



August 21, 2026

Limited Environmental Review and Finding of No Significant Impact

**Ashtabula County
Jefferson Booster Station Replacement
Loan Number: FS390004-0040**

The attached Limited Environmental Review (LER) is for a drinking water project in Ashtabula County which the Ohio Environmental Protection Agency (Ohio EPA) intends to finance through its Water Supply Revolving Loan Account (WSRLA) below-market interest rate revolving loan program. The LER describes the project, costs, and expected environmental benefits. Making available this LER fulfills the 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 program review and approval process. We have concluded that the proposed project should not result in significant adverse environmental impacts. In accordance with Ohio Administrative Code 3745-150-05, this project meets the criteria for an LER rather than the more comprehensive Environmental Assessment. More information can be obtained by contacting the person named at the end of the attached LER.

Upon issuance of this Final Finding of No Significant Impact (FNSI) determination, award of funds may proceed without further environmental review or public comment unless new information shows that environmental conditions of the proposed project have changed significantly.

Sincerely,

A handwritten signature in black ink, reading "Kathleen Courtright".

Kathleen Courtright, Assistant Chief
Division of Environmental and Financial Assistance

LIMITED ENVIRONMENTAL REVIEW

Project Identification

Project: Jefferson Booster Station Replacement

Applicant: Ashtabula County
25 West Jefferson Street
Jefferson, Ohio 44047

Loan Number: FS390004-0040



Figure 1. Ashtabula County

Project Summary

Ashtabula County (see Figure 1) requested funding from the Ohio Water Supply Revolving Loan Account (WSRLA) for the Jefferson Booster Station Replacement project. The project involves the replacement of the aged and outdated Jefferson Booster Station and associated sections of water main. No significant adverse impacts are anticipated based on the nature and location of construction, thoughtful design, and proposed protection measures to be implemented as discussed in the conclusion.

History & Existing Conditions

Ashtabula County purchased their public water system (PWS) from Consumers Ohio Water Company, now Aqua Ohio, with 4,690 customer accounts in 2002. Ashtabula County's PWS has since increased to more than 5,500 accounts and serves customers in the Village of Geneva-on-the-Lake, the City of Geneva, and the Village of Rock Creek, as well as ten different townships including the following: Ashtabula, Austinburg, Geneva, Harpersfield, Jefferson, Lenox, Morgan, Plymouth, Rome, and Saybrook. The distribution system consists of over 140 miles of water mains, four elevated water storage tanks, and seven booster stations.

Ashtabula County does not have its own drinking water source or treatment system. Instead, Ashtabula County purchases water from Aqua Ohio. Aqua Ohio operates 33 water treatment facilities (WTFs) in Ohio and supplies Ashtabula County with water from the Aqua Ohio – Ashtabula WTF. This facility draws raw water through two intakes in Lake Erie and treats water through a process consisting of grit removal and screening, chemical addition, flocculation, sedimentation, rapid sand filtration, fluoridation, and chlorination prior to distribution. Aqua Ohio – Ashtabula WTF treats an average of 5.1 million gallons daily (MGD) and has a total design capacity of 10 MGD. Of this amount, an average of 1 MGD is provided to Ashtabula County.

Ashtabula County regularly reviews their infrastructure to determine what improvements, repairs, and upgrades are needed to maintain reliability of their system. One such area identified as requiring attention is a booster station, the Jefferson Booster Station, located adjacent to Lampson Reservoir.

The Jefferson Booster Station is a critical piece of distribution system infrastructure that serves customers in the townships of Jefferson, Austinburg, and Morgan, and the villages of Jefferson and Roaming Shores. The only available water to customers in these areas should the booster station be inoperable are two storage tanks in Jefferson that are owned by Aqua Ohio and a storage tank in and owned by Roaming Shores. Ashtabula County reports that these storage sources would be exhausted in hours under normal demands and that the water system would likely depressurize in the event of a fire or water main break while the booster station is out of service.

The structure of the booster station is over 100 years old. It was originally the clearwell for a water treatment plant that treated water from Lampson Reservoir for customers in Jefferson. The station itself is located just south of Lampson Reservoir (see Figure 2). The water treatment plant was abandoned in the 1960s, and most of the plant was subsequently demolished. The clearwell was retained and converted into a pump station. The equipment installed at this time to convert the clearwell is still in use at over 60 years old. The station is mostly below grade and has a grass covered roof. It appears visually as nothing more than a grass mound.

The booster station is well beyond its expected useful life and has received no major upgrades since its original conversion. The nature of the station, due to its origins as a clearwell, prevents reuse or rehabilitation of the station moving forward. This is because there are no feasible means of bringing the station into compliance with modern standards. Ashtabula County determined that replacing the booster station is necessary to ensure reliable, safe water service is maintained for customers and that the only viable alternative to achieving this is to construct a new station elsewhere.

Project Description

New Jefferson Booster Station – A new booster station will be constructed on a site on the northern side of SR 307 within Austinburg village limits. The site is a 57-foot by 33-foot easement. The station will be factory-built including all necessary piping, controls, and appurtenances. The station will be delivered in one piece and require only off loading, installation onto the foundation, pipeline and drain line hook up, electrical service connection, telemetry panel installation, and field work to complete its installation. The selected contractor will construct a booster station pad prior to installation of the booster station. No internal booster station construction is required of the contractor.

The station will be equipped with three pumps, all having a rating of 225 gallons per minute (GPM). The peak hourly demand of the service area served by the station is 395 GPM. The new station will be capable of serving the area with one of its pumps out of service. The pumps will feature variable frequency drives, which will allow Ashtabula County to adjust the pump rates to match water demand and target system pressure.

A 12-inch suction line will feed the station, and a 12-inch discharge line will serve as the output. Each line will have a gate valve to allow each respective line to be closed if needed. A chain link fence and security gate will surround the station. The fence will be installed inward about 5 feet from the easement boundaries. A short asphalt driveway will provide access to the station and parking for personnel.

The existing Jefferson Booster Station will remain in service until the new station has been completed and tested to ensure proper functioning. Afterwards, the existing station will be decommissioned.

Backup Generator – A diesel backup generator equipped with an automatic transfer switch will be installed on an equipment pad at the rear of the station. The generator will power the booster station in the event of a mainline power outage.

Water Mains – An estimated 1,250 linear feet (LF) of 12-inch polyvinyl chloride (PVC) water main will be installed along SR 307 to replace an existing section of 12-inch line. This section will be on the suction side (i.e., west side) of the new pump station. Both the suction line and discharge line of the booster station will connect to this section of new water main, and the water main will also connect to the existing water main on the east side of the station. A gate valve installed on this water main between the station's suction line and discharge line, in combination with the gate valves installed on each of these respective lines, can be used to bypass the station should there be need to. In this configuration, the gate valves on the suction and discharge lines would be closed, and the gate valve located between these two lines would be opened.

An additional 330 LF of 14-inch high-density polyethylene (HDPE) water main will be installed via horizontal directional drilling (HDD) beneath Center Creek. This is located further east of the new booster station site. Horizontal directional drilling is a trenchless installation method that involves excavation of launch and receiving pits, each expected to be 6-feet-wide by 8-feet-long. These pits allow for proper positioning of drilling equipment. Operations begin at the launch pit and end at the receiving pit. A 14-inch gate valve with valve box will be installed at each end of this water main segment.

Ashtabula County is replacing these sections of water main as a precautionary measure due to their age and the adjusted strain due to booster station relocation. This is of particular concern for the section of water main beneath Center Creek. This section of main will experience higher water pressures following completion of the project. This is because the relocation of the booster station will switch this section of main from the suction side to the discharge side. A break in the main below Center Creek would require a more time-consuming repair than a water main not otherwise below a water crossing. Proactively replacing this section will greatly reduce the likelihood of experiencing a water main break below the creek.

See Figure 3 for locations of the project components.

Implementation

Ashtabula County requested \$1,594,844 from the Ohio WSRLA at the standard rate currently set at 3.11% to finance a portion of the project. Interest rates are set monthly and may change for a later loan award. Borrowing this amount in WSRLA monies could save Ashtabula County roughly \$252,000 over the 20-year loan term compared to the current market rate of 4.36%. Ashtabula County expects to receive \$300,000 in funding from the Appalachian Regional Commission and \$500,000 from the Ohio Public Works Commission for use towards the total project cost.

The debt associated with the project will be recovered from monthly user charges. The water service charges for Ashtabula County are driven by the total indebtedness of the county and annual operation and maintenance costs. Ashtabula County implemented beginning in May 2023 their most recent water and sewer rates resolution. Under the current resolution, water and sewer rates increased by 10% in 2024 and 5% in 2025 and 2026. The resolution also includes a 5% increase to take effect in 2027. Based on a monthly water usage of 4,000 gallons, the current rate results in an average residential water bill for those served by Ashtabula County of about \$941. This represents 1.75% of Ashtabula County's median household income of \$53,663 and is greater than the Ohio average annual water bill of \$481.

Construction is anticipated to take 570 days to complete from notice to proceed.

Public Participation

Ashtabula County Board of Commissioners holds regular meetings every Tuesday and provides information regarding meeting times and dates, agendas, and meeting minutes on the county's website. These meetings are open to the public to attend, and the commissioners may hold evening meetings at various locations throughout the county to increase the opportunity for residents to meet with commissioners. Also, local news articles have covered Ashtabula County's proposed booster station project.

Ohio EPA is unaware of any controversy about or opposition to this project. The Limited Environmental Review (LER) and Finding of No Significant Impact (FNSI) will be posted on the Ohio EPA Division of Environmental and Financial Assistance website. Additionally, the LER and FNSI have been provided to Ashtabula County to be made available according to their public notification procedures.

Conclusion

The proposed project meets the criteria for an LER; namely, it is an action within an existing public water distribution system, which involves the functional replacement of and improvements to existing mechanical equipment. Furthermore, the project meets the other qualifying criteria for an LER; specifically, the proposed project:

Will have no significant environmental effect and will require no specific impact mitigation. The new booster station site is roughly 1,880 square feet in size. The site is mostly wooded with an herbaceous dominated edge adjacent to SR 307. Site preparation includes clearing and grubbing the area.

The project is located within the known ranges of several state and federally listed threatened and endangered bat species including the Indiana bat, the northern long-eared bat, the tricolored bat, and the little brown bat. During spring and summer (April 1 through September 30), these species predominantly roost in trees behind loose and exfoliating bark, in crevices and cavities, and in leaf clusters. These species are also dependent on forest structure surrounding roost trees.

The U.S. Fish and Wildlife Service (USFWS) and Ohio Department of Natural Resources (ODNR) recommends that removal of trees greater than or equal to 3-inches in diameter only occur between October 1 and March 31 for protection of these species. Ashtabula County agreed to restrict clearing of trees meeting this criterion during the recommended timeframe. Ashtabula County must coordinate with the USFWS and ODNR first for guidance should the need arise to conduct tree removal outside of the recommended period.

Installation of the 14-inch HDPE water main beneath Center Creek via HDD will effectively avoid the need for in-water work and the subsequent impacts and permitting requirements that are often associated with such work. The contractor will be required to prepare and submit to Ashtabula County's engineer a work plan including an environmental protection and contingency plan for possible problems that could be encountered while executing HDD operations. The plan must abide by the contingency plan requirements outlined by Ashtabula County and document the thoughtful planning required to successfully complete this work. Critical to the plan will be monitoring requirements to identify signs of issue during HDD operations to catch and halt work prior to emergencies occurring, as well as a field response plan detailing emergency response actions.

Traffic on SR 307 may be impacted near the project area during construction. The contractor will be required to prepare and submit to Ashtabula County a detailed maintenance of traffic plan, which must be approved by the county and the Ohio Department of Transportation prior to the start of traffic. This plan will include the measures that the contractor will implement to ensure safe traffic is maintained throughout the duration of the project.

In addition to measures previously mentioned, the contractor will be responsible for implementing all necessary construction best management practices (e.g., erosion and sediment control, noise and dust minimization, proper storage and handling of materials, worker and public safety, traffic maintenance, legal disposal of waste and excess materials) throughout the duration of the project to avoid or minimize all short-term impacts to the area.

Will have no effect on high-value environmental resources. Construction will take place within rights-of-way along SR 307 and on the new booster station parcel. No location contains sensitive, unique, or valuable environmental resources.

Is cost effective. Ashtabula County determined that the Jefferson Booster Station is too far beyond its expected useful life to viably continue to rely upon its operability. In response, Ashtabula County is taking a proactive approach to replace the station now while it is still operational. Ashtabula County also determined that rehabilitation and upgrades to the existing station are not a viable options since the design of the station itself makes it impossible to bring up to modern standards.

Is not a controversial action. The nature of the project is such that there will be no significant adverse impacts on customers or the environment, and no controversy has been reported. Customer water service will not be impacted during construction.

Will not create a new or relocate an existing discharge to surface or ground waters, will not create a new source of water withdrawals from either surface or ground waters or significantly increase the amount of water withdrawn from an existing water source, and will not substantially increase the volume of discharge or loading of pollutants from an existing source or from new facilities to receiving waters. The project includes no actions that impact surface or groundwater discharges. The booster station will continue to serve the same user area and convey the same treated water withdrawn from the current source following completion of the project.

Will not provide capacity to serve a population substantially greater than the existing population. Design of the booster station was not based on the need for additional pump capacity or the expectation of significant customer growth in the future. Rather, the selected improvements will increase operational efficiency and reliability of the distribution system, benefiting existing customers served by the Jefferson Booster Station.

Based upon Ohio EPA's review of the planning information and the materials presented in this LER, we have concluded that there will be no significant adverse impacts from the proposed project as it relates to environmental features. 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.

Ashtabula County designed the project to be effective and affordable, the results of which will improve the reliability and efficiency of the Jefferson Booster Station and subsequently their distribution system as a whole.

Contact Information

Brody Betsch
Division of Environmental and Financial Assistance
Ohio Environmental Protection Agency
50 West Town Street, Suite 700
Columbus, Ohio 43215

Email: brody.betsch@epa.ohio.gov

Phone: 614.644.3710



Figure 2. Existing and future booster station sites

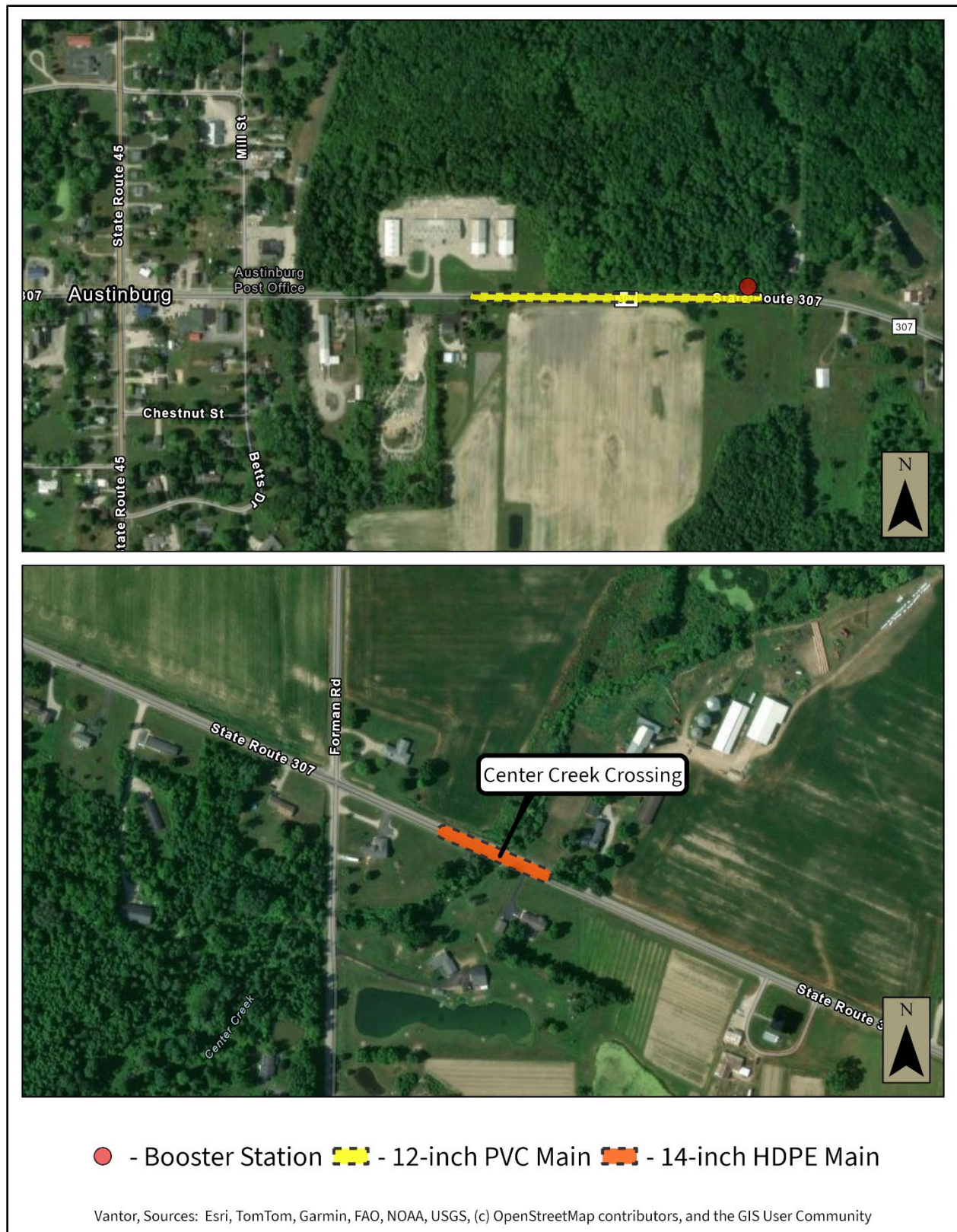


Figure 3. Project components