



Mike DeWine, Governor
Jon Husted, Lt. Governor
Laurie A. Stevenson, Director

March 29, 2022

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

**Washington County Board of Commissioners - Washington County
Devola Sanitary Sewer Improvements
Loan Number: CS390085-0006**

The attached Environmental Assessment (EA) is for a sewer infrastructure improvement project in unincorporated Devola in Washington County which the Ohio Environmental Protection Agency intends to finance through its Water Pollution Control Loan Fund (WPCLF) 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 WPCLF 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 me at 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, Washington County can then proceed with its application for the WPCLF loan.

Sincerely,

Kathleen Courtright

Kathleen Courtright, Assistant Chief
Division of Environmental & Financial Assistance

Attachment

ENVIRONMENTAL ASSESSMENT

Project Identification

Project: Devola Sanitary Sewer Improvements

Applicant: Washington County Board of Commissioners
1115 Gilman Avenue
Marietta, Ohio 45750

Loan Number: CS390085-0006

Project Summary

The Board of Commissioners of Washington County has requested financial assistance from the Ohio Water Pollution Control Loan Fund (WPCLF) to install sanitary sewers in the western portion of unincorporated Devola north of Marietta as mandated by Ohio EPA Director's Final Findings and Orders (Orders). The project will disturb residential lawns by excavation to replace existing septic tanks with new tanks and trenching to install septic tank effluent pumps (STEP) and small diameter force mains connecting to the proposed sanitary collection system, followed by landscape restoration. Construction of small diameter pressure sewers and conventional gravity sewers along roads will temporarily disrupt traffic.

History & Existing Conditions

Sanitary sewers and a local wastewater treatment plant (WWTP) were installed by the county in the eastern part of Devola in the late 1900s. In 2012 the county converted the WWTP to a pump station and constructed a force main to transport sewage to Marietta's municipal sewer system. The western part of Devola remains without central sewers; residences and the few commercial buildings have on-lot home sewage treatment systems (HSTS) (Figure 1).

In 2009, the Putnam Community Water Association (PCWA), drawing water from a floodplain aquifer, reported multiple samples of high nitrate levels in drinking water provided to the Devola area. The Washington County General Health District declared a public health nuisance due to an unsafe water supply and in 2010 requested the assistance of Ohio EPA.

Ohio EPA's hydrogeological investigation that year determined that the PCWA wells were influenced by groundwater flow from the Devola area and concluded that failing and leaking HSTS contributed to the high nitrate levels in ground water and the exceedances of health-based "maximum contaminant levels" in finished water.

The PCWA eliminated the health risk of high nitrate levels in treated drinking water by adding a reverse osmosis process to produce water meeting Safe Drinking Water Act (SDWA) requirements.

Concurrently, based on the results of the hydrogeological investigation, Ohio EPA in 2012 issued Orders to Washington County in which the Agency determined the high nitrate levels were evidence of unsanitary conditions and violations of Ohio's general water quality criteria. Also concluding that the typical residential lot sizes and soil conditions in the area are unsuitable for

replacing on-lot sewage treatment systems, the Orders required the county to eliminate the source of the unsanitary conditions by installing sanitary sewers in western Devola.

Having signed the Orders, Washington County negotiated with Marietta a contract for treating the additional wastewater flows from Devola. Marietta designed and constructed WWTP improvements to accept the anticipated flows. When local opposition to sewerage led to lawsuits challenging the Orders and the County Commissioners deferred progress toward the mandated sewer construction, Marietta, having incurred construction debt, sued the county to force payment.

After the Washington County Commissioners failed to submit the plan as required by the deadline in the Orders of January 18, 2015, Ohio EPA filed an enforcement action in the Washington County Court of Common Pleas on March 2, 2018. The trial court granted partial summary judgment in favor of Ohio EPA on November 30, 2018, ordering the Washington County Commissioners to comply with the 2012 Orders. (The issue of any civil penalties is still pending with the Court.)

The county has designed the project, received a Permit to Install (PTI) from Ohio EPA, and is finalizing a financing package to minimize the project cost to users. The Washington County Wastewater Department, currently serving over 900 people in seven small communities including eastern Devola, would double its service population by sewerage western Devola. Customers currently pay a monthly flat rate of \$70.

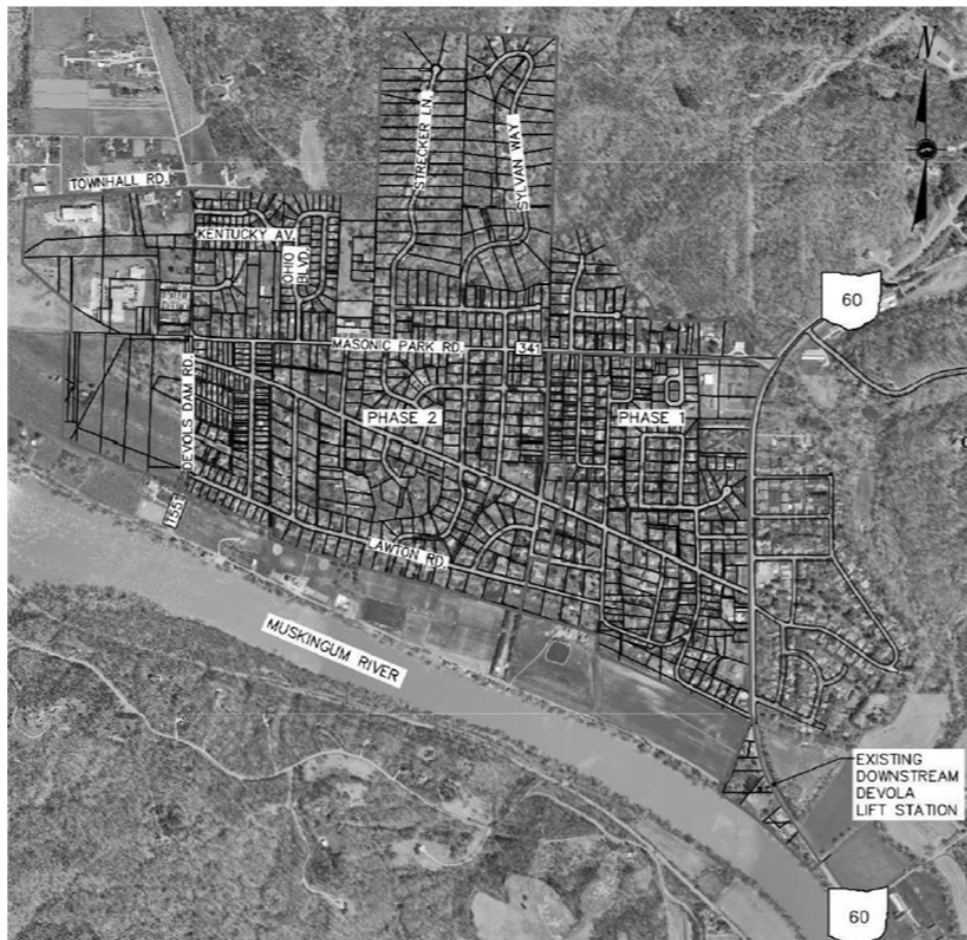


Figure 1 - General Project Area – Phase 1 is the area with sanitary sewer service; Phase 2 is the current project area (credit: WSP USA Inc.)

Population and Flow Projections

The PTI application shows 544 residences in the project area with a population of 920. Devola is “built out” and no additional homes or significant population change are expected.

Average daily wastewater flow (ADF) in the project area is calculated at 0.13 million gallons, with peak hourly flow 0.44 million gallons. The Marietta WWTP design capacity is 4.0 million gallons per day (mgd); ADF is 2.27 million gallons, which will increase to 2.4 million gallons with the expected additional flows from Devola.

Alternatives

With legally binding Orders requiring sewerage western Devola, “doing nothing” (the “no-action” alternative) would leave the community with unsanitary conditions and risk higher-level legal action by the state and is therefore not feasible. To comply with the sewer mandate, consultants for Washington County evaluated four feasible alternatives then added a fifth during project development. Because eastern Devola’s sewer system connects to Marietta’s for treatment, the alternatives for this project assume connecting to that existing system.

1. A mostly gravity system with property owners responsible for connecting service laterals to the system and abandoning their HSTS would involve construction of 8-inch diameter and 10-inch diameter pipe in trenches 10-12 feet deep or lengthy deep borings in the public right-of-way (R/W) to ensure a grade suitable to maintain appropriate flow. This amount of surface disturbance would have the greatest temporary impact to streets, traffic, and residential yards of the alternatives. A pump station with additional capital and operations and maintenance costs would be necessary due to variable terrain in the project area. Owners would face on-lot costs for service lateral construction and HSTS abandonment that could range upward from \$10,000 depending on distance from the public R/W. The capital cost estimate for planning purposes is \$11.7 million.
2. A mostly gravity system with the county responsible for connecting service laterals and abandoning HSTS. This alternative would have the same surface disturbance as Alternative 1, although the county would include the lateral and HSTS abandonment and those costs in the project. The public capital cost estimate for planning purposes is \$17.4 million.
3. A grinder pump pressure system with property owners responsible for connecting service laterals to the system and abandoning their HSTS would involve installing individual grinder pumps at each residence (shared pumps in some locations) with small diameter, flexible pipes connected to small diameter pressure sewers in the public R/W. Alternatives 3 and 4 would eliminate the need for the additional pump station and the flexible 1.25-inch diameter lateral pipes and 2-inch and 4-inch diameter pressure sewers can be installed in shallow and narrow trenches that allows contractors to avoid or minimize impacts to road surfaces, trees, landscape features, and underground utilities. New gravity sewers will carry the flows to an existing gravity sewer that drains to the existing Devola pump station. Property owners would be responsible for several thousand dollars in on-lot costs for the grinder pump and installation, construction of the connecting pipe, and HSTS abandonment. Owners would also be responsible for the additional electrical cost to operate the grinder pump. The public capital cost estimate for planning purposes is \$5.4 million.

4. A grinder pump pressure system with the county responsible for connecting service laterals and abandoning HSTS would be equivalent to Alternative 3 except all capital costs would be included in the project cost. Each owner would be responsible for the additional electrical cost to operate the grinder pump. The public capital cost estimate for planning purposes is \$12.5 million.
5. A STEP system comprised of new septic tanks with effluent pumps and on-lot, small-diameter, low-pressure sewers connected to a combination of small-diameter, low-pressure force mains and gravity sewers that drain to the existing Devola pump station. All capital costs would be covered by the project, each owner would be responsible for electrical service to the effluent pump, and the county would be responsible for pumping the septic tanks on a schedule (approximately every 7-10 years) to prevent solids entering the collection system. The public capital cost estimate for planning purposes is \$17.6 million.

The consultant's preliminary recommendation was Alternative 1. Although conventional gravity sewers typically have the highest capital costs, they have the lowest ongoing operation and maintenance costs, greatest reliability, and longest lifespan. Alternative 1 would require significant immediate direct expenditures by property owners. The planning report acknowledged that the preferred alternative might change based on public comment. Washington County, after further considering the alternatives, the significant opposition to the project by Devola residents, and the desire to minimize direct costs to residents, decided to pursue Alternative 4. Local opposition to the grinder pump proposal then led to development of Alternative 5.

Selected Alternative

Washington County proposes constructing Alternative 5, replacing existing septic tanks with new tanks and installing individual STEPs at each residence with small diameter, flexible pipes connected to small diameter pressure sewers in the public R/W. Spans of new gravity sewer will carry flows to the gravity sewer draining to the existing pump station. Each owner will be responsible for the additional electrical cost to operate the effluent pump. The capital cost estimate is \$17,650,000.

The project will install 556 STEP (effluent-only) systems, approximately 44,000 linear feet (lf) of 1.25-inch diameter laterals in residential yards, 42,600 lf of 2-inch, 4-inch, and 6-inch diameter pressure sewers in the public R/W, 552 lf of 8-inch diameter gravity sewers in the R/W, and 111 air-release valves and cleanouts. The flexible lateral pipes will be constructed by directional drilling and/or in narrow trenches that allows avoidance of important landscape features (Figure 2). Contractors will restore and re-seed the disturbed lawns and repave disturbed road surfaces.

During preliminary planning, Washington County identified at least 10 unconnected properties along Masonic Park, Chamberlain, and Lawton roads in sewer east Devola that will be connected as part of this project.

Each low-pressure sewer line, including valves and cleanouts, will need to be flushed and inspected every three years. Manufacturer data suggests the effluent pumps require service after 7-10 years; with 556 pumps in operation, a conservative average of 80 calls per year is anticipated. The first few years of sewer system operation life will probably see fewer service calls than this average with all equipment new and under warranty. The county will pump out septic tanks every 7-10 years as needed based on periodic dip testing. The calculated initial annual operation, maintenance, and replacement (O, M & R) cost for the new system is \$121,000.

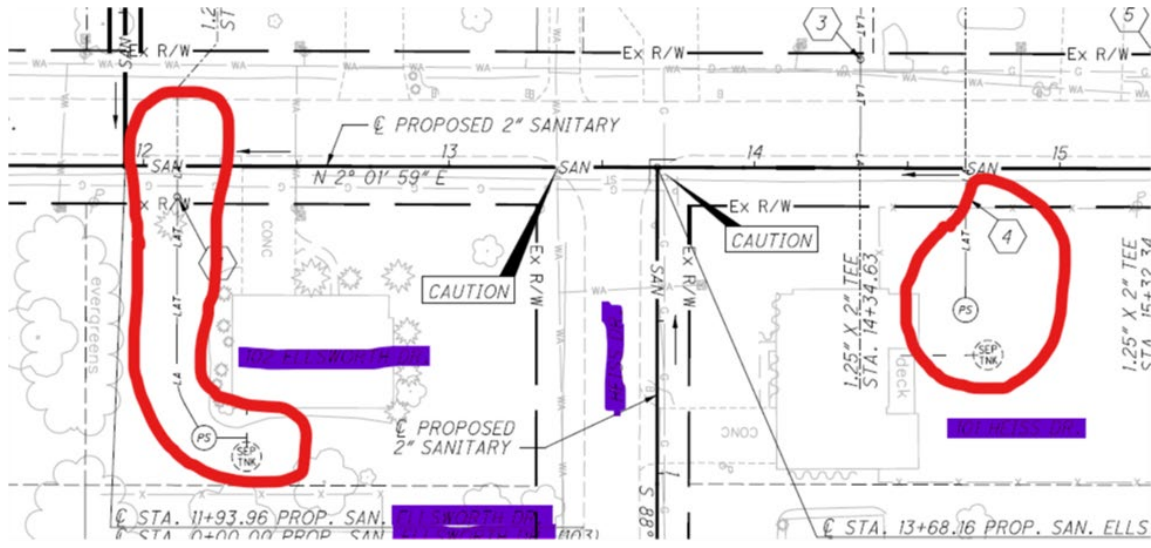


Figure 2 - Typical STEP and lateral locations (credit: WSP USA Inc.)

Implementation

The financing package for this \$17,650,000 estimated-cost project includes grant funding commitments totaling \$14,118,000 from the Army Corps of Engineers, Appalachian Regional Commission, state infrastructure funds (H2Ohio), and state and county American Rescue Plan Act (ARPA) awards. Unless additional grant funds are committed, Washington County will supplement the grant funds with approximately \$3,534,000 from the WPCLF as a 0% WPCLF regionalization discount rate, 20-year loan. With this scenario, Washington County would save approximately \$816,000 over the life of the loan compared to a market rate loan at 2.11%. Interest rates change monthly and may differ for a later loan award and accordingly alter the anticipated savings. Additional grant funding would accordingly alter the WPCLF loan amount and savings.

Right-of-entry agreements for each property served (to allow access by county staff for maintenance) and easement acquisition are in progress. To ensure all properties are connected to the new sewers as required by the Ohio EPA Orders, the county will initiate eminent domain proceedings if agreements are not signed by owners.

Construction of the sewers, laterals, and grinder pumps will take approximately 6 months, after which residential connections (new septic tank, STEP, and lateral pipe) will be completed. Full operation of the system will be approximately one year later.

Public Participation

This project has been locally controversial since Ohio EPA in 2012 issued Orders to eliminate documented unsanitary conditions. Resident opposition, including legal action, formation of Devola Against Sewering Homes (DASH), and refusal to allow property access for surveying has been the subject of local news regularly. The decision to change the proposal to the STEP system and announcements of additional funding have more recently been shared with the community.

Ongoing local news coverage, a county webpage dedicated to the project, and regular discussion in county commission meetings suggest the community is aware of the project and its cost.

Ohio EPA will make a copy of this document available to the public on its web page (<https://epa.ohio.gov/wps/portal/gov/epa/divisions-and-offices/environmental-financial-assistance/announcements>) and will provide it on request.

Environmental Impacts

The project will serve the existing population and does not provide sewer capacity for a larger population that could encourage additional development and will have no adverse secondary (development-related) environmental impacts or affect *land use* or *farmland*. No state or federal *wild or scenic rivers* are near the project area which is distant from the Ohio *coastal management* area along Lake Erie. No *wetlands* have been identified in the project disturbance. Drinking water is supplied by the PCWA and the installation of STEPs and small diameter sewers will not compromise the water supply or availability of *safe drinking water*.

Potential effects to the following features will be reduced or mitigated to acceptable levels:

The Muskingum River runs past Devola; no other streams or other *surface water resources* or *aquatic habitat* are in the project disturbance area. Standard erosion and sediment control measures are required in the contract to minimize surface water impacts from soil disturbance.

Because the proposed sanitary collection system (small diameter sewers and pressure sewers) will be constructed in roads, and the small diameter pipes connecting to STEPs can be flexibly installed and avoid trees, tree removal is not anticipated. If construction requires tree removal, it will occur between September 30 and April 1 to avoid potential impacts to endangered bat species. No other important *terrestrial habitat* is in the project disturbance vicinity and no impacts to *fish and wildlife* are expected.

The Ohio State Historic Preservation Office concurred with Ohio EPA's conclusion that the proposed construction will not affect important *archaeological and historical resources*.

Construction of the proposed sewers does not require deep excavations that could significantly affect *ground water resources* or private wells that might be used for non-drinking water purposes.

Local and regional *air quality* will be unaffected by this project that adds no permanent sources of air pollution. Operation of the STEPs and more frequent operation of the existing Devola pump station due to the increased flows from the project area will require electrical power that is readily available on the regional *energy* grid.

Construction in and along area streets will unavoidably affect traffic. Standard construction traffic controls measures (signs, flaggers, barrels) will help ensure *safe traffic* flow during construction. Trenches will be closed or covered during non-work hours and installation of new septic tanks, STEPs, and laterals in residential yards will be coordinated with owners to further ensure public *safety*. *Noise* from motorized excavators and trucks, similar to that of traffic regularly transiting the main thoroughfares through Devola, will be audible in the immediate construction vicinity and will be temporary as construction proceeds along each street. After construction is complete and lawn restoration is well established, the project will be evidenced only by the presence of the ground-level STEP vault cover. Otherwise, local *aesthetics* will be similar to pre-project conditions.

County sewer customers currently pay a flat monthly fee of \$70, which would be the base monthly cost covering operation, maintenance, and treatment for new Devola customers. The Devola project costs will be paid by all county sewer customers. The favorable financing package and relatively small debt service would add an estimated \$7 to the monthly fee if covered by all

customers (total monthly \$77 or \$924 annually). This amount is 1.9% of local median household income (MHI; \$48,572). Although higher than the Ohio average 1.3% of MHI, the amount has been acceptable to existing county customers and is unlikely to adversely affect the *local economy*.

Each new Devola customer will also pay the cost of electricity to run the STEP (\$3-4 monthly) and the \$6,000 county tap fee, payable directly or over thirty years on the county property tax bill.

Conclusion

Based on its review of this project's general plans and other information, Ohio EPA concludes that no significant short-term or long-term adverse direct environmental impacts will result from the project as related to the environmental features discussed in this Environmental Assessment. This is because these features do not exist in the project area, the features exist but will not be adversely affected, or the impacts of construction will be temporary and mitigated.

This project equally serves the affected area and no particular segment of the community will be faced with additional adverse impacts or be deprived of environmental benefits, compared to any other segment.

For these reasons, this project, alone or in combination with other projects, is not expected to result in any significant indirect or cumulative short-term or long-term adverse environmental impacts.

Ohio EPA expects the economic impact of the project on the average user to be acceptable because Washington County received a favorable financing package requiring little debt and user costs will increase only nominally.

The project will eliminate the potential public health threat of documented unsanitary conditions in Devola.

Contact Information

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