



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

March 31, 2023

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

**Village of Middlefield - Geauga County
Water Well No. 3 Completion
Loan Number: FS390595-0004**

The attached Environmental Assessment (EA) is for a water infrastructure improvement project in Middlefield 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 Village of Middlefield can then proceed with its application for the WSRLA loan.

Sincerely,

Kathleen Courtright, Assistant Chief
Division of Environmental & Financial Assistance

Attachment

ENVIRONMENTAL ASSESSMENT

Project Identification

Project: Middlefield Water Well No. 3 Completion

Applicant: Village of Middlefield
14860 North State Avenue
Middlefield, Ohio 43138

Loan Number: FS390595-0004

Project Summary

The Village of Middlefield has requested \$2.3 million in financial assistance from Ohio EPA's Water Supply Revolving Loan Account (WSRLA) to make improvements to its wellfield and raw water line as shown below in Figure 1. The improvements include a new well and a redundant water supply line, creating ample supply for current and future users. The village is eligible for \$1.4 million in state infrastructure grants, which will reduce the loan amount significantly.

Given the sensitive nature of the project area, the village contacted the Army Corps of Engineers and received a nationwide permit under Section 404 of the Clean Water Act. With its issuance, potential impacts were reduced to insignificance. In addition, the permit specifies the conditions under which the contractor will be required to install the proposed improvements included in this project. Other than the wetlands and stream crossing locations, the project area lacks important environmental features.

History & Existing Conditions

The Village of Middlefield owns and operates a public water system consisting of a wellfield, water treatment plant, and distribution system. Currently there are two ground water wells located in the Tare Creek Watershed along State Route (SR) 608, approximately 1.8 miles north of SR 87. Water from both wells is pumped approximately 0.5 miles to the village water treatment plant (WTP) which is also located along SR 608 and approximately 0.5 miles north of SR 87. Treatment at this roughly 576,000 gallons per day (gpd) WTP includes pressure filtration designed to oxidize, filter and remove iron, manganese and the attached arsenic, and chlorination. The WTP went on-line in 2008, resulting in a significant reduction of iron, manganese, and arsenic. The village's water system provides drinking water to 1,192 service locations daily. These include 990 residential connections, 151 commercial connections, and 51 industrial connections.

Village of Middlefield
Waterline Well #3
Nationwide Permit 58
DA Processing No.: LRB-2022-00527
Geauga County, Ohio
Coordinates: 41.468305, -81.077805
Sheet 1 of 25

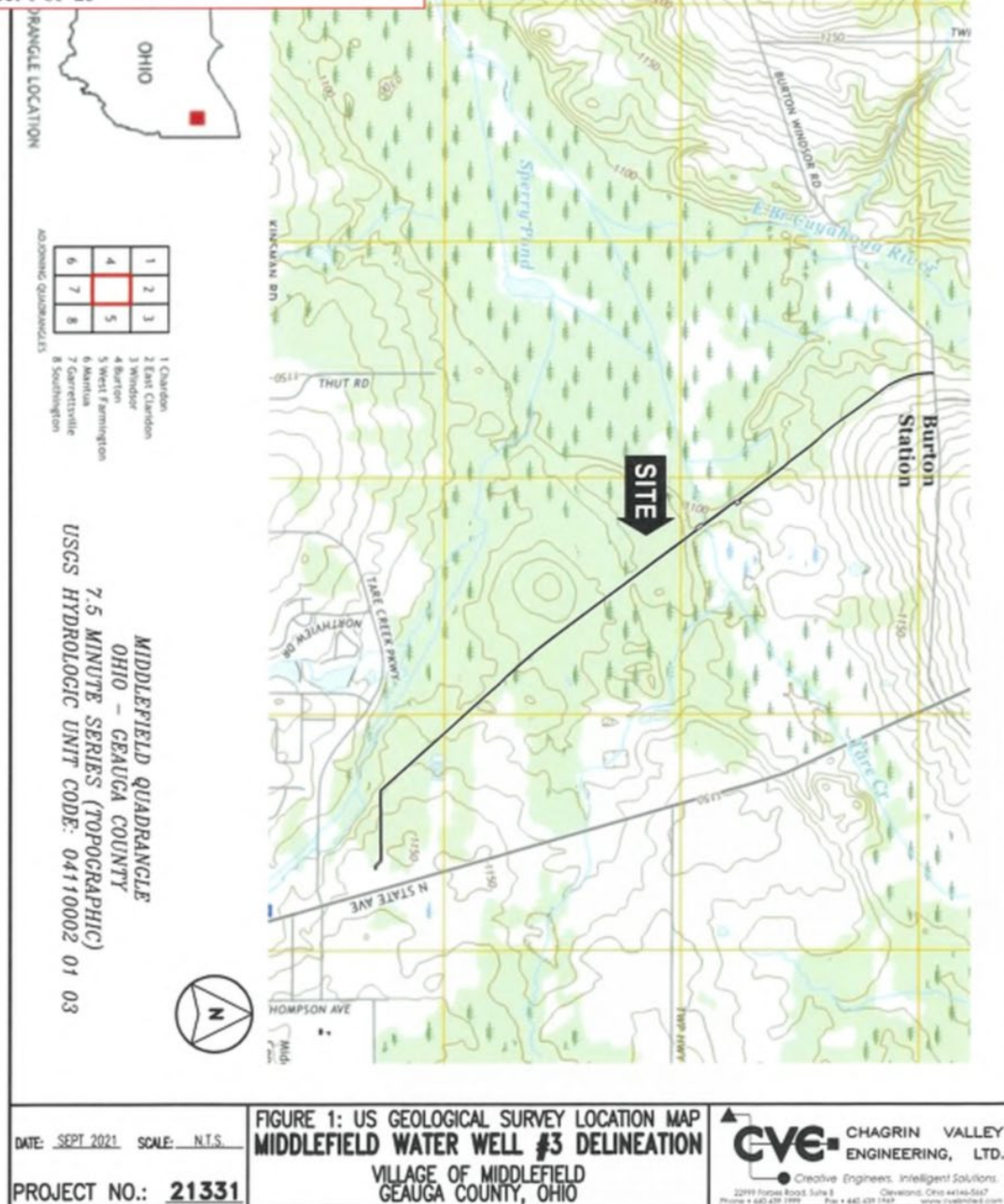


Figure 1. Middlefield project area map

The two groundwater supply wells are aging having been drilled and developed in the early 1960's. According to the village, completion of the proposed project will address the problem with the village's wells consisting of insufficient capacity.

Population and Flow Projections

According to the village, its population and the resulting water demand are expected to increase to 2,864 people. and about 576,000 gpd.

Alternatives

Middlefield evaluated three alternatives: a no-action alternative, regionalization (with the village of Burton or the City of Chardon), upgrades to the village's wells combined with improvements to the village's well and raw water line. The first option was eliminated from consideration because it would not address the problems the village is experiencing. The regionalization options were eliminated from consideration because they are not adjacent to the village and as a result the costs are higher than the local options. For that reason, the village considered local alternatives such as upgrading the existing system. As an upgrade to the existing system would not address the village's expected needs over the next 20 years, this option was also eliminated from further consideration. Since the village is expecting growth, bringing Well #3 and its associated raw water line on-line is the only option.

Selected Alternative

The project is broken down into two parts, the first being connection of a water line from Well #3 to the water treatment plant (8-inch water main connection to existing distribution water main with valves and check valves). The second part is the connection and build out of water Well #3 including a well building, the installation of fencing, driveway, electrical and telemetry along with engineering. This will create a new well to the system and also provide a redundant water supply line for current and future users. See Figure 1 above.

The electrical work consisting of running electric conduit from Burton Windsor Road southeast to the proposed location of Well #3, conduit work, pull boxes, and a transformer pad is almost completed. The remaining work including any electric cable or the pad mounted transformer will need to be completed by the electric utility.

Implementation

Middlefield has requested \$2.3 million from the WSRLA and is considering splitting this project into two. Effectively, this would mean that Middlefield would receive two loans, rather than one. The village received a state infrastructure grant for \$1.4 million and the remaining balance of \$871,782 will be borrowed at the small-community interest rate (currently 2.18%; the rate is set monthly and may change before loan award). Compared to market-rate financing at 3.98%, Middlefield will save \$308,836 over the 30-year life of the loan by using the WSRLA funding.

A typical residential customer served by the village's WTP using 3,315 gallons per month currently pays about \$30 per month for water service and can expect this monthly fee to increase by 3.3% each year over the life of the village's loan to keep pace with inflation. As a percentage of the village's annual median household income (MHI) of \$53,525, this annualized current sewer service charge of \$360 is about 0.67% of the MHI and compares favorably to the state average bill of \$697.

Construction will start after loan award and be completed in approximately ten months.

Public Participation

According to the village, the Well #3 project was talked about at open meetings in council, finance committee, and the streets and utilities committee throughout 2019 and 2020. The project was also part of the village's capital improvement plan.

Ohio EPA will make a copy of this document available to the public on its web page:

<https://epa.ohio.gov/divisions-and-offices/environmental-financial-assistance/announcements> for review and comment) and will provide it upon request. A copy may also be posted at the village's offices, and on its web site.

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.

Archaeological and Historical Resources

A cultural resources survey of the project disturbance area found no important historical or archaeological resources.

Aquatic Habitat and Surface Water, including Wetlands

Middlefield's project lies within the Tare Creek – Cuyahoga River Watershed. Based on the limited scope of the village's proposal, Ohio EPA has concluded that the project's potential impacts on aquatic habitats and surface water resources will be minimal as a result of the impact mitigation in the nationwide permit already issued for this project as discussed below. Disturbance to the three wetlands identified in the project area, a tributary to Tare Creek, and Tare Creek itself will be minimized by limiting construction to the right-of-way areas shown in the detail plans, as well as prohibiting any temporary or permanent disposal of fill material in wetlands and streams outside of the work right-of-way. Further, the geographic contour elevations in the project area must be restored. On this basis, direct, short-term impacts of this proposed project on area surface water resources will occur, but are not expected to result in significant, adverse environmental impacts on these surface water features.

Endangered Species

This project was reviewed for impacts on federally listed endangered and threatened species. Based on this review, three species of bats and one insect species were identified. By performing seasonal cutting of trees, defined as woody stems larger than five inches in diameter, between October 1st and March 31st, any potential adverse effects on the federally listed Indiana bat, northern long-eared bat, and the tricolored bat are expected to be minimal.

Fish and Wildlife

Based on the limited scope of the village's proposal, Ohio EPA has concluded that the project's potential impacts on fish and wildlife resources will be minimal as a result of the impact mitigation in the nationwide permit already issued for this project as discussed below.

The village is generally prohibited from performing in-water work between March 15 and June 30 to preclude adverse impacts on the spawning, nursery, and feeding activities of native fish species. For 2023's in-water restriction period only, ODNR has indicated that it does not object to granting a 48 hour in-water work waiver to the village during the restricted period of March 15 through June 30, 2023. This waiver is conditioned on the village's contractor completing the work as soon as possible once started and limited to what is needed.

Further, given the potential presence of state listed sandhill cranes, ODNR's Division of Wildlife has recommended that wetland impacts be avoided from April 1 through August 31.

Floodplains

As noted above, temporary disturbance to tributary of Tare Creek, Tare Creek and its floodplain will occur. By limiting construction to the right-of-way areas shown in the detail plans, as well as prohibiting any temporary or permanent disposal of fill material in floodplains without a permit, Ohio EPA expects that no significant, adverse long-term impacts will occur. This will be accomplished by the Army Corps requiring that the geographic contour elevations in the project area be restored. On this basis, direct, short-term impacts of this proposed project on area surface water resources will occur, but are not expected to result in significant, adverse environmental impacts on these surface water features.

Conclusion

Based on Ohio EPA's review of the village's proposed well expansion and raw water line project, it will have no significant direct effect on air quality, coastal zones, endangered species, energy, farmland, ground water resources, land use, local economy, noise/traffic/aesthetics, safety, safe drinking water, sole source aquifers, and terrestrial habitat. 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. Similarly, no major indirect and cumulative effects on these resource types are anticipated by Ohio EPA. Overall, the proposed project is expected to provide Middlefield with a more reliable wellfield and raw water distribution system.

Contact Information

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