



John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

July 16, 2015

**Issuance of A Limited Environmental Review
To All Interested Citizens, Organizations, and
Government Agencies**

**Northwestern Water and Sewer District
Wood County**

**Bays Road Water Line Replacement
Loan Number FS391432-0090**

**Bowling Green South Second Water Line Connection
Loan Number FS391432-0097**

**Southern Service Area Water System Disinfection Byproducts Improvements
FS391432-0092**

The purpose of this notice is to advise the public that Ohio EPA has reviewed the referenced projects and finds neither a Supplemental Study (SS) nor an Environmental Assessment (EA) is required to implement the projects as discussed in the attached Limited Environmental Review (LER). Consequently, a Finding of No Significant Impact is being issued for these projects.

The Water Supply Revolving Loan Fund program requires the inclusion of environmental factors in the decision-making process for project approval. Ohio EPA has done this by incorporating a detailed analysis of the environmental effects of the proposed actions in its review and approval process. Environmental information was developed as part of the facilities plan(s), as well as through the facilities plan review process. A subsequent review by this Agency has found that the proposed actions do not require the preparation of either an EA or an SS.

Our environmental review concluded that because the proposed projects are limited in scope and meet all applicable criteria, an LER is warranted. Specifically:

- The proposed projects will have no significant adverse environmental effect, nor will they adversely affect any specific resource type.
- They will not require extensive general or specific direct impact mitigation.
- They will not affect current design flow value or the existing service area.

- They are clearly cost effective.
- They are not controversial.
- They will not result in an increase in the volume of discharge or loading of pollutants to receiving water or increase the withdrawal of additional water supplies.

The LER presents additional information on the proposed projects, costs and the basis for our decision. Further information can be obtained by calling or writing the contact person listed on the back of the LER.

Upon issuance of this determination, loan award may proceed without being subject to further environmental review or public comment, unless information is provided which determines that environmental conditions on the proposed projects have changed significantly.

Sincerely,



for
Jerry Rouch, Assistant Chief
Division of Environmental & Financial Assistance

Attachment

**LIMITED ENVIRONMENTAL REVIEW
For
Northwestern Water and Sewer District
Wood County**

**Bays Road Water Line Replacement
Loan Number FS391432-0090**

**Bowling Green South Second Water Line Connection
Loan Number FS391432-0097**

**Southern Service Area Water System Disinfection Byproducts Improvements
FS391432-0092**

**Applicant: Jerry Greiner, President
Northwestern Water and Sewer District
12560 Middleton Pike
Bowling Green, OH 43402**

Existing Need

The Northwestern Water and Sewer District (NWWSD) owns and operates the water distribution system that serves large portions of Wood County, Ohio. NWWSD service areas in northern Wood County are provided water by the cities of Toledo and Oregon. The southern portions of the county are provided water by the City of Bowling Green. The projects referenced in this Limited Environmental Review include improvements to the Water Line (WL) #300 Service Area, which draws its water supply from Bowling Green.



Figure 1 NWWSD WL 300 Area General Location

The portion of the WL 300 Service Area that is the subject of this environmental document is known as the Southern Service Area. The Southern Service Area includes the municipalities of Portage, Jerry City, Cygnet and Hoytville and the surrounding unincorporated areas. It is primarily rural residential with a service population of 2,786. Its infrastructure includes a booster station in Portage and three elevated tanks: one in Portage, one on Bays Road, and one near Hoytville. Bowling Green provides water to the Southern Service Area through a single 16-inch diameter asbestos cement trunk line along State Route 25. Water is pumped south from Portage along SR 25, east to Cygnet and Jerry City, and west and south along Bays Road and Potters Road to Hoytville and an industrial area known as the CSX Intermodal Facility (CSX Intermodal).

Average daily water demand in the Southern Service Area is presently 211,907 gallons, most of which is from residential users. NWWSD plans to extend water to Bloomdale and Bairdstown, villages near Jerry City that currently rely on poor quality municipal well water. This will raise the service population of the Southern Service Area by approximately 870. Otherwise, there are no large new sources of demand. Little population influx is expected over a 20-year facilities planning period. No new subdivisions are planned. Several small unincorporated areas are preparing to petition

NWWSD for water. CSX Intermodal and an area around it were expected to experience growth, but so far there has been little development. The service agreement between Bowling Green and NWWSD specifies no limit on the amount of water provided to the Southern Service Area. Given the low projected growth in demand and the large water supply, NWWSD can provide water to the expected 20-year service population without major infrastructure improvements.

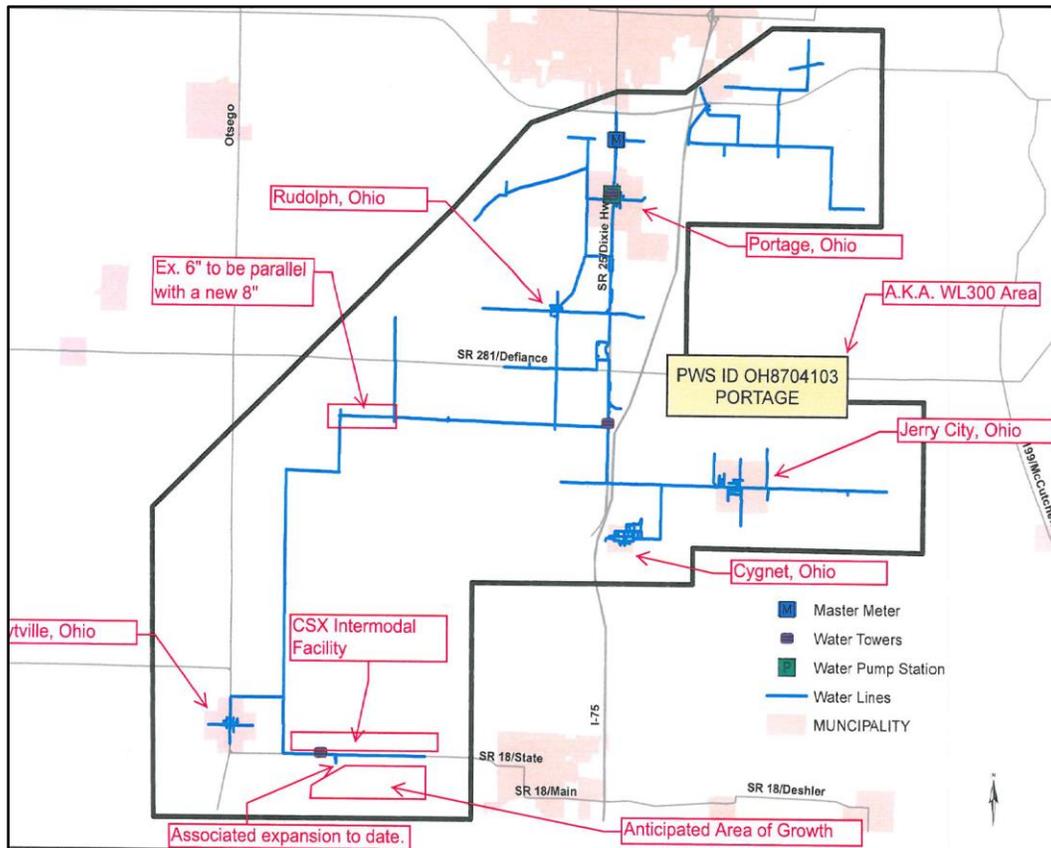


Figure 2: NWWSD Southern Service Area

Since assuming control over the Wood County water distribution system in 2011, NWWSD has identified a number of common infrastructure problems throughout the county. Some components are beyond their useful lives or are poorly designed. Some parts of the distribution systems lack water line redundancy. This creates vulnerability to water outages and, by allowing water to stagnate in dead-end lines, leads to poor water quality. Disinfection byproducts (DBP) occur in some areas in excess of the standards established in the Disinfection/Disinfectant Byproduct Rule (DDBR). DBP include classes of compounds known as trihalomethanes (TTHM) and haloacetic acids, which have connections to disease in humans. DBP are formed by the interaction of residual chlorine used for disinfection with organic matter that remains in finished water. Longer exposure times of residual chlorine to the organic matter yield higher DBP levels. The DDBR requires finished water at all points in a distribution system to have DBP concentrations of no more than 0.080 micrograms per liter. In extensive distribution systems where water can have a long residence time in the pipes, DBP

levels can exceed the standard at the fringes of the distribution system. DBP levels are controlled by further reducing organic matter during treatment and/or by installing aeration systems to remove DBP in the distribution system.

All the above mentioned problems are present to some extent in the Southern Service Area. Specific problems the NWWSD will address with the projects that are the subjects of this environmental document follow.

- Bowling Green South Second Water Line Connection, WSRLA loan number FS 391432-0097. The 16-inch trunk line along SR 25 is the only line bringing water from Bowling Green to the Southern Service Area. A break in this trunk line would leave the Southern Service Area with no water other than that in the lines and storage tanks. To avert this, NWWSD proposes to extend an existing 8-inch diameter water main approximately 4,500 feet along Kramer Road and under I-75 to another existing 8-inch line on County Home Road. This will provide a feed to the Southern Service Area utilizing a different 16-inch diameter trunk line from Bowling Green. The 8-inch water line will be installed by open cut in the south shoulder of Kramer Road, in an easement off the north shoulder, and under I-75 by directional bore.
- Bays Road Water Line Replacement, WSRLA Loan Number FS391432-0090. The Bays Road water main between Wingston Road and Potter Road is 6 inches in diameter, while the rest of the lines serving the western portion of the Southern Service Area are 8 inches. The 6-inch line causes a bottleneck in the lines feeding this part of the Southern Service Area, thus reducing the reliability of service to Hoytville and the growth areas around CSX Intermodal. To increase the reliability of service, NWWSD proposes to install approximately 5,200 feet of 8-inch water line by open excavation parallel to the existing 6-inch water line in the north right-of-way of Bays Road between Wingston and Potter Roads and for 900 feet along Potter Road. The 6-inch line serves customers along Bays Road, and will be left in place to continue service.
- Southern Service Area Water System DBP Improvements WSRLA Loan Number FS 3914320092. TTHM, primarily chloroform, have historically exceeded the standard in the Southern Service Area distribution system. In 2009-2011, Bowling Green installed a microfiltration system as part of an upgrade of its lime softening water treatment plant to remove more organic material as a way to reduce DBP formation. This has helped slightly but high TTHM levels still occur. After water enters the Southern Service Area, it travels over 7 miles to reach the users at the ends of the lines, allowing chloroform formation after treatment. The addition of Bloomfield and Bairdstown to the Southern Service Area will involve more lengthy pipelines. Aeration systems have been found in some cases to significantly reduce chloroform. To reduce chloroform formation everywhere in this system, NWWSD proposes to install an aeration system in the Portage water tank. The Portage tank is close enough to Bowling Green to reduce the chloroform levels, which rise rapidly after the water leaves Bowling Green.

All the construction areas are mown, support no wetlands, forested areas, or aquatic habitat and have been extensively disturbed for major road construction. No stream crossings are required. The aerator will be installed in existing tankage, which itself is in a paved utility yard.

Implementation

The total estimated project cost, potential WSRLA loan award amount and anticipated loan award schedule for each project are as follows:

Project	Total project cost	Loan award	Loan award date
Southern Service Area DBP Improvements	\$225,000	\$225,000	October, 2015
Bays Road Water Line Replacement	\$393,000	\$358,000	July, 2015
Bowling Green South Second Water Line	\$522,500	\$475,000	September, 2015

NWWSD qualifies for the WSRLA standard long-term construction rate, which, in March, 2015 is 1.79 percent over 20 years. Debt for each project will be repaid from a general repair and replacement fund without rate increases for the specific areas served by the improvements. Under the water rates that are effective in 2015, the average residential water bill is \$37.10 per month, or \$445.20 per year, based on a usage of 3,740 gallons per month.

Public Participation

NWWSD will send the affected residents a letter explaining the projects. In addition, NWWSD has discussed the projects at board meetings that were open to the public. Given the limited potential environmental impact of the projects, the lack of a rate increase and the lack of property assessments, this is considered adequate public participation.

Conclusion

The proposed projects are of a general project type (water line replacement and loop installation) that qualifies for a Limited Environmental Review. Specifically, they meet the following criteria:

They will have no significant adverse environmental effect: Construction will be limited to road rights-of way and easements that have been previously disturbed and to paved utility yards.

They will not affect any special resource type: No high quality resources are located in the paths of construction for these projects.

They will not require specific impact mitigation: The detail plans will include construction best management practices and prohibitions against placing excess excavated material from the trenches in streams, 100-year floodplains and wetlands. Given the minimal scope of these projects, this is considered adequate.

They are clearly cost-effective. In all cases, the option of doing nothing would leave unacceptable risks in place. The route alternatives for the Bowling Green South Second Water Line that would provide a redundant water source were evaluated and the one was selected that did so at the lowest cost. If a reliable water supply is to be delivered to the southwest portion of the Southern Service Area, the only option is to eliminate the bottleneck by installing an 8-inch line to replace the 6-inch line. Given the low potential for a significant increase in demand, the 8-inch mains are of sufficient capacity and do not need to be increased in size.

They are not controversial. They are affordable and, provided the construction best management practices and prohibitions on excess excavated material are followed, will have no adverse environmental impacts.

They do not involve a new or relocated discharge to surface or ground water, involve any increase in volume of discharge or loading of pollutants from an existing source or new facilities, create a new source of water withdrawals from either surface or ground waters, or significantly increase the amount of water withdrawn from existing sources; or provide capacity to serve a design population substantially greater (thirty percent) than the current design population. No discharge points or pollutant loading will be part of the projects. The projects do not require the expansion of Bowling Green's water treatment facility beyond its current capacity or require the addition of a supplementary water supplier, so they will not require a change in water withdrawal. Little population change is anticipated over the 20-year planning period.

The planning activities for the proposed water line replacement and redundancy projects have identified no potentially significant short-term or long-term adverse impacts to the quality of the human environment or to sensitive resources (floodplains, wetlands, surface water, endangered species or their critical habitat, cultural properties, raw water supplies, scenic or recreational rivers, air quality, farmland, or state and federal wildlife areas. Impacts related to dust, noise and odors will be temporary and well controlled during construction.

For further information, please contact:

R. Eric Schultz
Division of Environmental & Financial Assistance
Ohio Environmental Protection Agency
P.O. Box 1049
Columbus, Ohio 43216-1049

Phone: (614) 644-3713

E-mail: eric.schultz@epa.ohio.gov