



State Revolving Fund Loan Programs Drinking Water, Wastewater, Nonpoint Source

ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT

JACKSON COUNTY WATER UTILITY WATER MAIN CORRECTIVE ACTION, EAST FORK WHITE RIVER PRELIMINARY ENGINEERING REPORT ADDENDUM #2 SRF PROJECT DW08 04 36 01

DATE: June 21, 2012

TARGET PROJECT APPROVAL DATE: July 21, 2012

I. INTRODUCTION

The above entity has applied to the Drinking Water State Revolving Loan Fund (SRF) for a loan to finance all or part of the drinking water project described in the accompanying Environmental Assessment (EA). As part of facilities planning requirements, an environmental review has been completed which addresses the project's impacts on the natural and human environment. This review is summarized in the attached EA, which can also be viewed at <http://www.in.gov/ifa/srf/>.

II. PRELIMINARY FINDING OF NO SIGNIFICANT IMPACT (FNSI)

The SRF Drinking Water Program has evaluated all pertinent environmental information regarding the proposed project and determined that an Environmental Impact Statement is not necessary. Subject to responses received during the 30-day public comment period, and pursuant to Indiana Code 4-4-11, it is our preliminary finding that the construction and operation of the proposed facilities will result in no significant adverse environmental impact. In the absence of significant comments, the attached EA shall serve as the final environmental document.

III. COMMENTS

All interested parties may comment upon the EA/FNSI. Comments must be received at the address below by the deadline date above. Significant comments may prompt a reevaluation of the preliminary FNSI; if appropriate, a new FNSI will be issued for another 30-day public comment period. A final decision to proceed, or not to proceed, with the proposed project shall be effected by finalizing, or not finalizing, the FNSI as appropriate. Comments regarding this document should be sent within 30 days to:

Max Henschen
Senior Environmental Manager
State Revolving Fund -- IGCN 1275
100 N. Senate Ave.
Indianapolis, IN 46204
317-232-8623
mhensche@ifa.in.gov

ENVIRONMENTAL ASSESSMENT

I. PROJECT IDENTIFICATION

Project Name and Address:

Water Main Corrective Action:

East Fork White River
Preliminary Engineering Rpt. Addendum #2
Jackson County Water Utility
1119 W. Spring Street
Brownstown, IN 47220-0056

SRF Project Number:

DW 08 04 36 01

Authorized Representative:

Darrell Baker, General Manager

II. PROJECT LOCATION

The Jackson County Water Utility serves approximately 5,200 customers in Jackson County and portions of Jennings, Lawrence, Bartholomew and Brown counties. The water main corrective work will take place on the 16-inch water main that crosses the East Fork White River outside Ewing in the Brownstown USGS 7.5' quadrangle, T5N, R4E, Section 10 in Brownstown civil township; see Figure 1.

III. PROJECT NEED AND PURPOSE

The original project was approved in 2009 by the State Revolving Fund Loan Program (SRF). That project proposed new water mains and other improvements in rural Jackson County, including installation of a directionally bored 16-inch water main under the river bed of East Fork White River at Ewing. The line was installed to provide a backup in case the existing 12-inch line under the river breaks; approximately 2,400 customers in the Acme, Clearspring and Freetown networks would be out of water should such an event occur. The Utility installed the 16-inch main in 2010.

The original specifications required that the water main be installed a minimum of 10 feet below the bottom of the river to prevent freezing or breaking of the water main. During a 2010 low water period in the River, it was discovered that a significant portion of the new water main was exposed above the water surface (see Figure 2). Therefore, the water main requires corrective work to place it at the proper depth under the river bottom. The original contractor will conduct the corrective work.

IV. PROJECT DESCRIPTION

The contractor proposes to move the water main to the proper depth below the river bed by excavating on each side of the exposed water main. The contractor believes this open cut will allow the pipe to drop to the proper depth below the bottom. The contractor will place the excavated material over the top of the water main. Additional pipe fittings and pipe will adjust the depth of the water main, if necessary. Although the excavation will occur primarily along the exposed pipe, the depth of the rest of the water main will be verified; the contractor will make adjustments to ensure that the entire water main crossing is at the proper depth. The contractor estimates that the work may take up to one week.

V. ESTIMATED PROJECT COSTS, AFFORDABILITY AND FUNDING

There will be no cost to the utility for this corrective work.

VI. DESCRIPTION OF EVALUATED ALTERNATIVES

The no-action alternative would not correct the defective installation and therefore was rejected.

VII. ENVIRONMENTAL IMPACTS OF THE FEASIBLE ALTERNATIVES

A. Direct Impacts of Construction and Operation

Undisturbed/Disturbed Land: The project will affect only land which has been significantly disturbed by previous construction activity.

Structural Resources: Construction and operation of the project will not alter, demolish or remove historic properties. If any visual or audible impacts to historic properties occur, they will be temporary and will not alter the characteristics that qualify such properties for inclusion in or eligibility for the National Register of Historic Places. The SRF's finding pursuant to Section 106 of the National Historic Preservation Act is: "no historic properties affected."

Surface Waters and Wetlands: The White River is a listed on the Outstanding Rivers list compiled by the Indiana Natural Resources Commission. The River is a riverine wetland bordered by forested wetlands; the proposed project will have little effect on the forested shores. The U.S. Army Corps of Engineers has noted that the project qualifies for a Nationwide Permit 12. The Indiana Department of Environmental Management's Wetlands and Stormwater Section has concurred with the Corps. The project is exempt from the requirement to obtain a Construction in a Floodway Permit from the Indiana Department of Natural Resources (IDNR).

100-Year Floodplain: The proposed project will take place entirely in the 100-year floodplain, but will not affect it.

Groundwater: The proposed project will not negatively affect a sole source aquifer or other groundwater resource.

Plants and Animals: The proposed project will not affect endangered plants or animals, as long as the avoidance measures listed by the U.S. Fish and Wildlife Service and the IDNR in section VIII.C below are strictly followed.

Prime Farmland: The project will not convert prime farmland.

Air Quality: Air quality will be temporarily impacted by construction activities, including vehicle exhaust and dust.

Open Space and Recreational Opportunities: The proposed project will neither create nor destroy open space and recreational opportunities.

The proposed project will not affect National Natural Landmarks.

B. Indirect Impacts

The Utility's Preliminary Engineering Report (PER) states: *The Jackson County Water Utility, through the authority of its utility board, will ensure that future development, as well as future supply, storage, distribution, or treatment works projects connecting to SRF-funded facilities will not adversely impact archaeological/historical/structural resources, wetlands, wooded areas, or other sensitive environmental resources. The Water Utility will require new development and treatment works projects to be constructed within the guidelines of the U.S. Fish and Wildlife Service, IDNR, IDEM, and other environmental review authorities.*

C. Comments from Environmental Review Authorities

The Natural Resources Conservation Service, in correspondence dated March 11, 2008, noted that the originally proposed project, which occurred in several Jackson County townships, would directly convert 0.05 acres of prime/unique farmland and indirectly convert 42.65 acres of prime/unique farmland along the water main route to Acme. The proposed remediation work will not convert prime farmland.

The IDNR Division of Historic Preservation and Archaeology, in correspondence dated May 9, 2012, stated:

Pursuant to IC 13-18-21 and 327 IAC 14 and Section 106 of the National Historic Preservation Act (16 U.S.C. § 470f) and 36 C.F.R. Part 800, the Indiana State Historic Preservation Officer ("Indiana SHPO") is conducting an analysis of the materials dated and received by the Indiana SHPO on April 10, 2012, for the above indicated project in Brownstown Township, Jackson County, Indiana.

Based on our analysis, it has been determined that no historic properties will be altered, demolished or removed by the proposed project.

If any archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, state law (Indiana Code 14-21-1-27 and 29) requires that the discovery must be reported to the Department of Natural Resources within two (2) business days...Be advised that adherence to Indiana Code 14-21-1-27 and 29 does not obviate the need to adhere to applicable federal statutes and regulations.

The U.S. Fish and Wildlife Service, in an email dated April 11, 2012 stated:

If there will be no cofferdams or causeways (we) think the original recommendations in our letter of January 30, 2009 are still adequate because they address the possibility of an excavated crossing. If there will be no tree removal other than the stump it would not affect our endangered species consultation in that letter either. If standing trees will be removed it sounds like it would be so few that (the utility, consultant and contractor) that they could inspect them to verify if they are healthy and without exfoliating bark (i.e. not suitable bat roost trees). Removal of suitable roost trees would have to be after October 1.

The Service's January 30, 2009 comments on the original project, which included the directional bore of the White River water main, were:

These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.) and are consistent with the intent of the National Environmental Policy Act of 1969, the Endangered Species Act of 1973, and the U.S. Fish and Wildlife Service's Mitigation Policy.

We recommend the following measures to minimize physical impacts on streams and aquatic habitat:

- 1) Maintain a vegetated buffer between construction and streams, except at stream crossings. The buffer should be at least 25 feet wide, but preferably up to 100 feet wide if possible. Where maintenance of an adequate buffer is not possible because of other physical constraints, locate the sewer line to minimize clearing of woody riparian vegetation and destabilization of stream banks.*
- 2) Minimize erosion and cover or contain soil piles to prevent runoff to streams during construction. Stabilize disturbed stream banks as quickly as possible after construction is completed. Revegetate with native plant species in areas that are currently dominated by natural vegetation.*
- 3) For perennial stream crossings, attach the pipeline to existing bridges or use directional drilling wherever possible, rather than using an excavated crossing.*
- 4) When excavated crossings on perennial streams are unavoidable, avoid mussel beds and areas of high-quality aquatic habitats, such as gravel/rock riffles. Additionally, avoid disturbance within perennial stream channels during the fish spawning season (April 1 – June 30).*

Endangered Species

The proposed project is within the range of the federally endangered Indiana bat (Myotis sodalis). While some foraging habitat may exist in the project area, we concur that the proposed project is not likely to adversely affect this listed species.

This precludes the need for further consultation on this project as required under Section 7 of the Endangered Species Act of 1973, as amended. If, however, new information on endangered species at the site becomes available or if project plans are changed significantly, please contact our office for further consultation.

The Indiana Department of Natural Resources Environmental Unit, in correspondence to the SRF dated April 10, 2012, stated:

The Indiana Department of Natural Resources has reviewed the above referenced project per your request. Our agency offers the following comments for your information and in accordance with the National Environmental Policy Act of 1969.

Regulatory Assessment: *This proposal will require the formal approval for construction in a floodway under the Flood Control Act, IC 14-28-1, unless it qualifies for a general license under Administrative Rule 312 IAC 10-5 that applies to utility line crossings....*

Natural Heritage Database: *The Natural Heritage Program's data have been checked.*

The following mussels have been recorded near the project area:

- 1) Clubshell (Pleurobema clava) – Federally and State Endangered
- 2) Pyramid Pigtoe (Pleurobema rubrum) – State Endangered
- 3) Round Hickory Nut (Obovaria subrotunda) – Special Concern

Fish & Wildlife Comments: *None of the above mussel species are still found live in this section of the East Fork White River. Therefore, we do not foresee any impacts to these species as a result of this project.*

We recommend that all utility line stream crossings be done using the directional bore method wherever feasible. If directional boring at the proposed location is not feasible, another location that is close enough to tie in to the existing line should be investigated for the directional bore method.

Another option, if possible, might be to place the line by directional bore at a shallower depth than 10', but still within the cover depth required in a permit or general license. Open-cut crossings of perennial streams (normally flow year-round) should be done when the streams are at the lowest level of the year (normally late summer).

The additional measures that should be implemented to avoid, minimize, or compensate for impacts to fish, wildlife, and botanical resources, include the following:

- 1) *Revegetate all bare and disturbed areas in the floodway with a mixture of native grasses, sedges, wildflowers, and also native hardwood trees and shrubs as soon as possible under completion. Do not use any varieties of Tall Fescue or other non-native plants (e.g. crown-vetch).*
- 2) *Minimize and contain within the project limits inchannel disturbance and the clearing of trees and brush.*
- 3) *Do not work in the waterway from April 1 through June 30 without the prior written approval of the Division of Fish and Wildlife.*
- 4) *Do not cut any trees suitable for Indiana bat roosting (greater than 3 inches dbh, living or dead, with loose hanging bark) from April 1 through September 30.*

- 5) *Appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the stream or leaving the construction site; maintain these measures until construction is complete and all disturbed areas are stabilized.*
- 6) *Seed and protect all disturbed streambanks and slopes that are 3:1 or steeper with erosion control blankets (follow manufacturer's recommendations for selection and installation); seed and apply mulch on all other disturbed areas.*

In correspondence dated June 14, 2012, to the contractor who will perform the corrective action work, the IDNR Environmental Unit stated:

The Indiana Department of Natural Resources has reviewed the above referenced project per your request. Our agency offers the following comments for your information and in accordance with the Flood Control Act (IC 14-28-1) and Administrative Rule 312 IAC 10-5-0.3.

Because the proposed project is located along a stream listed as an Outstanding River, approval from the Division of Fish and Wildlife is required prior to construction. Approval is hereby granted for this project. All other general license criteria (copy enclosed) must be met for this approval to be valid. Failure to do so would be a violation of 312 IAC 10-5-0.3. You are also responsible to make sure any other necessary permits or approvals are obtained, if required.

In addition to the general license criteria, impacts to fish, wildlife, and botanical resources can be minimized by implementing the following conditions:

1. *Revegetate all bare and disturbed areas with a mixture of grasses (excluding all varieties of tall fescue), legumes, and native shrub and hardwood tree species as soon as possible upon completion.*
2. *Minimize and contain within the project limits all tree and brush clearing to the greatest extent possible.*
3. *Construction activities within the waterway from April 1 through June 30 shall not exceed two (2) calendar days.*
4. *Conduct any in-stream work during seasonally low flow conditions, and complete the work within seven (7) days between the dates of July 1 and March 31.*
5. *Do not cut any trees suitable for Indiana bat roosting (greater than 3 inches dbh, living or dead, with loose hanging bark) from April 1 through September 30.*
6. *Appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the stream or leaving the construction site; maintain these measures until construction is complete and all disturbed areas are stabilized.*

7. *Ensure that equipment used in the stream is not leaking any fluids that could be harmful to the aquatic environment.*
8. *Do not leave equipment in the stream when it is not in operation.*
9. *Stabilize the banks with erosion control blankets and a native seed mix.*

VIII. MITIGATION MEASURES

The 2009 PER states: *Precautions shall be taken during construction to prevent erosion and sediment transport. Efforts shall be made during construction to minimize disturbance of the creek/wetland areas. Efforts will be made to restore creek banks to existing conditions and rip rap fill will be minimized. Mitigation measures to lessen and compensate for wetland impacts cited in comment letters about the project from the Indiana Department of Natural Resources and the U.S. Fish and Wildlife Service will be implemented. Project plans shall include requirements for construction sequencing and both temporary and permanent erosion control measures. All disturbed areas shall be restored to their pre-construction condition. All vegetated lands shall be permanently seeded and maintained as necessary until vegetation growth is established. If dewatering is necessary, water shall be pumped through a filter bag prior to discharge into a swale or storm sewer. All mitigating measures recommended by reviewing authorities shall be implemented for this project. A Rule 5 permit is required through the Indiana Department of Environmental Management for Construction/Stormwater Pollution Prevention. This plan shall be approved by the Jackson County Soil and Water Conservation District. The County SWCD will routinely inspect the construction area to ensure that appropriate measures are taken to minimize erosion and sediment transport off-site.*

IX. PUBLIC PARTICIPATION

The proposed corrective work for the river crossing has been discussed in public meetings during regularly scheduled board meetings over the last 12 months.

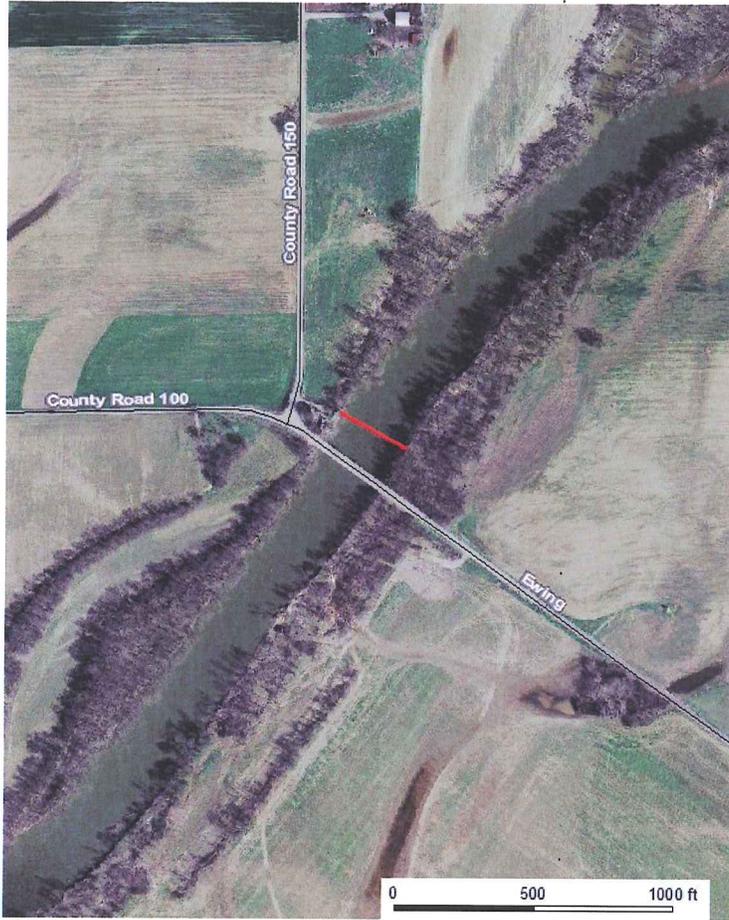


Figure 1: Approximate Location of 16-inch Water Main, East Fork White River



Figure 2: Exposed Water Main at East Shore