

TRANSPORTATION CABINET Frankfort, Kentucky 40622 www.transportation.ky.gov/

Michael W. Hancock, P.E. Secretary

Steven L. Beshear Governor

August 7, 2015

CALL NO. 112 CONTRACT ID NO. 151247 ADDENDUM # 1

Subject: Graves County, STP BRZ 0103 (356) Letting August 21, 2015

(1)Deleted - Pages 27-48 of 130
(2)Added - Note - Pages 1-34 of 34

Proposal revisions are available at http://transportation.ky.gov/Construction-Procurement/.

If you have any questions, please contact us at 502-564-3500.

Sincerely,

Kachel Mille

Rachel Mills, P.E. Director Division of Construction Procurement

RM:ks Enclosures



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ΝΟΤΙCΕ

DEPARTMENT OF THE ARMY CORPS OF ENGINEERS (NATIONWIDE PERMIT & GENERAL WQC AUTHORIZATION)

PROJECT: Graves County, Item No. 1-1137 Bridge Replacement

The Section 404 & 401 activities for this project have been previously permitted under the authority of the Department of the Army Nationwide Permit No. 14 "Linear Transportation Projects" & Division of Water General Water Quality Certification. In order for these authorizations to be valid, the attached conditions must be followed. The contractor shall post a copy of this Nationwide Permit & General WQC in a conspicuous location at the project site for the duration of construction and comply with the general conditions as required.

To more readily expedite construction, the contractor may elect to alter the design or perform the work in a manner different from what was originally proposed and specified. Prior to commencing such alternative work, the contractor shall obtain **written** permission from the Division of Construction and the Corps of Engineers. A copy of any request to the Corps of Engineers to alter this proposal and subsequent responses shall be forwarded to the Division of Environmental Analysis, DA Permit Coordinator, for office records and for informational purposes.



LEONARD K. PETERS SECRETARY

GOVERNOR

STEVEN L. BESHEAR

ENERGY AND ENVIRONMENTAL PROTECTION CABINET

DEPARTMENT FOR ENVIRONMENTAL PROTECTION DIVISION OF WATER 200 FAIR OAKS LANE FRANKFORT, KENTUCKY 40601 www.kentucky.gov

General Certification--Nationwide Permit # 14 Linear Transportation Projects

This General Certification is issued <u>March 19, 2012</u>, in conformity with the requirements of Section 401 of the Clean Water Act of 1977, as amended (33 U.S.C. §1341), as well as Kentucky Statute KRS 224.16-050.

For this and all nationwide permits, the definition of surface water is as per 401 KAR 10:001 Chapter 10, Section 1(80): Surface Waters means those waters having well-defined banks and beds, either constantly or intermittently flowing; lakes and impounded waters; marshes and wetlands; and any subterranean waters flowing in well-defined channels and having a demonstrable hydrologic connection with the surface. Lagoons used for waste treatment and effluent ditches that are situated on property owned, leased, or under valid easement by a permitted discharger are not considered to be surface waters of the commonwealth.

Agricultural operations, as defined by KRS 224.71-100(1) conducting activities pursuant to KRS 224.71-100 (3), (4), (5), (6), or 10 are deemed to have certification if they are implementing an Agriculture Water Quality Plan pursuant to KRS 224.71-145.

For all other operations, the Commonwealth of Kentucky hereby certifies under Section 401 of the Clean Water Act (CWA) that it has reasonable assurances that applicable water quality standards under Kentucky Administrative Regulations Title 401, Chapter 10, established pursuant to Sections 301, 302, 304, 306 and 307 of the CWA, will not be violated for the activity covered under NATIONWIDE PERMIT 14, namely Linear Transportation Projects, provided that the following conditions are met:

- 1. The activity will not occur within surface waters of the Commonwealth identified by the Kentucky Division of Water as Outstanding State or National Resource Water, Cold Water Aquatic Habitat, or Exceptional Waters.
- 2. The activity will not occur within surface waters of the Commonwealth identified as perpetually-protected (e.g. deed restriction, conservation easement) mitigation sites.
- 3. The activity will impact less than 1/2 acre of wetland/marsh.
- 4. The activity will impact less than 300 linear feet of surface waters of the Commonwealth. Stream realignment greater than 100 feet is not covered under this general water quality certification.



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- 5. For a single and complete linear transportation project, the cumulative length of impacts less than 300 linear feet of surface waters within each Hydrologic Unit Code (HUC) 14 watershed will not exceed 500 linear feet.
- 6. Stream impacts covered under this General Water Quality Certification and undertaken by those persons defined as an agricultural operation under the Agricultural Water Quality Act must be completed in compliance with the Kentucky Agricultural Water Quality Plan (KWQP).
- 7. The Kentucky Division of Water may require submission of a formal application for an individual certification for any project if the project has been determined to likely have a significant adverse effect upon water quality or degrade the waters of the Commonwealth so that existing uses of the water body or downstream waters are precluded.
- 8. Activities that do not meet the conditions of this General Water Quality Certification require an Individual Section 401 Water Quality Certification.
- 9. Activities qualifying for coverage under this General Water Quality Certification are subject to the following conditions:
 - Erosion and sedimentation pollution control plans and Best Management Practices must be designed, installed, and maintained in effective operating condition at all times during construction activities so that violations of state water quality standards do not occur (401 KAR 10:031 Section 2 and KRS 224.70-100).
 - Sediment and erosion control measures, such as check-dams constructed of any material, silt fencing, hay bales, etc., shall not be placed within surface waters of the Commonwealth, either temporarily or permanently, without prior approval by the Kentucky Division of Water's Water Quality Certification Section. If placement of sediment and erosion control measures in surface waters is unavoidable, design and placement of temporary erosion control measures shall not be conducted in such a manner that may result in instability of streams that are adjacent to, upstream, or downstream of the structures. All sediment and erosion control devices shall be removed and the natural grade restored within the completion timeline of the activities.
 - Measures shall be taken to prevent or control spills of fuels, lubricants, or other toxic materials used in construction from entering the watercourse.
 - Removal of riparian vegetation in the utility line right-of-way shall be limited to that necessary for equipment access.
 - To the maximum extent practicable, all in-stream work under this certification shall be performed under low-flow conditions.

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- Heavy equipment, e.g. bulldozers, backhoes, draglines, etc., if required for this project, should not be used or operated within the stream channel. In those instances in which such in-stream work is unavoidable, then it shall be performed in such a manner and duration as to minimize turbidity and disturbance to substrates and bank or riparian vegetation.
- Any fill shall be of such composition that it will not adversely affect the biological, chemical, or physical properties of the receiving waters and/or cause violations of water quality standards. If rip-rap is utilized, it should be of such weight and size that bank stress or slump conditions will not be created because of its placement.
- If there are water supply intakes located downstream that may be affected by increased turbidity and suspended solids, the permittee shall notify the operator when such work will be done.
- Should evidence of stream pollution or jurisdictional wetland impairment and/or violations of water quality standards occur as a result of this activity (either from a spill or other forms of water pollution), the KDOW shall be notified immediately by calling (800) 928-2380.

Non-compliance with the conditions of this general certification or violation of Kentucky state water quality standards may result in civil penalties.



Nationwide Permit No. 14, Linear Transportation Projects

Activities required for the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, airport runways, and taxiways) in waters of the United States.

- a. For linear transportation projects in non-tidal waters, the discharge cannot cause the loss of greater than 1/2-acre of waters of the United States. For linear transportation projects in tidal waters, the discharge cannot cause the loss of greater than 1/3-acre of waters of the United States.
- b. Any stream channel modification, including bank stabilization, is limited to the minimum necessary to construct or protect the linear transportation project; such modifications must be in the immediate vicinity of the project.
- c. This NWP also authorizes temporary structures, fills, and work necessary to construct the linear transportation project. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.
- d. This NWP cannot be used to authorize non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, train stations, or aircraft hangars.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) the loss of waters of the United States exceeds

1/10-acre; or (2) there is a discharge in a special aquatic site, including wetlands. (See general condition 31.) (Sections 10 and 404)

Note: Some discharges for the construction of farm roads or forest roads, or temporary roads for moving mining equipment, may qualify for an exemption under Section 404(f) of the Clean Water Act (see 33 CFR 323.4).

Valid from March 19, 2012 through March 18, 2017

Nationwide Permit General Conditions

<u>Note</u>: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as applicable, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP. Every person who may wish to obtain permit authorization under one or more NWPs, or who is currently relying on an existing or prior permit authorization under one or more NWPs, has been and is on notice that all of the provisions of 33 CFR §§ 330.1 through 330.6 apply to every NWP authorization. Note especially 33 CFR § 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

1. <u>Navigation</u>. (a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) 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.

2. <u>Aquatic Life Movements</u>. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species.

3. <u>Spawning Areas</u>. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. <u>Migratory Bird Breeding Areas</u>. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. <u>Shellfish Beds</u>. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.

6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car

bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).

7. <u>Water Supply Intakes</u>. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. <u>Adverse Effects From Impoundments</u>. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. <u>Management of Water Flows</u>. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. <u>Fills Within 100-Year Floodplains</u>. The activity must comply with applicable FEMAapproved state or local floodplain management requirements.

11. <u>Equipment</u>. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. <u>Soil Erosion and Sediment Controls</u>. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.

13. <u>Removal of Temporary Fills</u>. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. <u>Proper Maintenance</u>. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

15. <u>Single and Complete Project</u>. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

16. <u>Wild and Scenic Rivers</u>. No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).

17. <u>Tribal Rights</u>. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

18. <u>Endangered Species</u>. (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed.

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address ESA compliance for the NWP activity, or whether additional ESA consultation is necessary.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that might be affected by the proposed work or that utilize the designated critical habitat that might be affected by the proposed work. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete preconstruction notification. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the project, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have "no effect" on listed species or critical habitat, or until Section 7 consultation has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species-specific regional endangered species conditions to the NWPs.

(e) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the U.S. FWS or the NMFS, The Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering. (f) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the U.S. FWS and NMFS or their world wide web pages at http://www.fws.gov/ or <u>http://www.fws.gov/ipac</u> and http://www.noaa.gov/fisheries.html respectively.

19. <u>Migratory Birds and Bald and Golden Eagles</u>. The permittee is responsible for obtaining any "take" permits required under the U.S. Fish and Wildlife Service's regulations governing compliance with the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act. The permittee should contact the appropriate local office of the U.S. Fish and Wildlife Service to determine if such "take" permits are required for a particular activity.

20. <u>Historic Properties</u>. (a) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address section 106 compliance for the NWP activity, or whether additional section 106 consultation is necessary.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the authorized activity may have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer or Tribal Historic Preservation Officer, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of Section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted and these efforts, the district engineer shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified historic properties on which the activity may have the potential to cause effects and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA has been completed.

(d) The district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA Section 106 consultation is required. Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR §800.3(a)). If NHPA section 106 consultation is required and will occur, the district engineer will notify the non-Federal applicant that he or she cannot begin work until Section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must

still wait for notification from the Corps.

(e) Prospective permittees should be aware that section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to

prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

21. <u>Discovery of Previously Unknown Remains and Artifacts</u>. If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. <u>Designated Critical Resource Waters</u>. Critical resource waters include, NOAAmanaged marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, and 52 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with general condition 31, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.

23. <u>Mitigation</u>. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that adverse effects on the aquatic environment are minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse effects of the proposed activity are minimal, and provides a project-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse effects on the aquatic environment. Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

(1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in minimal adverse effects on the aquatic environment.

(2) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, wetland restoration should be the first compensatory mitigation option considered.

(3) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) – (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)).

(4) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the impact site and the number of credits to be provided.

(5) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan.

(d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation, such as stream rehabilitation, enhancement, or preservation, to ensure that the activity results in minimal adverse effects on the aquatic environment.

(e) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that a project already meeting the established acreage limits also satisfies the minimal impact requirement associated with the NWPs.

(f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the restoration or establishment, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, riparian areas may be the only compensatory mitigation required. Riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to establish a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or establishing a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(g) Permittees may propose the use of mitigation banks, in-lieu fee programs, or separate permittee-responsible mitigation. For activities resulting in the loss of marine or estuarine resources, permittee-responsible compensatory mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.

(h) Where certain functions and services of waters of the United States are permanently adversely affected, such as the conversion of a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse effects of the project to the minimal level.

24. <u>Safety of Impoundment Structures</u>. To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

25. <u>Water Quality</u>. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

26. <u>Coastal Zone Management</u>. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

27. <u>Regional and Case-By-Case Conditions</u>. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with

any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

28. <u>Use of Multiple Nationwide Permits</u>. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

29. <u>Transfer of Nationwide Permit Verifications</u>. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:

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

(Transferee)

(Date)

30. <u>Compliance Certification</u>. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

(a) A statement that the authorized work was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;

(b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(l)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and

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

31. <u>Pre-Construction Notification</u>. (a) <u>Timing</u>. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

(1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or

(2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify the Corps pursuant to general condition 20 that the activity may have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation (see 33 CFR 330.4(g)) has been completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) <u>Contents of Pre-Construction Notification</u>: The PCN must be in writing and include the following information:

(1) Name, address and telephone numbers of the prospective permittee;

(2) Location of the proposed project;

(3) A description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause, including the anticipated amount of loss of water of the United States expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. The description should be sufficiently detailed to allow the district engineer to determine that the adverse effects of the project will be minimal and to determine the need for compensatory mitigation. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);

(4) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many waters of the United States. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;

(5) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse effects are minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(6) If any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work. Federal applicants must provide documentation demonstrating compliance with the Endangered Species Act; and

(7) For an activity that may affect a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, for non-Federal applicants the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property. Federal applicants must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act.

(c) <u>Form of Pre-Construction Notification</u>: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is a PCN and must include all of the information required in paragraphs (b)(1) through (7) of this general condition. A letter containing the required information may also be used.

(d) <u>Agency Coordination</u>: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental effects to a minimal level.

(2) For all NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States, for NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require pre-construction notification and will result in the loss of greater than 300 linear feet of intermittent and ephemeral stream bed, and for all NWP 48 activities that require pre-construction notification, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (U.S. FWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Office (THPO), and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to telephone or fax the district engineer notice that they intend to provide substantive, site-specific comments.

The comments must explain why the agency believes the adverse effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure the net adverse environmental effects to the aquatic environment of the proposed activity are minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(3) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(4) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

D. District Engineer's Decision

1. In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. For a linear project, this determination will include an evaluation of the individual crossings to determine whether they individually satisfy the terms and conditions of the NWP(s), as well as the cumulative effects caused by all of the crossings authorized by NWP. If an applicant requests a waiver of the 300 linear foot limit on impacts to intermittent or ephemeral streams or of an otherwise applicable limit, as provided for in NWPs 13, 21, 29, 36, 39, 40, 42, 43, 44, 50, 51 or 52, the district engineer will only grant the waiver upon a written determination that the NWP activity will result in minimal adverse effects. When making minimal effects determinations the district engineer will consider the direct and indirect effects caused by the NWP activity. The district engineer will also consider site specific factors, such as the environmental setting in the vicinity of the NWP activity, the type of resource that will be affected by the NWP activity, the functions provided by the aquatic resources that will be affected by the NWP activity, the degree or magnitude to which the aquatic resources perform those functions, the extent that aquatic resource functions will be lost as a result of the NWP activity (e.g., partial or complete loss), the duration of the adverse effects (temporary or permanent), the importance of the aquatic resource functions to the region (e.g., watershed or ecoregion), and mitigation required by the district engineer. If an appropriate functional assessment method is available and practicable to use, that assessment method may be used by the district engineer to assist in the minimal adverse effects determination. The district engineer may add case-specific special conditions to the NWP authorization to address site-specific environmental concerns.

2. If the proposed activity requires a PCN and will result in a loss of greater than 1/10acre of wetlands, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for projects with smaller impacts. The district engineer will consider any proposed compensatory mitigation the applicant has included in the proposal in determining whether the net adverse environmental effects to the aquatic environment of the proposed activity are minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects on the aquatic environment are minimal, after considering mitigation, the district engineer will notify the permittee and include any activity-specific conditions in the NWP verification the district engineer deems necessary. Conditions for compensatory mitigation requirements must comply with the appropriate provisions at 33 CFR 332.3(k). The district engineer must approve the final mitigation plan before the permittee commences work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the proposed compensatory mitigation plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure no more than minimal adverse effects on the aquatic environment. If the net adverse effects of the project on the aquatic environment (after consideration of the compensatory mitigation proposal) are determined by the district engineer to be minimal, the district engineer will provide a timely written response to the applicant. The response will state that the project can proceed under the terms and conditions of the NWP, including any activity-specific conditions added to the NWP authorization by the district engineer.

3. If the district engineer determines that the adverse effects of the proposed work are more than minimal, then the district engineer will notify the applicant either: (a) that the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (b) that the project is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level; or (c) that the project is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse effects occur to the aquatic environment, the activity will be authorized within the 45-day PCN period, with activity-specific conditions that state the mitigation requirements. The authorization will include the necessary conceptual or detailed mitigation or a requirement that the applicant submit a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level. When mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan or has determined that prior approval of a final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation.

E. Further Information

1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.

2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.

3. NWPs do not grant any property rights or exclusive privileges.

4. NWPs do not authorize any injury to the property or rights of others.

5. NWPs do not authorize interference with any existing or proposed Federal project.

In Imo I

Version 1.1 January 6, 2013

KYTC Archaeological Investigation Form

| KYIC Item No: 1-1137.00 | County: Graves | |
|--------------------------------------|--------------------------|--------------------------|
| Route: CR1194 | Project Description: | REPLACE BRIDGE ON CR1194 |
| USGS Quad Name: Lynville | | OVER CALDWELL CREEK; .6 |
| USGS Date: 1974 | | MI S OF JCT CR 5221 |
| UTM Coordinates (Project center p | ooint) | |
| Zone: 🖸 16 🗖 17 | | |
| Easting: 361924 | | |
| Northing: 4045950 | | |
| Project Type listed in Attachme | nt 1 (in Section 106 Pro | grammatic Agreement)? |
| └─ Yes (list project activity types) | | |
| ☑ No (Continue) | | |
| Project Type listed in Attachmen | t 2 (in Section 106 Hand | lbook)? |
| ✓ Yes (list project activity types) | 1 | |

1. Culvert and structure replacement/reconstruction that involve no more than minimal additional rightof-way necessary to grade around the new bridge/culvert plus any necessary channel work

Are all new or existing ROW areas previously disturbed?

☑ Yes (Describe disturbance or basis for conclusion. Attach photos or maps):

Proposed project area disturbed by original construction activities. Bridge potentially rebuilt in place. Additional area investigated beyond scope of project. No archaeological sites located. No further work recommended.

Version 1.1 January 6, 2013

| | 1999 August 1999 | | |
|-----------------------------|------------------|--------------------------------------|--|
| No Historic Pro | perties Affecte | ed | |
| 1-1137.00 | Graves | CR1194 | |
| As Determined | By: | | |
| James 7 | elfin | 4-15-13- | |
| KY/IC Represe | ntative | Date | |
| - KKL | m | 4/15/13 | |
| SHPO Represen | | Date | |
| (Concurrence is Attachments | assumed if no r | response is received within 30 days) | |
| □ Project Pla | ns (show date of | n plans) | |
| Photos | | | |
| Mapping | | | |
| C Other: | | | |
| Copy EPM | | | |
| Copy DEC | | | |
| Copy DEA | Archaeologist | | |
| Copy SHP | | | |
| 8.3 | | | |
| | | | |

If the project plans change then additional archaeological survey may be required. If human remains are discovered or a previously unidentified archaeological site is encountered, work must cease and the KYTC Division of Environmental Analysis be notified immediately.

KYTC Historic Architectural Investigation Form

KYTC Item No: 1-1137.00 Route: CR 1194 County: Graves Project Description:

Replace CR 1194 Bridge # 042C00252N over Caldwell Creek

Project Type listed in Attachment 1 (in Section 106 Programmatic Agreement)?

□ Yes

₩ No (Continue)

Project Type listed in Attachment 2 (in Section 106 Handbook)?

▼ Yes (List project activity types) #11 Bridge Replacement

No (This project is not considered a small scale project under the Section 106 Programmatic Agreement. This checklist cannot be used. Process with full baseline or joint memorandum)

□ No (However, SHPO has agreed that this project may be documented using the Historic Architectural Investigation Form)

Project Area of Potential Effect is defined as:

Within 150 feet of project centerline (Small Scale Project - within existing corridor)

□ Within view shed of project (Discuss):

□ Other (Discuss):

Are there Historical Resources within the project APE (per KHC database)?

T Yes

🗹 No

 Γ N/A (Explain):

Are there Historical Resources (50 years old or older) identified within the project APE based on field investigations?

⊢ Yes

🔽 No

Date of Field Investigation: May 2013

Investigator Name(s): Rebecca Horn Turner

Discuss Basis for finding (Historic Mapping, PVA, Building Permit, Date of Construction, Deed/Title, etc.):

Bridge database (bridge built 1984), windshield survey

NRHP listed or potentially eligible sites/districts (> 50 years old) are:

✓ Not Present within the APE

| No Historic Properties Affected |
|---|
| As Determined By: |
| KYTC Representative Date |
| Attachments: |
| □ Map showing topography, APE and identified Historic Resources |
| Relevant Photos (Overview and individual resources) |
| □ Project Plans |
| Cher (Describe): |
| Г Сору ЕРМ |
| └ Copy DEC |
| Copy DEA Architectural Historian |
| └ Copy SHPO |



USGS Topographic Map – Lynnville Quad-Graves County, Kentucky



Aerial of Project Area

| KENTUCKY TRANSPORTATION CABINET | Federal Highwa | sportation Cabinet ay Administration | US Department of Transportation Federal Highway Administration |
|---|--|---|---|
| KYTC Item No: | 1 - 1137.00 | Route: | CR1194 |
| Quadrangle(s): | Lynnville | County(ies): | Graves |
| Project Description: (Ty etc.) | pe of improvement, areas to be | impacted, crossroad imp | rovements, easements, |
| Replace bridge on CR-1 042C00252N. | 1194 (MP 0.67) over Caldwell Cr | reek; 0.6 miles South of J | lunction CR-5221. |
| Listed Species: (Attach Cyprogenia stegaria (fans | copy of USFWS county list, KS shell) FSM (403) (KDFWR) | NPC web site and KDFW | /R web site) |
| <i>Villosa lienosa</i> (little spec | taclecase) LSM (431) (KDFWR, KSN | IPC) | |
| Etheostoma chienense (re | elict darter) RD (501) (USFWS, KDF) | WR, KSNPC) | |
| <i>Myotis sodalis</i> (Indiana ba | at) IB (903) (USFWS) | | |
| A habitat assessment One, on 17 July 2012 topographic and geolo including cave bearing | Is of assessment, who, what, wh was performed by Blake Beye and again on 5 September 20 ogic maps were reviewed for g strata and IB polygons. Dur e habitat available for the lis | er, Environmental Scie 013. Prior to the field potential habitat with ring the field visit the | visit USGS in the project area, |

Results: (Compare habitat used by listed species with available habitat)

Caldwell Creek at the project location is of insufficient size and flow to support the listed mussel species. On various site visits in 2012 the stream had little to no flow with ponding of the water in deeper pools. A No Effect is appropriate for fanshell and little spectaclecase mussels.

Caldwell Creek is not a tributary of the Bayou de Chien where the relict darter is found, therefore this project has No Effect upon the relict darter.

The project area does contain a small amount of trees which are considered to be potential habitat for the Indiana bat. These trees will need to be removed. The PMOA with the USFWS will be utilized to mitigate for the loss of habitat.

Determinations: No Habitat, No Effect for Cyprogenia stegaria (fanshell) FSM (403) (KDFWR) Villosa lienosa (little spectaclecase) LSM (431) (KDFWR, KSNPC) Etheostoma chienense (relict darter) RD (501) (USFWS, KDFWR, KSNPC) May Effect, Not Likely to Adversely Affect: Myotis sodalis (Indiana bat) IB (903) (USFWS)

The project has been assessed in accordance with the provisions of Section 7 of the Endangered Species Act. As a designated representative of the FHWA, the KYTC has determined that the project will have No Effect on any listed species or their critical habitat, and further Section 7(a)(2) consultation with the Service is not required.

Blalle Blyps KYTC Signature

6 september

Date

BIAKE Beyer

EATS updated

| THE MALLER | | U.S. Fis 330 Wes | U.S. Fish & Wildlife Service 330 West Broadway, Bm 265 | Service Rm 265 | 03 (356) |
|--|---|---|---|----------------------|--|
| | U.S. Fish & Wildlife Service Kentucky Ecological Services Field Office | | Frankfort, KY 40601 Phone: 502-695-0468 Fax: 502-695-1024 | 601 1468 24 | |
| Endangered, []] Species in | Endangered, Threatened, & Candidate Species inGRAVESC | County, KY | | | |
| Group | Species | Common name | Legal* Status | Known** Potential | Special Comments |
| | | | | | |
| Mammals | Myotis sodalis | Indiana bat | ш | ۹. | |
| Fishes | Etheostoma chienense | relict darter | W | ¥ | |
| | | | | | |
| NOTES: | | | | | |
| Key to notatio | ns: E = Endangered, T = Th _i | * Key to notations: E = Endangered, T = Threatened, C = Candidate. CH = Critical Habitat | - Critical Habits | at | |
| *Key to notatic o known occur | ons: K = Known occurrence r rence records, biological, an | **Key to notations: K = Known occurrence record within the county, P = Pot to known occurrence records. biological and physiographic characteristics | otential for the | species to occur | **Key to notations: K = Known occurrence record within the county, P = Potential for the species to occur within the county based upon historic range, proximity to known occurrence records. biological and physiographic characteristics |
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Updated July 30, 2008

FWS 2008 SPP LIST: GRAVES

Page 1 of 1

GRAVES COUNKY Dept of Fish and Wildlife County List Federal Threatened, Endangered, and Candid PDED PADE NDUM #1: 8-7-15 STP BRZ 0103 (356) Page 28 of 34

search kentucky.gov

HOME | CONTACT US | BUY LICENSES | LINKS | EVENTS | WHAT'S NEW | KENTUCKY AFIELD |

| Species Information KDFWR | Species Information Federal Threatened, Endangered, and Candidate Species observations for selected counties |
|---------------------------------|--|
| Maps | Linked life history provided courtesy of NatureServe Explorer. |
| Public | Records may include both recent and historical observations. |
| Hunting | US Status Definitions Kentucky Status Definitions |
| Area Maps | Link Pedaval Thursday of Tabaya and the little of the second second |
| Game Maps | List Federal Threatened, Endangered, and Candidate Species observations in 1 selected county. |
| Download GIS Data | Selected county is: Graves. |

Links

| Scientific Name and Life History | Common Name and Pictures | Class | County | US Status | KY Status | WAP | Reference |
|--|-----------------------------------|----------------|--------|--------------|--------------|------------|------------------|
| <u>Cyprogenia</u> <u>stegaria</u> | <u>Fanshell</u> | Bivalvia | Graves | LE | E | <u>Yes</u> | <u>Reference</u> |
| <u>Etheostoma</u> chienense | Relict Darter | Actinopterygii | Graves | LE | E | <u>Yes</u> | <u>Reference</u> |
| | <u>Copperbelly</u> Water Snake | Reptilia | Graves | PS:LT | s | <u>Yes</u> | Reference |

3 species are listed

Privacy Policy | Disclaimer | Individuals with Disabilities |

| Kentucky Sti | Kentucky State Nature Preserves Commission | Kentucky State Nature Preserves Commission | | 6 | | # of C | # of Occurrences | ences | | |
|----------------|--|--|--------------------------|----------|-------------|--------|------------------|----------|-------------|------|
| County | Taxonomic Group | Scientific name | Common name | Statuses | Ranks | E | Н | ĹŢ. | × | n |
| Graves | Vascular Plants | Carex hystericina | Porcupine Sedge | /H | G5 / SH | 0 | - | | - c | c |
| Graves | Vascular Plants | Carex seorsa | Weak Stellate Sedge | Τ / | G4 / S2 | | 0 | 0 | , c | |
| Graves | Vascular Plants | Chelone obliqua var. speciosa | Rose Turtlehead | S / | G4T3 / S3 | - | 0 | 0 | 0 0 |) C |
| Graves | Vascular Plants | Gleditsia aquatica | Water Locust | S / | G5 / S3? | - | 0 | 0 | , c | , c |
| Graves | Vascular Plants | Hieracium longipilum | Hairy Hawkweed | Τ/ | G4G5 / S2 | 0 | , <u> </u> | , c | ~ _ | ~ c |
| Graves | Vascular Plants | Hydrocotyle ranunculoides | Floating Pennywort | E/ | G5 / S1S2 | ~ | - c | | | |
| Graves | Vascular Plants | Iris brevicaulis | Zigzag Iris | Τ/ | G4 / S1S2 | · _ | 0 | | | |
| Graves | Vascular Plants | Limnobium spongia | American Frog's-bit | Τ/ | G4 / S2S3 | _ | 0 | 0 | , c |) (|
| Graves | Vascular Plants | Najas gracillima | Thread-like Naiad | S / | G5? / S2S3 | 0 | - | 0 | , c | , O |
| Graves | Vascular Plants | Paspalum boscianum | Bull Paspalum | S / | G5 / S2S3 | - | 0 | 0 | , 0 | , O |
| Graves | Vascular Plants | Prenanthes crepidinea | Nodding Rattlesnake-root | S / | G4 / S3 | 0 | _ | 0 | 0 | . 0 |
| Graves | Vascular Plants | Ptilimnium capillaceum | Mock Bishop's-weed | Τ/ | G5 / S1S2 | 1 | - | 0 | 0 | , 0 |
| Graves | Vascular Plants | Rudbeckia subtomentosa | Sweet Coneflower | E / | G5 / S1 | 0 | - | 0 | 0 | 0 |
| Graves | Vascular Plants | Verbena canadensis | Rose Mock-vervain | Ε/ | G5 / S1? | 0 | 0 | 0 | , <u> </u> | , o |
| Graves | Freshwater Mussels | Toxolasma texasiensis | Texas Lilliput | E/ | G4 / S1 | - | 0 | 0 | 0 | 0 |
| Graves | Freshwater Mussels | Villosa lienosa | Little Spectaclecase | S / | G5 / S3S4 | - | 0 | 0 | 0 | , c |
| Graves | Crustaceans | Cambarellus puer | Swamp Dwarf Cravfish | E / | G5 / S1 | _ | 0 | 0 | | |
| Graves | Crustaceans | Orconectes palmeri palmeri | Gray-Speckled Crayfish | E/ | G5T5 / S1 | | | | | |
| Graves | Crustaceans | Procambarus viaeviridis | Vernal Crayfish | Τ / | G5 / S1 | · | , c | | | |
| Graves | Insects | Amphiagrion saucium | Eastern Red Damsel | E / | G5 / S1 | · - | | | | |
| Graves | Insects | Papaipena sp. 5 | Rare Cane Borer Moth | T / | G1G2 / S1S2 | | , o |) O | | |
| Graves | Fishes | Cyprinella cantura | Bluntface Shiner | E/ | G5/S1 | 13 | 0 | 0 | 0 | 0 |
| Graves | Fishes | Cyprinella venusta | Blacktail Shiner | S / | G5 / S3 | 2 | - | C | 0 | 0 |
| Graves | Fishes | Erimyzon sucetta | Lake Chubsucker | Τ/ | G5 / S2 | ć | | , c | | |
| Graves | Fishes | Etheostoma chienense | Relict Darter | E/LE | G1/S1 | 10 | , o | > 0 | > 0 | > 0 |
| Graves | Fishes | Etheostoma lynceum | Brighteye Darter | E/ | G5 / S1 | Ś | 0 | 0 | ¢ | - c |
| Graves | Fishes | Etheostoma parvipinne | Goldstripe Darter | E/ | G4G5 / S1 | ŝ | ŝ | 0 | 0 | 0 |
| Graves | lishes | Etheostoma proeliare | Cypress Darter | Τ / | G5 / S2 | _ | 0 | 0 | 0 | c |
| Graves | Fishes | Etheostoma pyrrhogaster | Firebelly Darter | E / SOMC | G2G3 / S1 | - 6 | | | | |
| Data current a | Data current as of May 2012 | | | | | N. | b | , | Page 4 of 5 | of 5 |
| | | | | | | | | | 1 | |

GRAVES COUNTY STP BRZ 0103 (356)

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ADDED ADDENDUM #1: 8-7-15 Contract ID: 151247 Page 29 of 34

| County Repo Kentucky Sta | County Report of Endangered, Threatened, an Kentucky State Nature Preserves Commission | County Report of Endangered, Threatened, and Special Concern Plants, Animals, and Natural Communities of Kentucky Kentucky State Nature Preserves Commission | d Natural Communities of Kentuck | Ŷ | | | | | | |
|---|---|---|---|----------|-------------|-------------|---------------------------|------------|-----|---|
| County | Taxonomic Group | Scientific name | Common name | Statuses | Ranks | # of O E | # of Occurrences E H F | nces F | × | D |
| Graves | Fishes | Etheostoma swaini | Gulf Darter | E/ | G5 / S1 | = | ~ | 0 | 0 | |
| Graves | Fishes | Hybognathus hayi | Cypress Minnow | E/ | G5 / S1 | _ | 5 | 0 | - | 0 |
| Graves | Fishes | Lampetra sp. l | Undescribed Terrapin Creek brook lamprey | E/ | GNR/S1 | 6 | 0 | | 0 | 0 |
| Graves | Fishes | Lepomis marginatus | Dollar Sunfish | E/ | G5 / S1 | 14 | 0 | 0 | 0 | - |
| Graves | Fishes | Lepomis miniatus | Redspotted Sunfish | Τ/ | G5 / S2 | ~ | 0 | 0 | 0 | |
| Graves | Fishes | Moxostoma poecilurum | Blacktail Redhorse | E / | G5 / S1 | ŝ | 0 | | | |
| Graves | Fishes | Notropis maculatus | Taillight Shiner | Τ/ | G5 / S2S3 | | 0 | 0 | 0 0 | - |
| Graves | Fishes | Noturus hildebrandi | Least Madtom | E/ | G5 / S1 | ŝ | 0 | 0 | 0 0 | _ |
| Graves | Fishes | Noturus phaeus | Brown Madtom | E/ | G4 / S1 | 9 | 2 | 0 | | - |
| Graves | Fishes | Umbra limi | Central Mudminnow | Τ/ | G5 / S2S3 | 14 | 1 | _ | 1 0 | |
| Graves | Amphibians | Eurycea guitolineata | Three-lined Salamander | Τ/ | G5 / S2 | _ | C | 0 | | |
| Graves | Amphibians | Hyla avivoca | Bird-voiced Treefrog | S / | G5 / S3 | | , 0 | | | |
| Graves | Amphibians | Rana areolata circulosa | Northern Crawfish Frog | S / | G4T4/S3 | 7 | 2 | | | _ |
| Graves | Reptiles | Clonophis kirtlandii | Kirtland's Snake | T / SOMC | G2 / S2 | - | 0 | 0 | 0 | |
| Graves | Reptiles | Farancia abacura reinwardtii | Western Mud Snake | S / | G5T5 / S3 | ŝ | 0 | | | |
| Graves | Reptiles | Thamnophis proximus proximus | Western Ribbon Snake | T / | G5T5 / S1S2 | | 0 | 0 | | |
| Graves | Reptiles | Thamnophis sauritus sauritus | Eastern Ribbon Snake | S / | G5T5 / S3 | 1 | 0 | | | |
| Graves | Breeding Birds | Aimophila aestivalis | Bachman's Sparrow | E / SOMC | G3 / S1B | 0 | 0 | 0 2 | C | |
| Graves | Breeding Birds | Ardea alba | Great Egret | Τ/ | G5 / S2B | 0 | | | | |
| Graves | Breeding Birds | lctinia mississippiensis | Mississippi Kite | S / | G5 / S2B | - | 0 | 0 | | |
| Graves | Breeding Birds | Tyto alba | Barn Owl | S / | G5 / S3 | - | | | | |
| Graves | Mammals | Myotis austroriparius | Southcastern Myotis | E / SOMC | G3G4 / S1S2 | 0 | 1 | 0 | C | |
| Graves Mamm. Graves County Total: | Mammals ty Total: | Nycticeius humeralis | Evening Bat | S / | G5 / S3 | 147 | 0 7 | 0 0 | | |
| | | | | | | | | | • | |

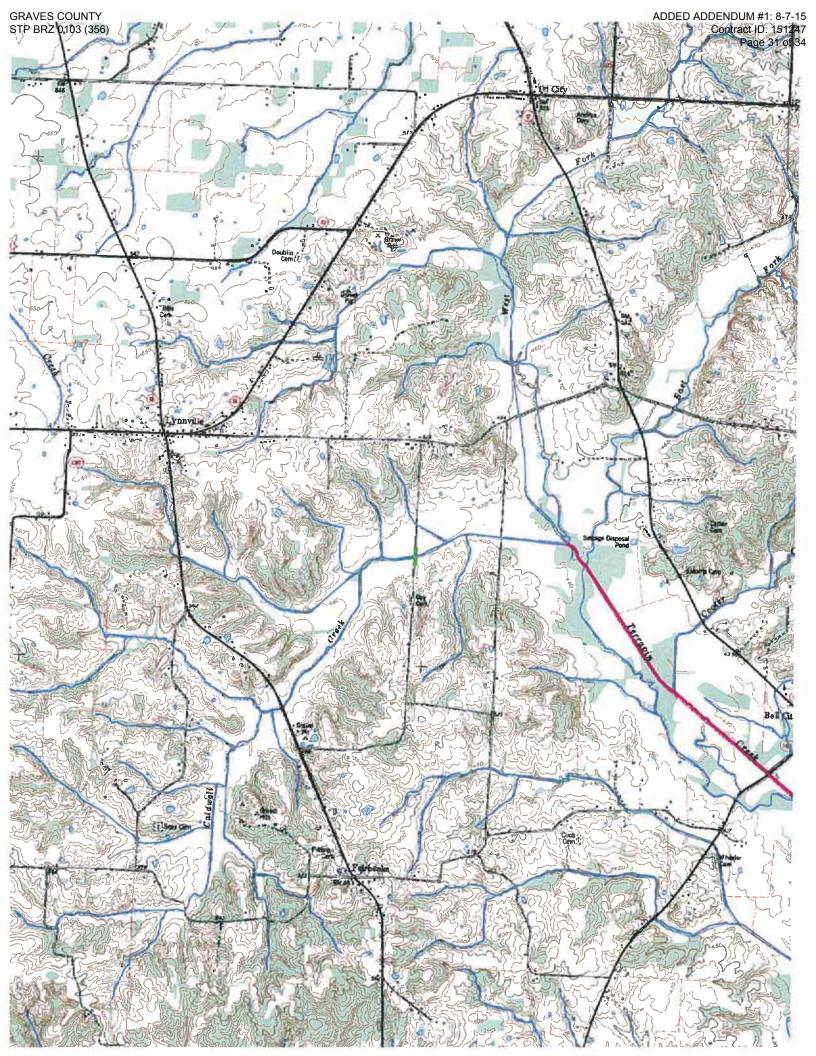
GRAVES COUNTY STP BRZ 0103 (356)

II.

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