

John R. Kasich, Governor Mary Taylor, Lt. Governor Craig W. Butler, Interim Director

April 7, 2014

Village of Cleves Attn: Eric Winhusen 101 N Miami Ave Cleves, Ohio 45002

RE: Village of Cleves Elizabethtown Water Mains, Phase 3; Environmental Assessment and DRAFT Finding of No Significant Impact; WSRLA Loan Number FS390264-0013

Dear Mr. Winhusen:

Please find attached the DRAFT final finding of no significant impact (FNSI) and associated environmental assessment (EA) for the Village of Cleves' Elizabethtown Water Mains, Phase 3 Project. Before a final FNSI can be issued for this project, this document must be subject to a 30 day public comment period. To fulfill this requirement, please make the attached EA and draft FNSI available for public viewing via your website. A hard copy should also be available, upon request, at the Village of Cleve's office. When this has been done, please notify me of where the document has been distributed and the date(s) of distribution.

If you have any questions about the FNSI or the public noticing instructions, please feel free to contact me at (614) 644-3711 or via e-mail me at: rahel.babb@epa.state.oh.us.

Raher S. Babb Environmental Planner

Division of Environmental & Financial Assistance

**Enclosures** 

ec: Daniel Schaefer, Brandstetter Carroll, Inc.
Wayne Cannon, Ohio Rural Community Assistance Program
Leah Zedella, Ohio EPA, DEFA
Gina Hayes, Ohio EPA, DDAGW, SWDO
Daniel Osika, Ohio EPA, DDAGW, SWDO
Sue Farmer, OWDA



John R. Kasich, Governor Mary Taylor, Lt. Governor Craig W. Butler, Director

### April 7, 2014

# DRAFT FINDING OF NO SIGNIFICANT IMPACT TO ALL INTERESTED CITIZENS, ORGANIZATIONS, AND GOVERNMENT AGENCIES

VILLAGE OF CLEVES, HAMILTON COUNTY ELIZABETHTOWN WATER MAINS, PHASE 3 WSRLA No.: FS390264-0013

The purpose of this notice is to seek public input and comments on Ohio EPA's preliminary decision that a Supplemental Environmental Study is not required to implement the recommendations discussed in the attached Environmental Assessment of a plan submitted by the entity mentioned above.

How were environmental issues considered?

The Drinking Water Assistance Fund program requires the inclusion of environmental factors in the decision-making process. Ohio EPA has done this by incorporating a detailed analysis of the environmental effects of the proposed alternatives in its review and approval process. Environmental information was developed as part of the plan review process and during site inspections. The Agency's preliminary Environmental Assessment found that the project does not require the preparation of a Supplemental Environmental Study.

Why is a Supplemental Environmental Study not required?

Our environmental review concluded that significant environmental impacts will not result from the action. Any adverse impacts have either been eliminated by changes in the plan or have been reduced by the implementation of the mitigative

measures discussed in the attached. Environmental Assessment.

How do I get more information?

A map depicting the location of the project is included as part of the Environmental Assessment. The Environmental Assessment presents additional information on the project, alternatives that were considered, impacts of the proposed action and the basis for our decision. Further information can be obtained by calling or writing the contact person named in the back of the Environmental Assessment.

How do I submit comments?

Any comments supporting or disagreeing with this preliminary decision should be submitted to the contact person and at the address at the end of the document. Ohio EPA will not take any action on this plan for 30 calendar days from the date of this notice in order to receive and consider any comments.

What happens next?

In the absence of substantive comments during this period, Ohio EPA's preliminary decision will become final. The entity will then be eligible to receive loan assistance from this Agency.

Please bring any information that you feel should be considered to our attention. We appreciate your interest in the environmental review process.

Sincerely,

Alauddin A. Alauddin, Chief

Alauddin

Division of Environmental and Financial Assistance

Attachment

#### **Environmental Assessment**

# A. Project Identification

Name:

Village of Cleves

Elizabethtown Water Main

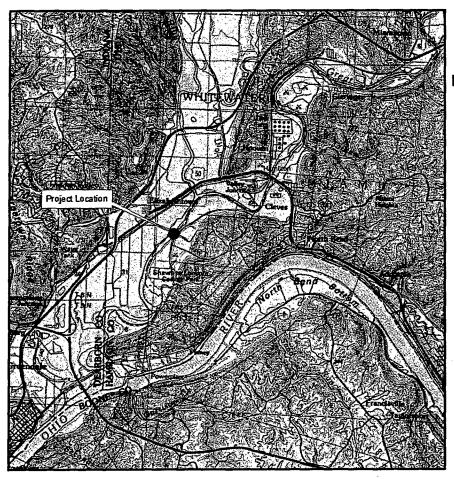
Address:

Mr. Eric Winhusen, Water Superintendent

Village of Cleves

3 South Miami Avenue Cleves, OH 45002

WSRLA No: FS390264-0013



Village of Cleves

Elizabethtown Water Main Extension, Phase 3

WSRLA Loan No. FS390264-0013





# B. Proposed Project

# 1. Summary

The Village of Cleves has applied to the Ohio Environmental Protection Agency's (Ohio EPA) Drinking Water Assistance Fund (DWAF) for financing of phase 3 of the Elizabethtown Water Main project. This Environmental Assessment (EA) has been prepared, in accordance with the DWAF procedures, to evaluate the potential environmental impacts of the proposed project.

The community of Elizabethtown is in need of a public water system. Previous studies conducted by the General Health District of Hamilton County in 1998, and Ohio EPA in 2004, identified and documented sources of contamination from failing septic systems and other surrounding land use activities that have contaminated ground water. Water samples from these studies indicate that the maximum contaminant level (MCL) for nitrates, coliform bacteria and chemical constituents (sodium, potassium, chloride and calcium) has been exceeded. As a result, Elizabethtown needs an alternate water supply and Cleves Water Works has the capability to provide that need to the community.

The project addressed in this document is the third phase of a two year water main extension project to provide water from the Cleves Water Works facility to Elizabethtown. Phases 1 and 2 received funding through the DWAF in June 2012 and May 2013, respectively. Together, those projects have resulted in the installation of 17,200 linear feet of new water mains in the Elizabethtown area. Phase 3 will provide public water service to remaining residents and businesses, as well as provide a redundant second water supply, which will tie in an existing storage facility on Rittenhouse Road.

## 2. Project History and Existing Conditions

Elizabethtown does not have a public water system. Instead, the community of approximately 150 residential and business entities gets its drinking water from six individual public well supplies and several private wells, which have been utilized for decades. In addition to not having a public water system, the community of Elizabethtown also does not have a public sewer system. As a result, failing septic systems have contributed to ground water contamination and, consequently, contamination of the community's drinking water sources.

The Hamilton County Health Department and Ohio EPA require separation between sewer and water supplies, a requirement with which Elizabethtown is not in compliance. As a result, this community has experienced higher than normal nitrate and coliform bacteria levels in its drinking water, presumably from septic tanks that are in close

proximity to existing private and public well water supplies. Providing a public water system will eliminate the public health concern due to affected ground water supplies.

Other potential ground water contamination sources include a scrap metal and recycling facility located east of the community and upstream of the ground water supply; and a sand and gravel mining operation located to the north and east areas of Elizabethtown, which also continues to alter the flow of ground water for the community.

Since 1998, the Hamilton County Health Department has performed various water models and analyses for a number of residents and has found incidences of contaminants that exceed safe Ohio drinking water standards. The health department has noted elevated contaminants in the ground water supplies at various homes, mainly due to close proximity of the septic systems to the ground water supplies.

Elimination of the cross contamination between ground water wells and septic systems is a primary objective for this project. The proposed water main extension from the Cleves Water Works to Elizabethtown will bring a reliable and safe drinking water source to the residents of Elizabethtown.

In 1998, Cleves Water Works constructed a new water treatment plant on Kilby Road along the Whitewater River to replace the old water treatment plant in the Village center along the Great Miami River. The new Kilby Road plant contains facilities for fluoride and chlorine treatment as required by Ohio EPA. The current rated capacity of the treatment plant is five million gallons per day (MGD). The water sources are three ground water wells adjacent to the treatment plant in the Whitewater buried valley aquifer. Additional wells can be added as necessary. The ground water supply is tested regularly and complies with all Ohio EPA drinking water standards.

The Cleves service area contains approximately 8,720 people for the entire water system. The population projection for the planning year of 2020 estimates around 300 more people in the combined Cleves service area. Most of this expansion is anticipated in the eastern high-growth area of the Village of Cleves (Drees residential development), the Elizabethtown area and along the State Route 128 corridor south of the Miamitown area.

### 3. Alternatives Analysis

Three alternatives were considered to address the existing drinking water problems in Elizabethtown: 1) no action; 2) construction of a water treatment plant and distribution system specifically intended to serve the community of Elizabethtown; and 3) regionalization with an existing water treatment plant.

The no-action alternative would leave the residents of Elizabethtown on private well systems and have individual property owners install separate in-house water treatment

systems to improve drinking water quality. Considering the local water system alternative, Elizabethtown does not have the financial, technical or administrative capability to build and operate its own public water treatment and distribution system. In terms of regionalization alternatives, nearby Cleves owns and operates an existing water system that includes a water main in Kilby Road near the water treatment plant, located just south of Suspension Bridge Road. Elizabethtown is located in Whitewater Township, which has agreed to partner with Cleves Water Works in developing a project that provides a safe public water supply for the community at a reasonable cost.

No other public water system is available to this area. Since the Cleves water system is located near the community and has capacity to supply water to the area, this alternative was selected for implementation, in lieu of leaving the area on private wells.

## 4. Project Description

This Elizabethtown Water Main, Phase 3 project completes the Ohio EPA previously-approved project phases from 2012 and 2013 by providing system redundancy, storage and hooking up remaining village residents, while also completing the water main loop system for Elizabethtown. As shown in Figure 1, the project consists of approximately 9,850 linear feet of new line installed in road rights-of-way along Lawrenceburg Road and a portion of Dugan Gap Road. The new water main will connect other new water

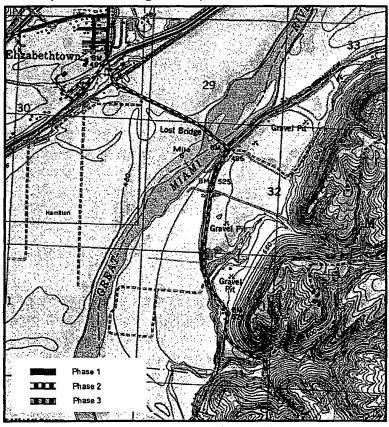


Figure 1: Elizabethtown Water Mains, Phase 3 alignment in proximity to phases 1 and 2.

mains installed in Elizabethtown (previously authorized phases 1 and 2 in 2012 and 2013), along with an existing line on Dugan Gap Road (approximately 1,500 linear feet from the intersection with Lawrenceburg Road).

Three sizes of pipe will be used for this project. The majority of the water main line (8,800 linear feet) will be eight-inch diameter ductile iron pipe and will be installed immediately adjacent to the north/east sides of Lawrenceburg Road and Dugan Gap Road. width will be approximately three feet, with an average depth of three to four feet. For the crossing of the Great Miami River. the main will

approximately 600 linear feet of 12-inch diameter high-density polyethylene (HDPE) line that will be installed using horizontal directional drill (HDD) technology. The HDD launch pit will be on the east side of the Lawrenceburg Road Bridge and will be drilled under the stream at a minimum depth of 20-feet. Lastly, approximately 450 linear feet of six-inch diameter ductile iron pipe will be used as extension line for fire hydrants that will be installed at approximately 350-feet intervals along the water main.

## 5. Implementation

The Village of Cleves has secured sufficient funding to implement the project at a reasonable cost. The total cost for the project is estimated to be \$900,000. Funding for the proposed project is expected to come from the Ohio DWAF, specifically the Water Supply Revolving Loan Account (WSRLA) administered by Ohio EPA.

The Elizabethtown Water Main, Phase 3 project ranked high enough on Ohio EPA's priority list to be in the fundable range for WSRLA funds. Based on the DWAF Program Management Plan, the Village qualifies for a 20-year loan at an interest rate of two percent.

The WSRLA loan to Cleves is currently anticipated to be awarded in April 2014. Project construction will commence shortly thereafter and take approximately 12 months to complete.

### C. Environmental Impacts of the Proposed Project

A complete environmental review of the project was performed and each environmental attribute is addressed below. Construction-related impacts will generally be confined to the areas of surface disturbance. These areas will include the construction easement in which the proposed water lines will be installed. Collectively, these areas are relatively small and the construction-related impacts are such that standard construction mitigation will generally be adequate to prevent adverse environmental impacts.

## 1. Major Land Forms

The Elizabethtown Water Main, Phase 3 project is located in and around Elizabethtown in Hamilton County, Whitewater and Miami townships. It lies in a portion of Hamilton County that is in the Bluegrass physiographic region. The Bluegrass physiographic region is characterized by gently rolling lowland that is coextensive with the outcrop of Ordovician and Silurian carbonates and shales exposed on the crest and flanks of the Cincinnati arch. The region, which takes its name from the lush growth of native bluegrass, is subdivided into the Inner Bluegrass, mostly on the Lexington Limestone, and the Outer Bluegrass, mostly on limestones, dolomites and shales of Late Ordovician and Silurian age. A transition zone between these two subregions, underlain by the Kope and Clays Ferry formations, is known as the Eden Shale belt.

Specifically, the project area is in the Outer Bluegrass subregion. The Outer Bluegrass typically has low-to-moderate relief and soils that range from thick, over limestones, to thin, over shales; dolomites of the Silurian are commonly well exposed. Silurian shales, with abundant swelling clays, typically result in small, low-angle landslides and underlie zones of unstable slopes. The soils developed on some Silurian carbonate rocks are nearly as rich as those of the Inner Bluegrass.

The project area lies within the Miami and Whitewater river valleys. These valleys are broad, flat-bottomed depressions flanked on either side by relatively steep bluffs rising 200 to 500 feet above the general level of the valley floor. The valley floors are low enough to be subject to floods and are covered by a thin veneer of recent alluvium. These broad valleys are the remnants of valleys that existed prior to Pleistocene glaciation and were partly filled with glacial drift.

Water line installation will be a relatively simple process of digging a narrow (approximately two feet wide) and shallow (approximately five feet deep) trench, installing the bedding material and pipe and then backfilling the trench. There will be no large areas of excavation or stockpilling earthen materials. The only above-ground features of the project will be the hydrants. Once construction is completed, all ground surface elevations will be restored to their pre-construction levels. The Great Miami River will have to be crossed by the proposed water main. This will be completed by boring under the stream to avoid impacts to the stream bed. The method for this crossing is discussed later in this document.

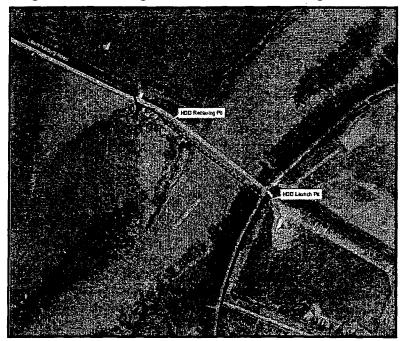
Based on the above, the proposed project will have no significant adverse effect on major land forms.

#### 2. Surface and Ground Water

The project area is within the Whitewater River watershed (HUC 05080003) and the Great Miami River watershed (HUC 05080002). The Whitewater River has an aquatic life use designation of "exceptional warmwater habitat (EWH)" and an antidegradation categorization of "superior high quality water." The Great Miami River, in this location, has an aquatic life use designation of "warmwater habitat (WWH)." New water main construction for this project will not directly impact either of these streams; however, it will be necessary for the line to cross the Great Miami River. This crossing will occur at river mile 5.56 and be continuous with the portion of the line that will be installed along Lawrenceburg Road.

<sup>&</sup>lt;sup>1</sup> "Warmwater habitat" and "exceptional warmwater habitat" are water quality designations used by Ohio EPA to define the ability of the streams to support a diversity of aquatic life. "Warmwater habitat" is the most common water quality designation in the state. A "warmwater habitat" stream supports typical assemblages of fish and invertebrates. "Exceptional warmwater habitat" supports a unique and highly diverse assemblage of fish and invertebrates.

To avoid impacts to the Great Miami River, the main will be installed using horizontal directional drill technology at a minimum depth of 20-feet below the bed of the stream. As shown in Figure 2, the proposed HDD launch pit will be on the southeast side of the Lawrenceburg Road Bridge, from which the line will be drilled across the river to a receiving pit in an area where a gravel mining operation currently exists. Approximately 1,100 linear feet of HDPE pipe will be installed below the river bottom. The plan sheets developed for the project provide specific details as to how the crossing should occur. They also contain requirements for a frac-out<sup>2</sup> contingency plan that must be developed by the contractor and submitted for review and approval of the U.S. Army Corps of Engineers, Huntington District before drilling work can begin.



There are many reasons and causes for frac-out occurrence. including excessive pressure in the bore hole, underground conditions (faults, fractures. voids. etc.) that provide pathways for drilling fluid to reach the surface. highly variable/difficult subsurface drilling conditions, and relatively inexperienced drilling operators. contingency The plan. developed by the contractor, address the measures necessary to fully respond appropriately and quickly to any frac-out situation.

Figure 2: Great Miami River crossing

The frac-out contingency plan must include the following general procedures and response requirements:

- The contractor must stop drilling operations immediately upon notice of inadvertent release of drilling fluids on the land or river, reduce pressure on the drilling fluids in the borehole, and locate the source(s) of the frac-out;
- The contractor must describe the procedures that will be used to contain the drilling mud and prevent further migration on land or in the river;

<sup>&</sup>lt;sup>2</sup> During normal drilling operations, drilling fluid travels up the borehole into a pit. A "frac-out" occurs when the borehole becomes obstructed or the pressure becomes too great inside the borehole, the ground fractures and fluid escapes to the surface.

- The plan should include notification of the Cleves Water Works Engineers and other applicable regulatory authorities, including the Army Corps of Engineers and Ohio EPA;
- Any inadvertent release of drilling mud must be cleaned up immediately by the HDD contractor and disposed according to permit requirements of this project;
- For in-water frac-outs, drilling operation will not be resumed until site-specific containment measures are in place and functioning effectively. The frac-out site(s) will be closely monitored to make sure no further inadvertent releases occur;
- The plan must identify and store on site the necessary materials for implementing frac-out containment procedures, including silt fencing, sand bags, floating booms, plywood sheets, sections of concrete culvert pipe, or aqua-dams;
- The potential equipment and vehicles needed for drilling mud containment and clean up should be described (e.g., backhoe, vacuum truck, etc.) and must be available to the contractor for timely response.
- The contingency plan must include a detailed outline of the contractor report that will be used to summarize the events leading up to any inadvertent release, as well as the measures taken following the release to minimize impacts on the environment. This report must be submitted to all parties, including the Army Corps of Engineers and Ohio EPA.

Provided the contingency plan is developed in accordance with these requirements and approved by the associated agencies, the project is not expected to have any significant adverse environmental impacts to the Great Miami River.

Also within the project area is an unnamed tributary to the Great Miami River. This tributary is located near the southern-most portion of the project along Dugan Gap Road. In order to avoid impacts to the stream and lessen traffic disruption in this area, the line will be installed in the road as shown in Figure 3.

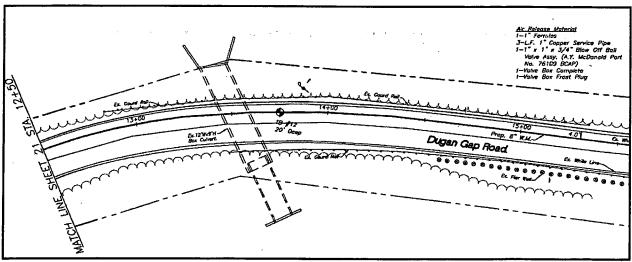


Figure 3: Dugan Gap Road stream crossing

Generally speaking, normal construction best management practices (including appropriate storm water controls, as needed), good project site housekeeping and following road rights-of-way will minimize impacts to surface water features.

#### **Ground Water**

The drinking water for the Village of Cleves' service area, in which Elizabethtown is located, will come from a buried-valley aquifer that underlies the Great and Little Miami River valleys. This aquifer, known as the Great Miami River Buried Valley Aquifer, has been designated a sole-source aquifer<sup>3</sup> by the United States Environmental Protection Agency (USEPA) and is the principal source of drinking water for 1.6 million people.

The aguifer is found in bedrock valleys incised into uplifted Silurian and Ordovician bedrock by a tributary of the Teays River preglacial drainage system. These valleys were buried by sediments deposited by advancing glaciers (tills) or filled in by coarsegrained sediments deposited by glacial meltwaters (outwash). Depth to water in most parts of the aguifer is less than 20 ft. Supply wells completed in the sand and gravel deposits commonly yield more than 1,000 gallons per minute (GPM). At several locations, high pumping rates are maintained by induced infiltration of river water or by artificial recharge lagoons. In the northern part of the aquifer system, Silurian limestones and dolomites form a carbonate bedrock aquifer that is used for domestic and small industrial supply. Wells completed in the carbonate aguifer typically yield between 10 and 100 GPM. In the southern part of the aquifer system, the shale-rich Ordovician bedrock is poorly permeable and is used for domestic-water supply only where other sources of water are not available. In most of this portion of Hamilton County, yields from ground water wells can be as much as 100 GPM.4 There are also some areas of the project that can yield more than 500 GPM.

Ground water quantity and quality should not be adversely affected by the proposed project. During construction, it may be necessary to de-water the trenches in some areas, but this should not significantly impact ground water quantity because the trenches will be shallow and de-watering will not occur in any one place for a significant amount of time. De-watered flows will be settled, if necessary, before discharge to any water body. To protect ground water quality during construction, a spill prevention plan and response measures have been included in the detailed plans for the project.

Based on the above, it is concluded that the proposed project will have no significant adverse impact on ground or surface water quantity or quality.

<sup>4</sup> Information obtained from the Ohio Department of Natural Resources (ODNR), Hamilton County Ground Water Resource Map.

<sup>&</sup>lt;sup>3</sup> The Sole Source Aquifer program, established in 1974 under the Safe Drinking Water Act, allows for special protections to aquifers that supply the sole or principal source of a community's drinking water. These protections are intended to prevent contamination of the community's local ground water source of drinking water and require a more detailed review as a result.

### 3. Terrestrial and Aquatic Habitat

As part of the environmental review of the overall project, the Ohio Department of Natural Resources (ODNR) was consulted with regard to threatened and endangered species that may be present in the project area. United States Fish and Wildlife Service (USFWS) information on federally-listed species was also collected. Information from ODNR and USFWS indicates that Hamilton County is within the range of the below described species.

The project lies within the range of the **bald eagle** (Haliaeetus leucocephalus), a species protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. Due to the project type, location, and onsite habitat, this species would not be expected within the project area and no impact to this species is expected.

The proposed project lies within the range of the **Indiana bat** (*Myotis sodalis*), a federally-listed endangered species. Since first listed as endangered in 1967, their population has declined by nearly 60 percent. Several factors have contributed to the decline of the Indiana bat, including the loss and degradation of suitable hibernacula, human disturbance during hibernation, pesticides and the loss and degradation of forested habitat, particularly stands of large, mature trees. Fragmentation of forest habitat may also contribute to declines. Most recently, white-nose syndrome, a novel fungal pathogen, has caused serious declines in the Indiana bat population in the northeastern U.S. White-nose syndrome has also been documented in Ohio and declines of Indiana bats during winter censuses have been noted, but the full extent of the impacts from white-nose syndrome in Ohio are not yet known.

During winter, Indiana bats hibernate in caves and abandoned mines. Summer habitat requirements for the species are not well defined, but the following are considered important:

- dead or live trees and snags with peeling or exfoliating bark, split tree trunks and/or branches or cavities, which may be used as maternity roost areas;
- live trees (such as shagbark hickory and oaks) noted for their extensive exfoliating bark; and
- stream corridors, riparian areas and upland woodlots with relatively open understory that provide forage sites.

The proposed project lies within the range of the **northern long-eared bat** (Myotis septentrionalis), a species that is currently proposed for listing as federally-endangered. White-nose syndrome has caused serious declines in the northern long-eared bat population in the northeastern U.S, also.

During winter, northern long-eared bats hibernate in caves and abandoned mines. Summer habitat requirements for the species are not well defined, but the following are considered important:

- Dead or live trees and snags with cavities, peeling or exfoliating bark and split tree trunks and/or branches, which may be used as maternity roost areas;
- Foraging habitat in upland and lowland woodlots and tree lined corridors; and
- Occasionally they may roost in structures like barns and sheds.

There are no trees or other suitable bat habitat that will be affected in the project area. Therefore, it is the determination of Ohio EPA, DEFA, that impacts to either the Indiana bat or the northern long-eared bat are unlikely. Should there be a change in the proposed alignment that results in potential impacts to trees and other suitable bat habitat, the USFWS recommends that the habitat and surrounding trees be saved wherever possible. If the trees must be cut, then further coordination with USFWS must occur as described in the November 26, 2013, letter from that Agency.

The project is within the range of the **fanshell** (Cyprogenia stegaria), **pink mucket pearly mussel**, (Lampsilis abrupta), **sheepnose** (Plethobasus cyphyus) and **snuffbox** (Epioblasma triquetra). Records of these species exist in the Ohio River, which is over one mile from the project site. The proposed project also lies within the range of the **rayed bean** (Villosa fabalis), a federally-listed endangered species. The rayed bean is generally known from smaller, headwater creeks, but records exist in larger rivers. They are usually found in or near shoal or riffle areas, and in the shallow, wave-washed areas of lakes. There is a record of this species in the Great Miami River.

Habitat that supports these species is present within the project area; however, potential impacts will be avoided since there will be no disruption to stream beds as previously described in this document. Therefore, it is the determination of Ohio EPA, DEFA, that impacts to the fanshell, pink mucket pearly mussel, sheepnose, snuffbox or rayed bean are unlikely. If project plans change and boring will not be used to install the water main under the Great Miami River, or should the proposed project directly or indirectly impact any of the habitat types described above, then further coordination with USFWS must occur as described in the November 26, 2013, letter from that Agency.

The proposed project lies within the range of the **running buffalo clover** (*Trifolium stoloniferum*), a federally-listed endangered species. There are multiple records of this species within three miles of the project area. This species can be found in partially shaded woodlots, mowed areas (lawns, parks, cemeteries), and along streams and trails. Running buffalo clover requires periodic disturbance and a somewhat open habitat to successfully flourish, but cannot tolerate full-sun, full-shade or severe disturbance.

Due to the severe disturbance of the areas where the water main will be installed, it is the determination of Ohio EPA, DEFA, that impacts to this species are unlikely.

In addition to the above-listed federal species, the following Ohio-listed species have a documented presence within a one-mile radius of the project area: blue sucker (Cycleptus elongates), a state-threatened fish species; and, lark sparrow (Chondestes grammacus), a state-endangered bird species. Again, because of the lack of stream bed disturbance and avoidance of tree/vegetation clearing, it is the determination of Ohio EPA, DEFA that impacts to either of these state-listed species is unlikely.

According to a letter written by the US Fish and Wildlife Service on November 26, 2014, there are no Federal wildlife refuges, wilderness areas or Critical Habitat within the vicinity of the project area. Furthermore, stream bed impacts will be avoided as previously discussed and no trees or other sensitive habitat will have to be altered to accommodate this project.

Due to the nature of the proposed project, its alignment and its typical construction techniques, it is not expected that any of the above-listed species will be adversely affected by this project. Given the fact that sensitive habitat will not be altered, the project is not expected to have any significant adverse environmental impacts to terrestrial or aquatic habitat or to threatened or endangered species.

Based on the above, it is concluded that the proposed project will have no significant adverse impact on terrestrial and aquatic habitat.

# 4. Land Use and Agriculture

The project area is located in Whitewater Township, Hamilton County. The general project area is developed and previously disturbed. Land use in the project area is comprised of residential homes, roadways, utility lines, gravel mining and a coal ash landfill.

The proposed project will install water lines to provide potable water to existing residents of Elizabethtown. These water lines are only for the existing residents of that community and are not designed for significant development of residential growth, nor is significant residential growth expected in the project area. Thus, the proposed project will neither directly or indirectly impact land use or agriculture in the project area.

Based on the above, it is concluded that the proposed project will have no significant adverse impact on land use and agriculture.

### 5. Floodplains and Wetlands

A portion of the project is located within the 100-year floodplain of the Great Miami River. This includes the section of Lawrenceburg Road as it leaves Elizabethtown and crosses the Great Miami River. Because of the nature of the project (i.e., buried water mains), the project will not result in a loss of floodplain area or capacity.

The proposed project was also reviewed with respect to any wetlands in the construction area. Based on information reviewed by Ohio EPA, it does not appear that wetlands are present along the proposed project's alignment.

Based on the above, it is concluded that the proposed project will have no significant adverse impact on floodplains and wetlands.

### 6. Archaeological and Historical Resources

The proposed project was reviewed with respect to its potential for adverse impacts to archaeological or historic resources. According to the Ohio Historic Preservation Office's online mapping system, the area in question has been rather extensively surveyed for archaeological and historical resources. While some of those resources have been documented in the vicinity of the proposed Elizabethtown Water Mains, Phase 3 project, no resources either listed or eligible for listing in the National Registry of Historic Places (NRHP) are present within the area where the water mains will be installed. Therefore, because the work will be performed within the road rights-of-way, involving an eight-inch diameter water line that will have a relatively small area of disturbance within the road (which is considered to be previously disturbed), Ohio EPA, DEFA has determined that the proposed project will have no significant adverse impact on archaeological and historical resources.

## 7. Air Quality

There are six federal air quality pollutants for which monitoring are required: sulfur dioxide, nitrogen oxide, lead, carbon monoxide, particulate matter and ozone. Hamilton County is in attainment with five of the six federal air quality pollutant standards and is currently in non-attainment with particulate matter.

The proposed project will result in a temporary increase of dust and fumes from construction activities; however, the contractor(s) will take appropriate measures (such as keeping roadways clean and spraying exposed soil with water) to control fugitive dust during construction, so any such impacts should be short-term and insignificant. Since the new water line does not involve additional motorized parts to operate and will not induce future growth, there will be no significant, long-term adverse impact to air quality associated with the proposed project, either.

Based on the above, it is concluded that the proposed project will have no significant adverse impact on air quality.

#### 8. Noise, Traffic and Aesthetics

While noise levels in the project area will be increased by the operation of equipment during construction, the impact of these activities will be temporary and short-term. Vehicles and equipment will remain in any one location for only a short period of time and will be operated so as to minimize noise to the greatest degree practicable. Therefore, noise resulting from the operation of earthmoving and other construction equipment should not result in any significant adverse environmental impacts. Furthermore, there will be no long-term increase in noise levels attributable to the proposed project.

The proposed project is in an area with residential and industrial traffic. There will be a slight increase in the normal amount of traffic (equipment and materials delivery, etc.), but this increase will not be significant. The proposed project will not necessitate any long-term road closures; however, there will be some temporary road closures during the water line installation segments. Traffic and road closures will be done in accordance with Hamilton County Engineer permit and township requirements and involve all appropriate mitigative measures (detours, safety barriers, flagpersons, etc.). Construction activities are typically aesthetically displeasing; however, the proposed construction will be of short duration and will be confined (at any one time) to a small area. Once the construction is complete, there will be little visible change in the surrounding area. The only above ground structures – fire hydrants – will be generally not visible unless someone is in close proximity. There are no long-term adverse aesthetic impacts anticipated from the proposed project.

Based on the above, it is concluded that the proposed project will have no significant adverse impact on noise, traffic and aesthetics.

### 9. Local Economy

The proposed Elizabethtown Water Main, Phase 3 project has an estimated total cost of \$900,000. The project ranked high enough on Ohio EPA's priority list to be in the fundable range for WSRLA funds. Based on the DWAF Program Management Plan, Cleves qualifies for a loan with a 20-year term at an interest rate of two percent.

Property owners and residents of the Elizabethtown community will become water customers of the Cleves Water Works and will pay a monthly user charge, as well as a water system fee and tap-in fee. According to Cleves Water Works, the average monthly charge to these property owners and residents will be approximately \$13.05 per base monthly usage (2000 gallons/month) for a single family unit and \$3.19 per each 1000 gallons over this base usage. In addition, the residents will pay a reduced

tap-in fee during water main construction of \$1,458, which can be paid up front or placed on the monthly water bill for as little as \$5.76 per month. A monthly system fee as low as \$15.80 will be included as well. Thus, the typical ¾ inch water service user could pay as little as \$34.61 per month for a base water bill, tap-in and system fee (using a payment plan) for up to 30 years. There will also be some additional one-time costs for each property such as: private service connection to the house or building, flow regulator and well abatement costs. The cost to hire a plumber to install water service to the house and the cost to abandon the private well to meet health department requirements could be financed with possible grant dollars through the Hamilton County Development Corporation for up to \$6,500, based on eligibility. Property owners were presented costs and project information with township trustees present at the April 17, 2012, public meeting.

The Village of Cleves' annual median household income (MHI) is \$33,654 and the average annual user charge for the project area is estimated to be \$415.32, which is 1.2 percent of the MHI for the project area. This equals the Ohio average of 1.2 percent (the 2008 state average annual user charge for water supply services as a percentage of the 2000 Ohio MHI).

Elizabethtown's projected average annual user cost is within the range of surrounding communities namely: Cincinnati (population 332,572) - \$283, Lockland (population 3,488) - \$385 and Wyoming (population 8,347) - \$572. The population served for this Phase 3 project is 100 residents.

Based on the above, it is concluded that the proposed project will have no significant adverse impact on the local economy.

## D. Public Participation

The following agencies have reviewed, and were provided an opportunity to comment on, the planning information for the proposed project:

- Ohio Environmental Protection Agency
- Ohio Department of Natural Resources
- Ohio Historic Preservation Office
- United States Environmental Protection Agency

The public and local residents were notified about the project and associated costs through the public meeting on April 17, 2012. Notification letters were sent to the residents the week of April 1, 2012, which described the project and advertised the upcoming public meeting. The Village of Cleves, Whitewater Township, Hamilton County Planning and Development and the General Health District of Hamilton County have all been involved in the process of developing the project.

In general, public support for this project has been positive. The public sees these extensions as long overdue, especially for Elizabethtown and residents along these water main extension routes where long time contamination has existed. All the Cleves projects will follow the same protocol required by Ohio EPA and the residents are invited regularly to board and Council meetings to discuss any matters of concern they may have. The Village plans to hold another public meeting for this upcoming project, as well as follow up on previous public meetings and any outstanding concern or issues.

Furthermore, this environmental assessment will be subject to a 30-day public review period. Any comments received during that review will be evaluated and addressed in a response-to-comments document. The draft document will be available for review on Ohio EPA's website at

http://epa.ohio.gov/defa/EnvironmentalandFinancialAssistance.aspx

Based on the above, Ohio EPA feels that adequate public participation has occurred and is not aware of any significant public opposition to the proposed project.

## E. Reasons for a Preliminary Finding of No Significant Impact

Based upon Ohio EPA's review of the planning information and the materials presented in this environmental assessment, it is concluded that there will be no significant adverse impacts from the proposed project as it relates to the environmental features discussed previously. Through avoidance of sensitive areas and the use of mitigative measures outlined in this document, the impacts from construction should generally be short-term and insignificant.

The completion of this long-awaited project will provide a safe and adequate supply of treated water for the residents of Elizabethtown.

#### F. Questions or Comments

For further information, please contact:

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