



June 4, 2024

Limited Environmental Review and Finding of No Significant Impact

**City of Dayton - Montgomery County
36" Raw Water Main within Miami Wellfield Phase A - EC
Loan number: FS390302-0037**

The attached Limited Environmental Review (LER) is for a raw water main extension project in Dayton 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 LER describes the project, its costs, and expected environmental benefits. Making available this LER 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. This project's relatively narrow scope and lack of environmental impacts qualifies it for the LER rather than a more comprehensive Environmental Assessment. More information can be obtained by calling or writing the person named at the end of the attached LER.

Upon issuance of this 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,

Kathleen Courtright, Assistant Chief
Division of Environmental and Financial Assistance

Attachment

LIMITED ENVIRONMENTAL REVIEW

Project Identification

Projects: 36-inch Raw Water Main within Miami Wellfield Phase A

Applicant: City of Dayton
101 West Third Street
Dayton, Ohio 45402

Loan Numbers: FS390302-0037

Project Summary

The City of Dayton has applied to Ohio EPA Water Supply Revolving Loan Account (WSRLA) for \$7,601,250 for a raw water main improvements project. The project will construct a raw water main extension to convey increased raw water supply from a new well project in the nearby Miami Wellfield. The project is part of a larger initiative the city is implementing to connect their two water treatment plants, and to help implement strategies to protect source waters from emerging contaminants, such as Perfluorooctanoic Acid (PFAS) and Perfluorooctyl Sulfonate (PFOS). The project is eligible for up to \$7,500,000 in emerging contaminant grant funding.

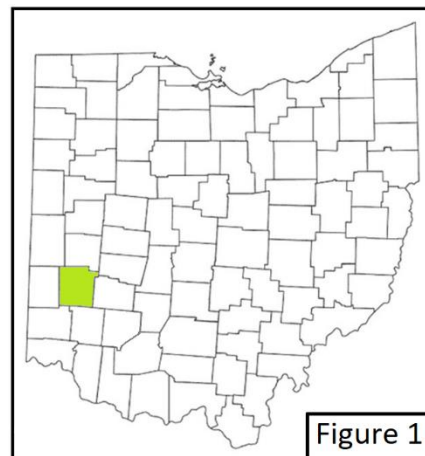
History & Existing Conditions

Dayton, in Montgomery County (Figure 1), has two water treatment plants (WTPs): Miami WTP and Ottawa WTP. These plants supply water to approximately 400,000 people within Montgomery County, including approximately 137,571 residents within Dayton's city limits.

The distribution system has approximately 753 miles of water mains, with 16 water storage facilities at an 88-million-gallon storage capacity. The storage facilities include elevated tanks, underground reservoirs, and a standpipe.

The City of Dayton's distribution system is divided into the north and south, with downtown Dayton serving as the dividing line between north and south. The Miami WTP supplies water to the north side of the distribution system, which is approximately one-third of the demand. The Ottawa WTP supplies water to the south side of the system, which is approximately two-thirds of the demand.

Dayton's drinking water is supplied by the Mad River and Miami wellfields (see Figure 2), which are in the Great Miami Buried Valley Aquifer. This sand and gravel aquifer holds approximately 1.5 trillion gallons of water and stretches from north of the City of Troy into Logan County and south to the Ohio River through Hamilton County. The Mad River Wellfield supplies water to the Ottawa WTP and the Miami Wellfield supplies water to the Miami WTP. Currently, the water supplies are separate.



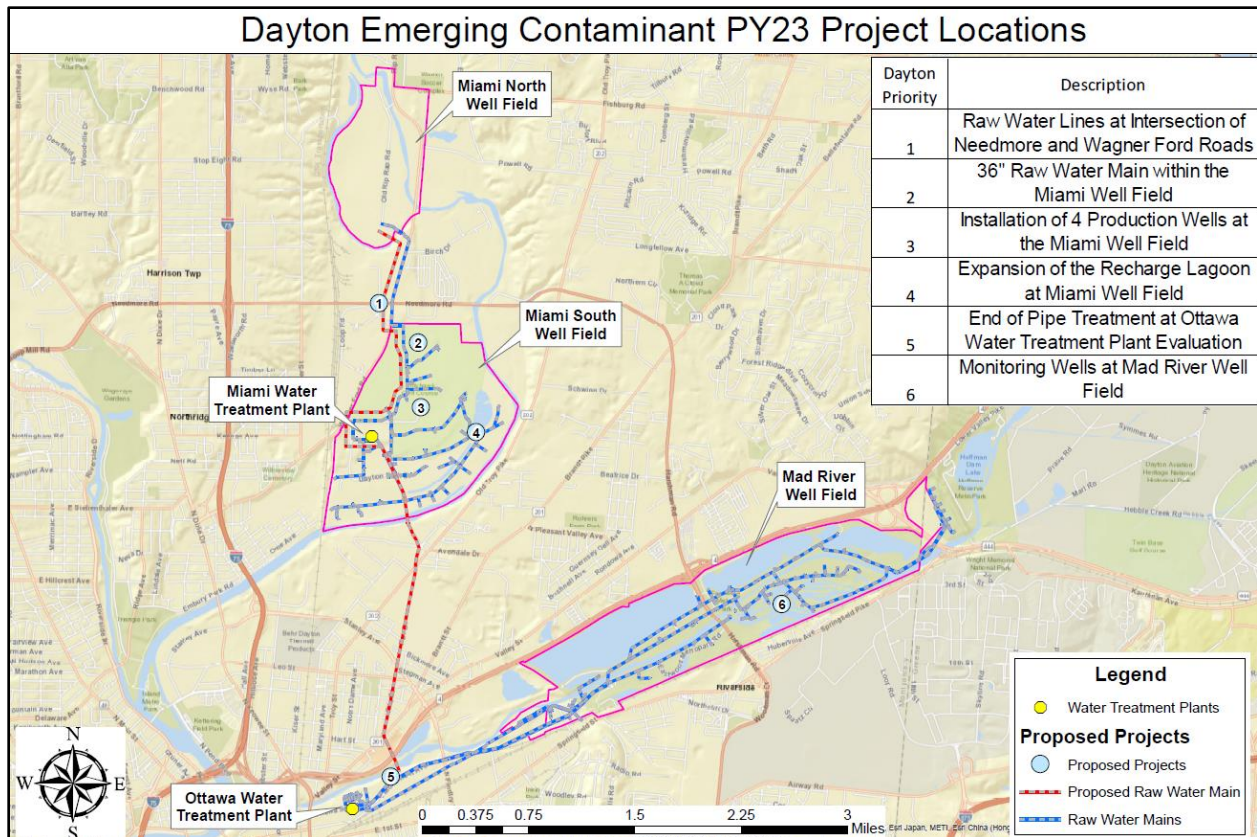


Figure 2. Map of Dayton raw water main project, located at Number 2

The Miami Wellfield is bordered by Harrison Township and the cities of Huber Heights and Riverside. With an approximate capacity of 72 MGD, this wellfield was originally established as an alternative source for Ottawa WTP. In the mid 1960's it began providing water to Miami WTP through a 72-inch force main. It currently has 38 wells and is divided into two sections: Miami North (Rip Rap Road Island) and Miami South.

Miami North is located close to the city of Huber Heights. There are currently three production wells in use at this wellfield. Water from Rip Rap Road is pumped through a 36-inch main to the northeast side of the Miami South Wellfield.

Miami South is located along Wagner Ford Road and Needmore Road. A 72-inch diameter pipe conveys raw water to the Miami WTP from the southeast side. Another 60-inch diameter pipeline conveys water to the west side of the Miami WTP from wells on the western section of the wellfield and from Miami North.

A new well project is currently underway to install four new wells in the Miami Wellfield. The new wells are part of increasing water supply redundancy, when PFAS/PFOS are found to be in some of the existing wells. Dayton is currently working to ensure that raw water sources are not used when PFAS/PFOS contamination is found. A new pipe is required to convey the increased new water flow to the Ottawa Water Treatment Plant.

Project Description

The raw water line project is needed to carry raw water from the Miami North Wellfield (Rip-Rap Wellfield) to the Miami WTP. The project will install approximately 2,100 linear feet of 36-inch raw water main beginning at the intersection of Needmore Road and Wagner Ford Road and ending at the WTP (see Figure 3). The project will be under and adjacent to the road, and also crosses through the inactive golf course. The contractor will maintain and manage road traffic during construction. Some trees will need to be removed, but will not be done so until the winter tree cutting season to avoid impacts to threatened and endangered bat species.

This project is one of many in Dayton's initiative to avoid exposure to PFAS in drinking water. The raw water main will provide a redundancy by conveying increased raw water from a new wells project in the Miami Wellfield.

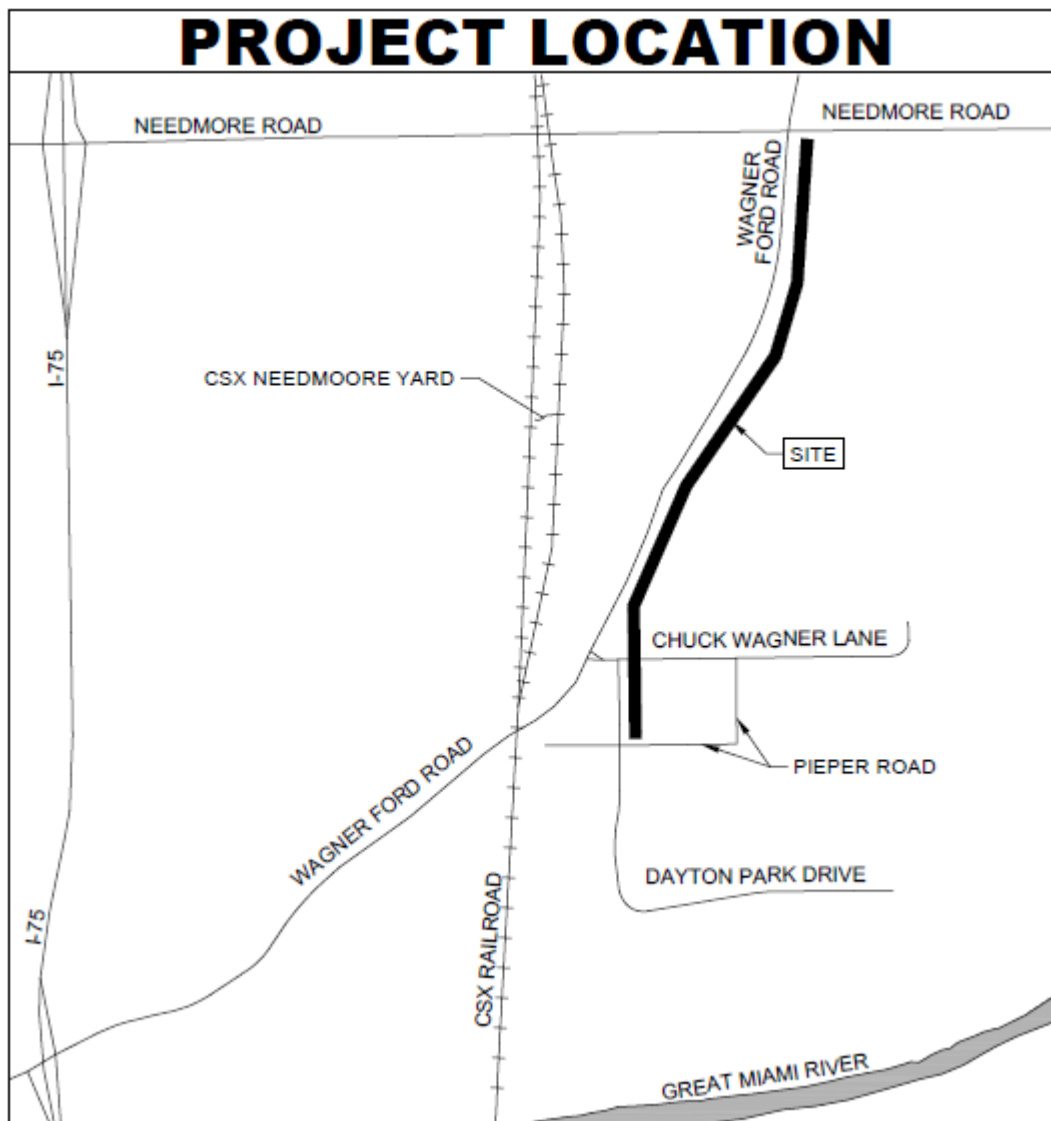


Figure 3. Map of the water main extension along Wagner Ford Road

Implementation

Dayton has requested \$7.6 million for the new raw water line project. The project is eligible for emerging contaminant grant funding up to \$7,500,000 as well as 0% interest rate for any additional loan balance. During a 20-year loan period, Dayton will save approximately \$11 million in interest by using WSRLA dollars and emerging contaminant forgiveness, compared to the market rate of 3.98%.

A typical residential water customer of Dayton currently pays \$26.73 per month. The last water rate increase was 9% in 2024, with rate increases of 9% planned for 2025. The estimated median household income (MHI) for a Dayton water customer is \$37,536. The planned average annual water bill will cost \$352 per year by 2025, which is 0.94% of the MHI.

Anticipating loan award in June 2024, construction of the project will commence shortly after loan award, and construction is anticipated to be complete within 18 months.

Public Participation

Dayton has made good efforts to communicate this project and related water system improvements to the city. Dayton has a section on their website describing PFAS projects and other water system improvements. Many news articles have been published in the local newspaper about this project and other related water system improvements.

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> and distribute it to interested parties. Information supporting the LER is available from the project contact named below.

Conclusion

The proposed project meets the criteria for a Limited Environmental Review (LER); namely, it is an action within an existing water distribution system, which involves the construction of a new raw water line. Furthermore, the projects meet the other qualifying criteria for an LER; specifically, the proposed projects:

Will have no significant environmental effect, will require no specific impact mitigation, and have no effect on high-value environmental resources. The raw water line project will occur adjacent to the roadway and under the road and will not impact valuable natural resources. The project will require a small number of trees are removed near the golf course and will be done so during the tree-clearing window from October 1 to March 30, to prevent impacts to threatened and endangered bat species who use trees for habitat and foraging. Standard construction best management practices will be in place for both projects to minimize noise and dust, and traffic disruptions will be temporary with appropriate traffic maintenance measures present. The project is within the Great Miami Buried Valley Aquifer. Notes are included to contractors that best management practices to prevent spills of petroleum products are to be followed, and a spill containment kit will be on site to prevent contaminating drinking and groundwater. A stormwater pollution prevention plan will be in place to prevent soil and sediment runoff into storm drains, with silt fencing installed around excavations, and inlet protection installed on storm drains where applicable.

Is cost effective, and is not a controversial action. The project has no feasible alternative for necessary improvements. Water rates will increase a typical annual amount and will not put excessive financial strain on customers. Ohio EPA is unaware of controversy or opposition to the projects.

Does not create a new, or relocate an existing discharge to surface or ground waters, does 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, or substantially increase the volume of discharge or loading of pollutants from an existing source or from new facilities to receiving waters. The project will not affect discharges to surface or ground waters, or discharge or loadings of pollutants to receiving waters. The raw water main will not impact source water withdrawals.

Will not provide capacity to serve a population substantially greater than the existing population. No new service connections will be made by the project.

Based upon Ohio EPA's review of the planning information and the materials presented in this Limited Environmental Review, we have concluded that there will be no significant adverse impacts from the proposed projects as they relate to the environmental features discussed previously. This is because these features do not exist in the project areas, the features exist but will not be adversely affected, or the impacts will be temporary and mitigated.

The raw water line project will result in an increased raw water conveyance capacity, improving the connection of the Ottawa WTP and the Miami WTP. The new wells will provide for addition water supply, and redundancy to avoid emerging contaminants.

Contact Information

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