



GRETCHEN WHITMER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY
LANSING



PHILLIP D. ROOS
DIRECTOR

April 25, 2024

TO: All Interested Citizens, Organizations, and Government Agencies

SUBJECT: FINDING OF NO SIGNIFICANT IMPACT
Village of Pentwater
Water System Improvements Project
Drinking Water State Revolving Fund Project Number 7676-01

The purpose of this notice is to seek public input and comment on a preliminary decision by the Michigan Department of Environment, Great Lakes, and Energy (EGLE) that an Environmental Impact Statement (EIS) is not required to implement recommendations discussed in the attached Environmental Assessment of a water supply project planning document submitted by the applicant mentioned above.

HOW WERE ENVIRONMENTAL ISSUES CONSIDERED?

Part 54, Safe Drinking Water Assistance, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, being Sections 324.5401 to 324.5418 of the Michigan Compiled Laws Annotated, requires EGLE to evaluate all environmental implications of a proposed water supply project. EGLE has done this by incorporating a detailed analysis of the environmental impact of the proposed alternatives in its review and approval process. A project planning document was prepared by the applicant and reviewed by the State. EGLE has prepared the attached Environmental Assessment and found that the proposed project does not require the preparation of an EIS.

WHY IS AN EIS NOT REQUIRED?

Our environmental review concluded that no significant environmental impacts would result from the proposed action. Any adverse impacts have either been eliminated by changes in the project planning document or will be 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 proposed project is attached. This information is also available on our website at Michigan.gov/DWSRF under "Additional Links." 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 one of the contact people listed below.

HOW DO I SUBMIT COMMENTS?

Any comments supporting or disagreeing with this preliminary decision should be submitted to me at EGLE, P.O. Box 30457, Lansing, Michigan 48909-4957. We will not take any action on this project planning document 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, our preliminary decision will become final. The applicant will then be eligible to receive loan assistance from this Agency to construct the proposed project.

Any information you feel should be considered by EGLE should be brought to our attention. If you have any questions, please contact Sara Brown, the project manager, at 517-231-8916; BrownS93@Michigan.gov; or you may contact me. Your interest in this process and the environment is appreciated.

Sincerely,

Dan Beauchamp

Dan Beauchamp, Section Manager
Water Infrastructure Funding and Financing Section
Finance Division
517-388-3380

Attachment

DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY
Drinking Water State Revolving Fund (DWSRF)
Village of Pentwater, Oceana County
Environmental Assessment
April 2024

PROJECT IDENTIFICATION

Applicant: Village of Pentwater

Address: 324 South Hancock Street
Pentwater, Michigan 49449

Authorized Representative: Jeff Hodges, Village President

Project Number: 7676-01

PROJECT BACKGROUND

The village of Pentwater (Pentwater) is located in northwest Oceana County approximately 45 miles north of the city of Muskegon and has a total land area of 1.28 square miles. According to the 2020 United States Census, Pentwater had an estimated population of 857, with the seasonal population near 4,000, and is projected to increase to 1,052 by 2039.

Pentwater is seeking a DWSRF low interest loan administered by the Michigan Department of Environment, Great Lakes, and Energy (EGLE) to complete a project that will include water main replacement, installation and construction of a new well and wellhouse, construction of a new transmission main which will run from the new well under the Pentwater Canal and connect to the distribution system (see Figure 1), and lead service line replacement (LSLR) (see Figure 2). The estimated cost of the project is \$4,490,000. Pentwater was identified by state criteria to be a financially overburdened community and as a result is eligible to receive a \$1,853,000 grant with funds made available from the American Rescue Plan (ARP). In addition, the DWSRF was able to offer a \$2,637,000 loan which includes up to \$392,000 in principal forgiveness with funds provided by the Bipartisan Infrastructure Law (BIL) for LSLR. Between fiscal years 2025 and 2027, Pentwater anticipates a gradual rate increase totaling approximately \$8.25 per quarter by 2027 for the average residential user as a result of this project.

PROPOSED PROJECT

A. Project Need/Justification

Pentwater's water supply system currently consists of three wells. Well No.1 and Well No.3 are housed in the same building and piped to a common point prior to discharging. Well No.2 is currently the primary water source. Firm capacity is 600 gallons per minute (gpm) with Well No.3 out of service, which covers the projected maximum day demand for 2040 of 198 gpm. Pentwater operates an 800-gpm arsenic removal plant located at the well site. The treatment system utilizes ferric chloride and chlorine addition followed by pressure filters to treat the water and remove the iron and arsenic. Well No.1 and Well No.3 contain carbon dioxide in the water which is why they're mainly used as backup. It's recommended that Pentwater evaluates treatment of the carbon dioxide or evaluate securing land for a second well field in the event that contamination is discovered in this aquifer or carbon dioxide begins showing up in Well No.2. Regular

testing is done throughout the system per EGLE requirements, and Pentwater's water meets the State drinking water standards and is in compliance based on the last round of testing in 2021. Pentwater has one storage tank located on the east side of Hancock Street between Fourth Street and Fifth Street. The storage tank was constructed in 1973 and holds 150,000 gallons. Recommended maintenance has been completed, and the tank was inspected in 2018 and found to be in good condition. Pentwater's water distribution system is Type I (public) containing over 14 miles of water main that is 2-inches to 12-inches in diameter, with most being 6-inch and 8-inch diameter ductile iron pipe.

Pentwater submitted their Preliminary Distribution System Materials Inventory and estimated that out of 741 total service lines the system includes, two known water services constructed with galvanized pipe that were previously connected to lead (GPCL), 157 constructed with unknown material but likely lead, 30 services with unknown material and no information, 206 that are known - likely not lead, and 346 that are not lead or GPCL. The Michigan Lead and Copper Rule states that LSLs and GPCLs must be replaced by 2041. The three wells that are in service are currently located on the same site and consolidated within the same aquifer. In addition to the Water Reliability Study submitted in 2020, Pentwater has also completed a Preliminary Evaluation of Potential New Water Well Sites in 2019 to maintain, organize, and optimize performance of the existing water supply, storage, and distribution system. Well No.1 and Well No.3 are used as emergency backup as they contain carbon dioxide, which the existing arsenic and iron removal treat plant does not treat for. EGLE recommends that water systems have redundancy and an alternate water source in the event that water source gets contaminated or water quality changes. Due to the age and size of the current water mains, upsizing and replacement is needed in various areas to improve looping and efficiency.

B. Alternatives Considered

No-action (Alternative A)

Under the "No Action" alternative, Pentwater would continue the use of the existing water system in its current condition. The no-action alternative assumes continued use of approximately 4,620 linear feet (lft) of 4-inch diameter water main installed prior to 1950, existing lead impacted service lines, and a leaking booster tank. Continued use of the distribution mains not only goes against the standards set forth by the Great Lakes – Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers (GLUMRB), but also increases the risk of more frequent water main and service line breaks, and increased water loss. GLUMRB guidance, typically referred to as the "Ten-State Standards" within the industry, states that water main must be 6-inches in diameter at a minimum to provide needed fire flow and customer flow. Much of the 4-inch diameter water main in the proposed scope of work is made of cast iron pipe, which has an average useful life of 60-70 years. The pipes that have been proposed for replacement were installed in 1950 or earlier and are therefore beyond their expected useful life. There is a cost associated with the no-action alternative, although it is difficult to quantify that cost. Leaving the old water mains in service poses a risk of water main breaks. Frequent water main breaks and repairs not only add up in material costs, but in labor, as well as loss of pressure and risk of contamination. Alternative A will not address Michigan's Lead and Copper Rule of replacing a minimum of 5 percent of the lead impacted service lines annually, which disqualifies it from being a feasible alternative.

Optimize Performance of Existing Facilities Alternative (Alternative B)

Under this alternative, the water main, water tower, arsenic & iron treatment plant, and service lines would remain in service. These portions of the system were identified as lines in need of upsizing and replacing. In addition, EGLE considers 4-inch diameter water main to be undersized for a public water supply system. Optimization of the current system would involve keeping the undersized water main throughout the system and enhancing operational efficiency. The existing facilities are currently operating at their optimum efficiency. Furthermore, this option does not address the concern of water main and water service lines aging beyond the useful service life. Lastly, this alternative does not address the Michigan Lead and Copper Rule to replace a minimum of 5 percent per year and will not be evaluated further as a principal alternative.

Regional Water System Alternative (Alternative C)

This alternative would include decommissioning the existing Pentwater Village Wells and sourcing the water from another regional water distribution system to supply and serve the existing needs of the study area. The nearest water distribution is in the city of Hart (Hart), nearly 9 miles southeast. The Hart water distribution system serves a similar service population to Pentwater, which does not possess the capacity to serve both municipalities. In developing a regional distribution system with Hart, lead impacted services, and undersized water mains would still need to be replaced, which are independent needs. Therefore, the Regional Alternative is not a feasible option.

System Improvements Alternative (Alternative D)

To keep this alternative feasible, the recommended improvements have been prioritized to include the replacement of 200 water service lines that are constructed with lead or GPCLs, replacement of approximately 4,280 lft of 4-inch diameter water main that were constructed circa 1950 with 8-inch diameter water main, construction of an 8-inch diameter water main loop connecting Sand Street and Third Avenue dead ends, construction of a new Type 1 well and wellhouse, and the construction of a 12-inch diameter transmission line connecting the proposed water well to the existing water distribution system.

Implementing the list of water system improvements will move Pentwater toward achieving the project objectives, while maintaining a feasible scope.

C. Selected Alternative

The selected alternative is System Improvements (Alternative D). This project will include the replacement of approximately 200 LSLs and GPCLs, the new Type I well and wellhouse, replacement of approximately 4,250 lft of water main, and the installation of a new transmission main that will connect the new well with the system via horizontal directional drilling under the Pentwater Canal.

The proposed water system improvements will be constructed within Pentwater-owned property, easements, and road right-of-way. Service line replacement will occur from the road right-of-way to either the water meter or 18-inches into the house or structure. The water service material will be confirmed in the design phase prior to construction. Coordination with property owners will occur before construction begins in the spring of 2025. When needed, Pentwater will issue notices and request resident approval to enter the dwellings. It is anticipated homeowners will be notified by a public meeting and home

visits prior to construction. Should homeowners not allow access to replace the private side LSLs, the service lines will be capped at the curb stop and water services will not be restored until a full LSLR can occur in compliance with the Michigan Lead and Copper Rule. Construction will likely begin in spring 2025 and be completed by winter 2025. Water service may temporarily be shut off for a maximum of 30 minutes, and residents and businesses will be notified a minimum of 24 hours prior to shut off.

D. Project Cost and Implementation

Pentwater is anticipated to receive funding for the full project cost of \$4,490,000. The funding sources include a \$1,853,000 ARP grant, a \$2,637,000 30-year DWSRF loan at 2.00 percent interest which will include up to \$392,000 in principal loan forgiveness with funds provided by the BIL for LSLR projects.

Table 1 – Estimated Project Cost

Category	Cost
Construction Costs	\$3,907,600
Design, Construction Engineering	\$532,400
Bond Council, Financing, Administration, Legal, Contingencies	\$50,000
Total	\$4,490,000

PROJECT IMPACTS

A. Water Quality Impacts

Groundwater is the source drinking water for Pentwater’s water system. The EGLE permitting process will establish a permitted well capacity that will limit production from the well to a capacity that the aquifers and watershed can support. With this permitting process, it is anticipated that there will be no direct or indirect impacts on groundwater or surface water as a result of the proposed project.

B. Construction Impacts

According to a review by the United States Fish and Wildlife Service (USFWS) survey and the Michigan Natural Features Inventory, several endangered and a single threatened species are found within Pentwater. Any potential impact will be mitigated by following the Department of Natural Resources (DNR) recommended requirements, as well as the use of wildlife safe materials for erosion control and site restoration. Tree removal will be minimized, and it will be completed outside the roosting season for bats. Pentwater shall comply with all appropriate protection and mitigation actions indicated by the DNR and USFWS. All local, state, and federal permits will be obtained prior to construction.

Archeologists at RESCOM reviewed the project and determined there will be no impact to historical properties in the project area. The State Historic Preservation Office (SHPO) is reviewing the project to determine the effect on historic properties within the LSLR project area, any recommendation made by SHPO will be implemented into the proposed construction plan. If the scope of work changes in any way or if archeological material is encountered during construction activities related to the project, work will be halted and SHPO will be contacted immediately.

Federally identified tribes for Oceana County were contacted requesting comment regarding any potential impact to historic, religious, or cultural resources. To date, no comments have been received.

Short term construction impacts are expected to be minimal. Soil erosion and sedimentation, as well as dust control, will be properly mitigated by adherence to permit requirements. Temporary traffic detours are anticipated, but access to houses and businesses will be maintained. Instances where temporary impacts to front yards and driveways are anticipated, will be restored to original condition.

C. Secondary Impacts

No significant secondary impacts are anticipated for this project. Aesthetics of the distribution system will not be significantly affected, and efforts will be taken to match existing systems. No changes in land use or impacts to sensitive features should occur.

PUBLIC PARTICIPATION

A public meeting was advertised on Pentwater's website on May 11, 2023, and the draft project planning document was available to review at the Pentwater Village Community Hall. A public meeting was held on May 22, 2023, to discuss and take comments on the proposed project planning document and selected alternative. The meeting included a presentation outlining project background, need for project, alternatives, environmental considerations, and cost impacts to users. Questions were asked and answered during the public comment period. The village council unanimously passed a formal resolution adopting the project planning document and selected alternative following the public meeting.

REASONS FOR CONCLUDING NO SIGNIFICANT IMPACTS

The project will present no long-term significant impacts associated with its construction. The project will not significantly increase the demand on the Pentwater's water supply. The long-term positive impacts include a sustainable, quality drinking water supply and removal LSLs in Pentwater.

Questions regarding this Environmental Assessment should be directed to:

Sara Brown, Project Manager
Water Infrastructure Funding and Financing Section
Finance Division
Michigan Department of Environment, Great Lakes, and Energy
P.O. Box 30457
Lansing, Michigan 48909-4957
Telephone: 517-231-8916
Email: BrownS93@Michigan.gov

Figure 1: Village of Pentwater Proposed New Well and Water Main Replacement Project

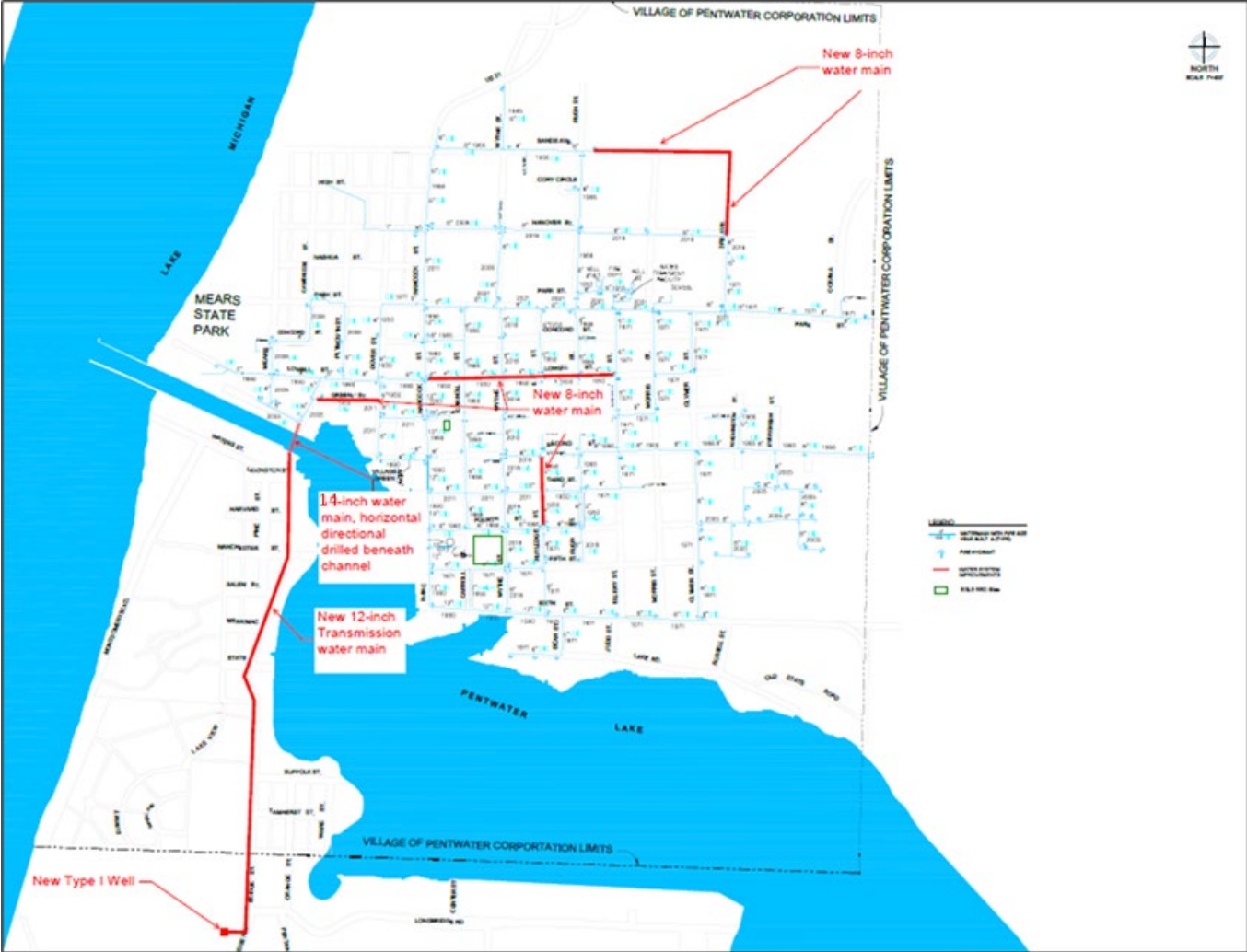


Figure 2: Village of Pentwater Proposed LSLR Locations

