Ohio Environmental Protection Agency

Mike DeWine, Governor
Jon Husted, Lt. Governor
Anne M. Vogel, Director

May 18, 2023

Preliminary Finding of No Significant Impact
To All Interested Citizens, Organizations, and Government Agencies

Brown County Rural Water Association
Village of Ripley/Ripley Union Water System Improvements
Loan Number: FS391666-0002

The attached Environmental Assessment (EA) is for a drinking water regionalization project in Brown County which the Ohio Environmental Protection Agency intends to finance through its Water Supply Revolving Loan Account (WSRLA) below-market interest rate revolving loan program. The EA describes the project, its costs, and expected environmental benefits. We would appreciate receiving any comments you may have on the project. Making available this EA and seeking your comments fulfills Ohio EPA's environmental review and public notice requirements for this loan program.

Ohio EPA analyzes environmental effects of proposed projects as part of its WSRLA program review and approval process. We have concluded that the proposed project should not result in significant adverse environmental impacts. More information can be obtained by contacting the person named at the end of the attached EA.

Any comments on our preliminary determination should be sent to the email address of the contact named at the end of the EA. We will not act on this project for 30 calendar days from the date of this notice. In the absence of substantive comments during this period, our preliminary decision will become final. After that, the Brown County Rural Water Association can then proceed with its application for the WSRLA loan.

Sincerely,

Kathleen Courtright

Kathleen Courtright, Assistant Chief
Division of Environmental & Financial Assistance

Attachment

ENVIRONMENTAL ASSESSMENT

Project Identification

Project: Village of Ripley/Ripley Union Water System Improvements

Applicant: Brown County Rural Water Association
3818 U.S. Route 52
Ripley, Ohio 45167

Loan Number: FS391666-0002

Project Summary

Brown County Rural Water Association applied for financing from the Ohio Water Supply Revolving Loan Account (WSRLA) to fund the Village of Ripley/Ripley Union Water System Improvements project. This project will provide regionalized water service to an area with an aged water supply and treatment system. The estimated loan amount for this project is $5,446,050, with construction scheduled to begin in autumn of 2023 and last approximately 12 months. Up to $2,723,025 of WSRLA financing will be in the form of principal forgiveness, a loan that does not need to be repaid.

History & Existing Conditions

Brown County Rural Water Association (BCRWA) provides public drinking water to a population of approximately 28,299 in a large portion of Brown County. The system has greatly expanded since its beginning in 1972, and BCRWA has worked at staying ahead of growth, as well as absorbing several systems into the water association. Thirteen ground water wells provide raw water for the BCRWA water treatment plant (WTP), which produces approximately 2.1 million gallons per day (MGD) of finished water. The BCRWA distribution system includes approximately 900 miles of 2-inch through 20-inch diameter water mains, 20 water storage tanks, 13 booster stations, valves, and hydrants.

The Village of Ripley currently owns a WTP and distribution system that supplies water to residents of Ripley and to the adjacent Ripley Union Water System (RUWS). Though the WTP has only been in operation since 2007, the WTP and distribution system need approximately $2,500,000 in improvements to ensure that drinking water supplied to local customers meets the Safe Drinking Water Act (SDWA) standards and regulations. Challenges include a large percentage of water losses within the system, needed WTP filter media replacement, lack of a well maintenance program, poor water quality in a number of areas of the system, several non-functional hydrants, needed repairs to two water storage tanks, and a general lack of on-going WTP and distribution improvements. Furthermore, Ripley's water infrastructure issues have been exacerbated by problems in maintaining staffing levels for the Ripley water system. The Village of Ripley and Ripley Union Water System currently have water interconnections with BCRWA for emergency situations.

In 2021, Ripley voters passed a ballot issue to sell Ripley's public water system to BCRWA. The Village of Ripley and BCRWA entered an agreement on November 24, 2021, to transfer the Ripley water system to BCRWA. This agreement will allow BCRWA to eliminate the existing Ripley WTP, extend additional service mains to Ripley, and make other required improvements within Ripley's system to bring it in line with SDWA standards.

Population and Flow Projections

The intended project will add approximately 1,459 residential and business customers to the BCRWA system. BCRWA WTP has a design capacity of 3.7 MGD of finished water, with peak demand of 2.6 MGD, and average demand of 2.1 MGD. BCRWA has potential for expansion further within Brown County, as well as the potential of being a bulk water supplier to other local villages. BCRWA has and will continue to interconnect with neighboring water systems, which could ultimately lead to these water systems becoming future bulk water customers. BCRWA projects the growth in its service areas to increase by approximately 1-2 percent in the 20-year planning period. Based on the current 3.7 MGD BCRWA WTP capacity, BCRWA could serve an additional 2,500 residential customers. At the projected level of growth, the BCRWA water supply, treatment, and distribution systems can adequately meet the present and future needs of the county, the Village of Ripley, and Ripley Union Water System through the 20-year planning period.

Alternatives

Alternative 1. No-Action

Due to the above-described existing conditions for drinking water services within the project area, the No-Action alternative of continuing with the current situation would leave citizens with unreliable water quality and service, and the water system would also continue with multiple Ohio EPA violations, which is not a viable, long-term option.

Alternative 2. Repairs and Improvements to the Existing Water System

The Village of Ripley water system has various violations with Ohio EPA that are required to be addressed to ensure continued safe and effective water service. However, the repairs and improvements to address these violations are extensive, expensive, and would result in water rates significantly higher than Alternative 3. Furthermore, Ripley's water infrastructure issues have been exacerbated by problems in maintaining staffing levels for the Ripley water system.

Alternative 3. Connection to the Brown County Rural Water Association

BCRWA's 3.7 MGD water plant and distribution system has more than enough capacity to serve the project area, has nearby water transmission lines, and an additional connection to this system will result in minimal environmental impacts, and will be the most cost-effective solution compared to implementing repairs and improvements to the existing water system.

Selected Alternative

Alternative 3 was selected (see Figure 2) and will extend approximately 24,000 linear feet of 12-inch diameter water lines southwest along U.S. 62 to the Village of Ripley and connect existing water mains. The project will also include improvements to two Village of Ripley inground storage tanks, abandonment of Village of Ripley water wells, demolition of the Ripley Union Water System booster station and meter pits, replacement of service meters, and upgrade connections to Village of Ripley and Ripley Union Water System mains. The vast majority of the project will take place in previously disturbed road rights-of-way. The project includes directional bores of streams, roads, and culverts, and open-cut excavation and directional bores within easements on private properties. The project will serve up to 1,459 residential and business customers. The new water lines will be owned and maintained by BCRWA.

Implementation

The total estimated cost for the proposed project is $5,446,050. BCRWA will receive $2,723,025 in WSRLA principal forgiveness, a loan which will not need to be repaid, leaving an estimated balance of $2,723,025. BCRWA proposes to borrow this amount from the WSRLA, and qualifies for a 40-year, zero-percent interest rate for regionalization projects. Borrowing $2,723,025 at zero percent will save BCRWA approximately $2,823,000 for the 40-year loan period compared to borrowing the same amount at the current market rate of 4.08 percent.

Public Participation

In 2021, Ripley voters passed a ballot issue to sell Ripley's public water system to BCRWA. The Village of Ripley and BCRWA entered an agreement on November 24, 2021, to transfer the Ripley water system to BCRWA. Various public meetings have been held to discuss the project, and the project has been discussed extensively in local media and on social media. A public notice announcing the availability of this Environmental Assessment will be posted on BCRWA, Village of Ripley, Ripley Union Water System, and Ohio EPA Division of Environmental and Financial Assistance websites. The public notice for the Environmental Assessment will be open for a 30-day public comment period.

Thus, there have been adequate opportunities for information dissemination and public participation.

Environmental Impacts

The project has the potential to affect the following features, but the effects will be reduced or mitigated to acceptable levels as explained below.

Surface Water and Ground Water: The proposed project will not have significant adverse long-term impacts on surface water resources, as there will be no in-water work, and the majority of work will be performed within road rights-of-way and limited easements on private properties, in which the predominant cover is pavement, gravel, and lawn grass. The project has multiple stream crossings; all of which will be performed by directional bore.

Engineering controls are part of the specifications to minimize the impacts of erosion and deposition from construction and the discharge of pumped water to a river or stream. Minor, short-term impacts from the open-cut construction and directional boring could occur. Excavation of the trenches and pits could be prone to erosion and deposition if construction mitigation is not followed, and dewatering of ground water or surface water to enable work below grade may be necessary.

A Stormwater Pollution Prevention Plan (SWPPP), which describes the measures that will be taken to prevent pollution caused by runoff into surface waters, is required, as is a frac-out contingency plan for horizontal drilling, which describes how inadvertent escapes of drilling slurry to the surface (known as "frac-outs") will be managed.

Based on the above, the proposed project will not result in significant adverse impacts to surface waters or ground water.

Terrestrial Habitat and Endangered Species: The U.S. Fish and Wildlife Service (USFWS) indicates that the project is within the range of the federally endangered Indiana bat and northern long-eared bat, and state endangered little brown bat and tricolored bat. Trees within the project area range from small shrubs to large-sized trees and scrubby roadside brush. Tree clearing and trimming will be limited to those that are necessary for the project. Other mature trees are located outside of the work area and would provide alternative habitat. Tree removal will only be permitted to occur October 1 to March 31 or in coordination with USFWS, and tree removal is limited to only those trees necessary for completion of the project (e.g., trees within the excavation location or within the path of heavy equipment, etc.). These tree clearing restrictions will further ensure that any potential impacts to these bat species are avoided.

The project is within the range of the fanshell, pink mucket pearly mussel, rayed bean, sheepnose, and snuffbox, all federally endangered mussels; American eel, channel darter, river darter, and paddlefish, all state threatened fish. While multiple stream and drainage crossings are present within the project area, no in-water work will take place as part of this project. All crossings will utilize directional drilling methods to install the water line, adhering to the SWPPP and frac-out contingency plan to minimize potential impacts to these aquatic species.

Based on this information, the project will have no significant short-term or long-term adverse effect on terrestrial habitat or endangered species.

Air Quality, Dust, Noise and Odors: Brown County air quality meets standards for the six regulated air pollutants (carbon monoxide, sulfur dioxide, nitrogen oxide, lead, particulate matter, and ozone). During construction, dust and vehicle exhaust will be insignificant sources of local air pollution. Dust due to excavation in dry weather will be controlled by good housekeeping measures (minimizing the area of disturbed soil, road sweeping, dust suppression with water or other benign dust suppressant). Because of its temporary nature and the use of emissions controls on motorized equipment, construction vehicle exhaust will be an insignificant pollution source compared to background sources of motorized vehicle exhaust in the greater project area. Work will be restricted to weekdays from 7:00 AM to 6:00 PM. Once the project is complete, the water line extensions will operate with no noise, dust, or odors.

Based on this information, the project should have no significant adverse short-term or long-term impacts on local air quality.

Safety and Traffic: Construction in road rights-of-way will cause temporary traffic disruption and potential threats to public safety. Contract documents require contractors to implement standard traffic controls to minimize traffic disruption and public safety risks. For example, contractors are required to cover or close trenches overnight, maintain access for emergency vehicles at all times, and utilize traffic direction devices such as flaggers, cones, and barricades. With these precautions, the project is unlikely to create significant traffic disturbance or threats to public safety.

Once construction is complete, the project areas will be restored and returned to pre-construction conditions. The project will not permanently alter traffic patterns. Therefore, the project will have no long-term change or adverse impacts on safety and traffic.

Archaeological and Historical Resources: Based on the extensive pre-design review and historic structure avoidance that went into the routing of the water line project, and through coordination with the State Historic Preservation Office, Ohio EPA has concluded that no features listed on, or

eligible for listing on, the National Register of Historic Places will be adversely impacted by the proposed project.

Based on this information, Ohio EPA believes that, due to the extent of disturbance in the project area, unrecorded archaeological sites or properties eligible for listing or listed on the National Register of Historic Places are not likely to be present.

In the event that archaeological properties are found during construction, contractors and subcontractors are required under Ohio Revised Code Section 149.53 to notify the Ohio State Historic Preservation Office and Ohio EPA and to cooperate with those entities in archaeological and historic surveys and salvage efforts when appropriate.

Local Economy: Debt for this project will be repaid from monthly rates without rate increases based on this project. The median household income (MHI) of the project area is $38,060. Under the water rates that are effective in 2023, the average residential water bill is expected to be $42.70 per month, or $512 per year, based on 3,800 gallons per month usage. This annual water bill represents 1.35 percent of the MHI, compared to the state average of 1.2 percent.

Unaffected Environmental Features: The installation and operation of the proposed project will have few indirect, development-related impacts. This is because the current and expected levels of population growth are low in the region as a whole, and because of geographic limitations to development within the project area (e.g., a significant portion of the available land in the project area lies on steep grades. No state-designated scenic rivers or state-designated or federally designated wildlife areas are present in or near the work sites. No wetlands will be affected by the project, and no above-ground structures, aside from hydrants, will be located in floodplains. The project is not located in the Lake Erie coastal zone. No sole source aquifers are present under the project.

Conclusion

Based upon Ohio EPA's review of the planning information and the materials presented in this Environmental Assessment, we have concluded that there will be no significant adverse impacts from the proposed project as it relates to the environmental features discussed previously. This is because these features do not exist in the project area, the features exist but will not be adversely affected, or the impacts will be temporary and mitigated. It will have long-term benefits associated with the provision of a safe and adequate supply of potable water that is maintained according to the standards of the Safe Drinking Water Act and will result in adequate and reliable water pressure to support the needs of residential customers and businesses throughout the project area.

Contact information

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Figure 1. General project area

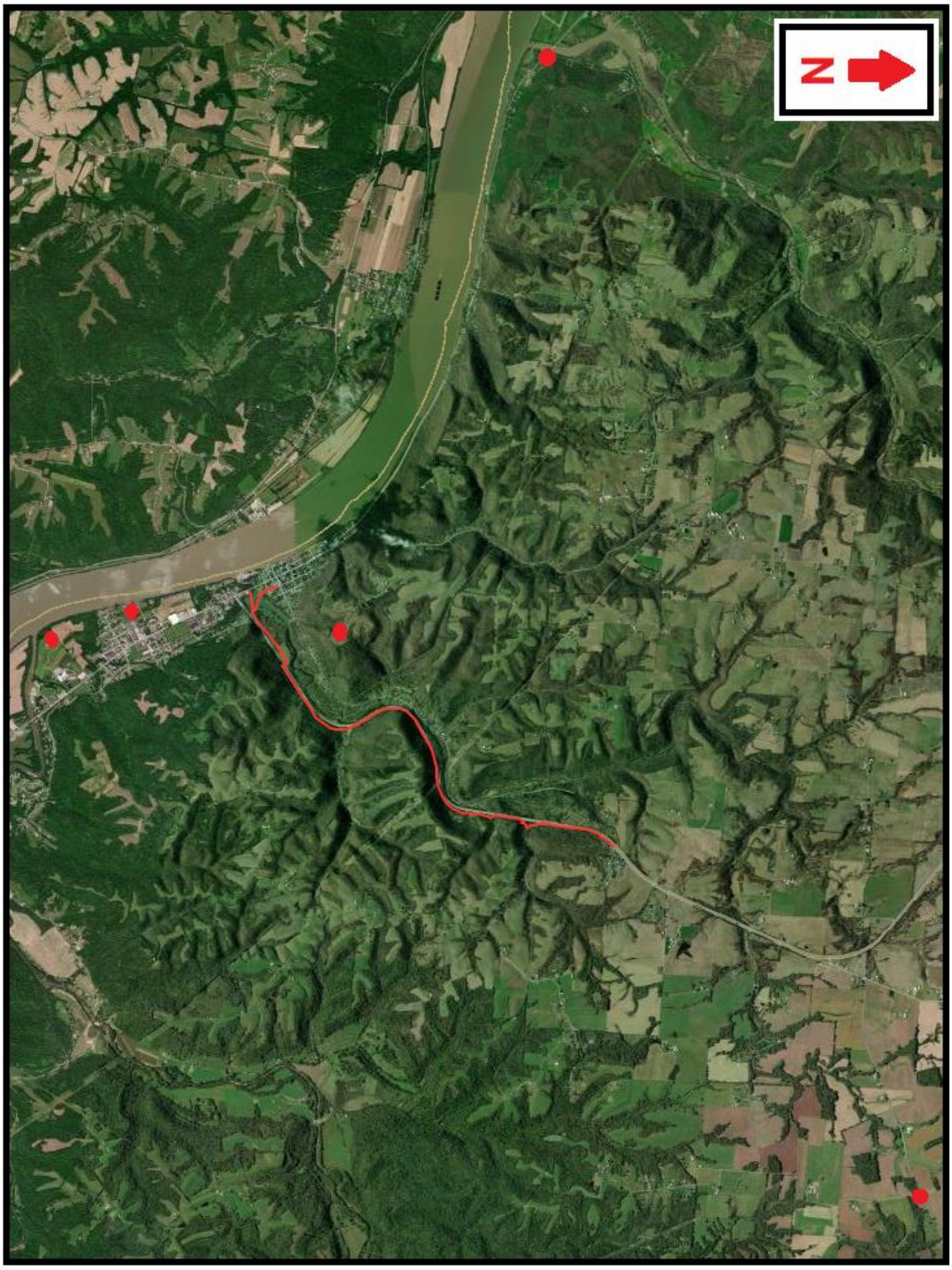

Figure 2. Project areas, in red