

John R. Kasich, Governor Mary Taylor, Lt. Governor Scott J. Nally, Director

November 7, 2013

## FINDING OF NO SIGNIFICANT IMPACT TO ALL INTERESTED CITIZENS, ORGANIZATIONS, AND GOVERNMENT AGENCIES

Village of New Boston Scioto County

Combined Sewer Separation Phases 1, 2, 3, Manning Street, Peebles Street, Finney Street and Stewart Street WPCLF Loan Numbers CS390658-0002 and CS390658-0004

The purpose of this notice is to seek public input and comments on the Ohio EPA's preliminary decision that a Supplemental Environmental Study is not required to implement the recommendations discussed in the attached Environmental Assessment of the sewer separation project submitted by the municipality mentioned above.

How were environmental issues considered?

The Water Pollution Control Loan Fund program requires the inclusion of environmental factors in the decisionmaking process. Ohio EPA has done this by incorporating a detailed analysis of the environmental effects of the proposed alternatives in its review and approval process. Environmental information was developed as part of the facility plan and associated documents. as well through the facility plan review process and during site inspections. Agency's preliminary Environmental Assessment found that the project does not require the preparation of Supplemental Environmental Study.

Why is a Supplemental Environmental Study not required?

Our environmental review concluded that significant environmental impacts will not result from the action. Any adverse impacts have either been eliminated by changes in the facilities plan or have been reduced by the implementation of the mitigative measures discussed in the attached Assessment.

How do I get more information?

A map depicting the location of the project is included as part of the Environmental Assessment. The Environmental Assessment presents additional information on the project, alternatives that were considered. impacts of the action and the basis for our decision. Further information can be obtained by calling or writing the contact person listed in the back of the Environmental Assessment

How do I submit comments?

Any comments supporting or disagreeing with this preliminary decision should be submitted to me at the letterhead address. We will not take any action on this facilities plan 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 municipality will then be eligible to receive loan assistance from this agency.

Please bring any information that you feel should be considered to our attention. We appreciate your interest in the environmental review process.

Sincerely,

Alauddin A. Alauddin, Chief Division of Environmental &

Financial Assistance

AAA/JB/jb

Attachment

# Environmental Assessment for

Combined Sewer Separation Phases 1, 2, 3, Manning Street, Peebles Street,
Finney Street and Stewart Street
Village of New Boston
WPCLF Loan Numbers: CS390658-0002 and CS390658-0004

Applicant: The Honorable James Warren, Mayor

Village of New Boston 3980 Rhodes Avenue New Boston, OH 45662

### **Project Summary**

New Boston, population approximately 2,272, is located as shown below on the Ohio River. It owns and operates a combined sewer system that includes approximately 80,000 feet of both separate storm and sanitary sewers and of combined sewers. The combined sewer system has four pump stations whose pumps and motors are owned and operated by the neighboring City of Portsmouth. Portsmouth treats wastewater from New Boston.



New Boston's NPDES<sup>1</sup> permit allows sewage overflows at diversion structures that discharge through combined sewer overflows (CSOs) to the Ohio River. The CSOs activate frequently during wet-weather, and in severe storms sewage emerges from manholes in the lower streets. New Boston is under orders by US EPA and Ohio EPA to develop and implement a Long-Term Control Plan (LTCP) to reduce CSO activation.

In 2013, New Boston submitted an approvable facilities plan of combined sewer separation that will eliminate several sources of storm water inflow that contribute significantly to overloading at the pump stations and to CSO activation in New Boston and Portsmouth. The plan recommends doing this by separating combined sewers and installing a 72-inch diameter storm sewer in Rhodes Avenue to convey storm flows to Munn's Run, an Ohio River tributary. This work will be carried out in phases based on the availability of affordable funding. New Boston has taken bids and is prepared to award a contract for \$2,639,904 for the first two phases. If this project meets WPCLF<sup>2</sup> programmatic requirements, it will be eligible for WPCLF principal forgiveness and a zero percent interest loan.

<sup>&</sup>lt;sup>1</sup> National Pollutant Discharge Elimination System permit, which sets limits on the discharge of pollutants and establishes the operations and maintenance parameters.

Water Pollution Control Loan Fund, the state revolving fund in Ohio that is authorized under the Clean Water Act to provide financial and technical assistance for water pollution control projects.

## **Existing Conditions**

New Boston is surrounded by Scioto County and the eastern portions of Portsmouth (Figure 2). New Boston generally has an east-west orientation. Rhodes Avenue and Gallia Avenue are the main east-west running streets. One portion of the Village along Harrisonville Avenue and Lakeview Avenue extends north into the hills. The Village's downtown is primarily commercial in use, while the outer areas are residential.

Sanitary and combined flows from New Boston are collected in the sewers in the north-south running streets and conveyed to a 36-inch diameter combined sewer in Rhodes Avenue. Flows from North Moreland in Portsmouth and Eden Park in Scioto County enter New Boston's system from the north. Flows from the east and north parts of the Village and outside areas are assisted by the Munn's Run Pump Station, the Eastern Pump Station and the Webb Alley Pump Station. Overflows from the Webb Alley pump station are discharged from the Webb Alley CSO. Six diversion chambers direct flow from areas around Manning, Peebles, Finney, Stewart, and Stanton streets and West Avenue to the Rhodes Avenue combined sewer or to the West Avenue CSO. All flows that do not discharge through a CSO meet at the West Avenue Pump Station, which pumps to the Portsmouth Lawson Run wastewater treatment plant.

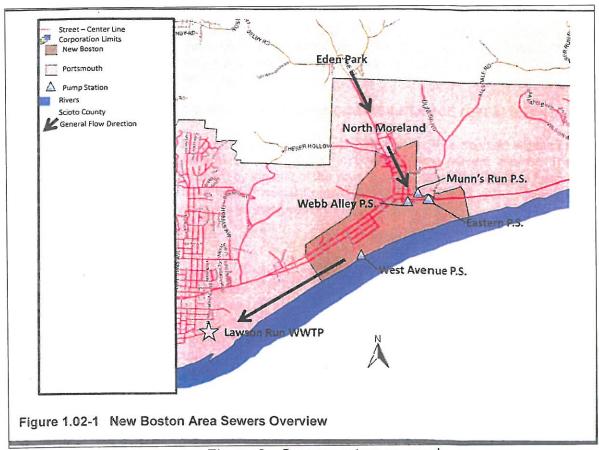


Figure 2 - Sewer system general

There are two general sources of storm water entry into this system. One source is catchment areas in the hills that discharge to the sewers upstream from the main downtown combined sewer system; specifically, at Cedar Street, Hill Street, Glenwood Avenue, and Peebles, Manning, Finney and Stewart streets. The other is surface runoff from paved areas on Rhodes Avenue at Cedar Street, Lakeview Avenue, Harrisonville Pike, Glenwood Avenue, Peebles Street, Manning Street, Finney Street and Stewart Street. In a 10-year, 1-hour storm event, for example, the hillside catchments contribute an estimated 2,378,000 gallons and the pavement runoff contributes an estimated 2,461,000 gallons of clear water to New Boston's sewers.

#### **Alternatives Considered**

In early field investigations, the Village found that the removal of clear water by separating the combined sewers was technically feasible and cost-effective. It would involve localized work to reconfigure some manholes and add short spans of sanitary and storm sewer, as well as constructing a large storm pipeline to convey storm water thus removed to Munn's Run. An early engineering estimate for sewer separation at Cedar Street, Hill Street, Glenwood Avenue, Peebles Street and Manning Street and installing a 72-inch diameter storm pipe in Rhodes Avenue from Glenwood Avenue to Munn's Run was \$4,300,000. A project with this cost would remove the flows from a 10-year, 1-hour storm for roughly \$1.00 per gallon. It would at least partially address CSOs and be serviceable at low operations and maintenance costs for many decades.

Once the new storm sewer system is operational, the Village can assess its effect on CSO discharges and determine whether more work (e.g., further sewer separations, equalization facilities, new Village wastewater treatment plant) will be needed to bring CSO activation to target levels. If it more work is found to be necessary, an assessment of the impact of the sewer separation will help the Village make informed decisions about the size and type of further CSO controls. This makes the project a critical first step in the longer-term process of bringing CSO discharges into compliance with orders.

Given the clear cost-effectiveness and necessity of sewer separation, there were no other meaningful alternatives to the one described above.

# **Proposed Project**

The project will include a 72-inch diameter storm sewer from an outfall on Munn's Run along the north side of Rhodes Avenue to Gallia Street and Glendale Street, local separation and CSO diversion at Manning, Peebles, Finney and Stewart streets (Figure 3), and cleaning and televising of critical sections of existing sewer line. Existing sanitary pipes and the 36-diameter combined sewer will be relocated in Rhodes Avenue to accommodate the 72-inch pipe. Sanitary flows will remain connected to the 36-inch combined sewer, which will function as a sanitary sewer after project completion. Due to affordability concerns in New Boston, the project will be undertaken in the following phases as funding allows.

Phase 1: This is the construction of the Munn's Run storm sewer from the headwall to Lakeview Avenue and the reconfiguration of manholes at Cedar Street. This action will re-direct creek water that enters the combined system at Cedar Street and storm runoff that enters the system from paved areas around Rhodes and Lakeview streets to the Munn's Run storm sewer.

Phase 2: This is the construction of the Munn's Run storm sewer from Lakeview Avenue to Glenwood Avenue and the re-configuration of manholes at Rhodes and Park avenues and Rhodes Avenue and Hill Street. This action will re-direct creek water that enters the combined system at Hill Street and storm water that enters from paved areas around Rhodes Avenue and Harrisonville Pike to the Munn's Run storm sewer.

Phase 3: The construction of the Munn's Run storm sewer along Glenwood Avenue between Rhodes Avenue and Gallia Avenue and the re-configuration of manholes along Glenwood Avenue. This action will re-direct Glenwood Creek and storm runoff from around Rhodes and Glenwood avenues to the Munn's Run storm sewer.

Manning Street, Peebles Street, Stewart Street and Finney Street: Under each of these streets run small sections of combined sewer that convey local sanitary flows and storm flows that originate at the foot of an undeveloped hillside north of Gallia Street to the 36-inch combined sewer. Sanitary flows will be separated by adding new sanitary lines parallel to each combined line in these streets and connecting the new sanitary lines to the 36-inch combined sewer. New storm line will be installed between the north side of Gallia Street and connected to existing overflow lines in Rhodes Avenue. This action will disconnect the hillside flows from the combined system.

The work areas are in paved roadways and sidewalks, with the exception of about 300 feet from the Munn's Run outfall to Rhodes Avenue, which will be installed in a small municipal park, and the work north of Gallia Street, which will be in a mown right-of-way. Most of the work will be carried out by conventional excavation, pipe installation, backfilling and pavement restoration. At the east end of the Munn's Run storm sewer, the 72-inch pipe will be installed under Rhodes Avenue by tunneling or jack and bore.

## Implementation

The Village took bids on the entire sewer separation plan and found that it can fund Phases 1 and 2 and the Manning and Peebles streets separation with the WPCLF funding available in 2013. Phase 3 and the separations at Stewart and Finney streets will be pursued in later years. The as-bid construction cost of Phases 1 and 2 and Manning and Peebles is \$2,639,904. Added to that will be the \$400,000 WPCLF design loan for the project, \$216,000 in construction management, and \$98,000 in general project administrative costs, making the total for this loan \$3,353,904 (not including contingency).

New Boston plans to fund this entire amount through the WPCLF. New Boston qualifies for WPCLF principal forgiveness in the amount of approximately \$1,800,000 and a zero-

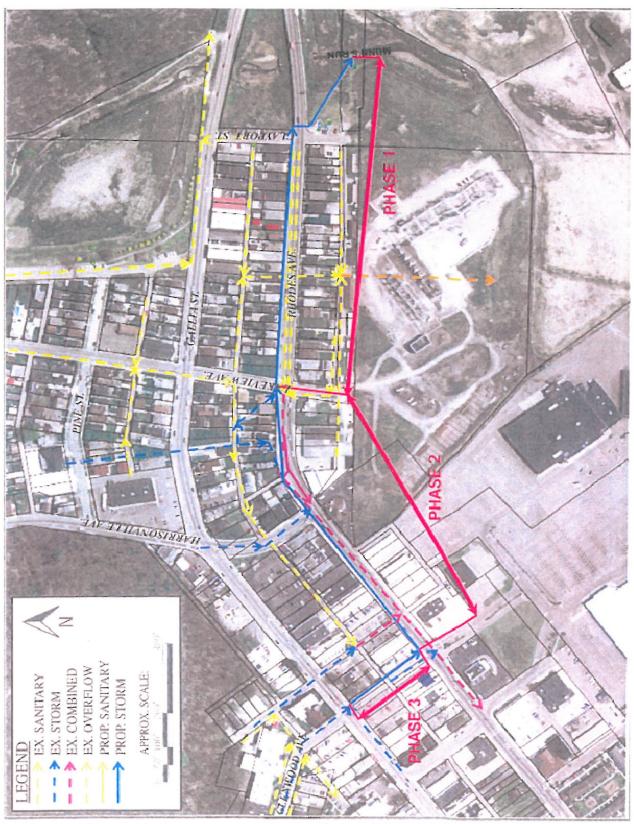
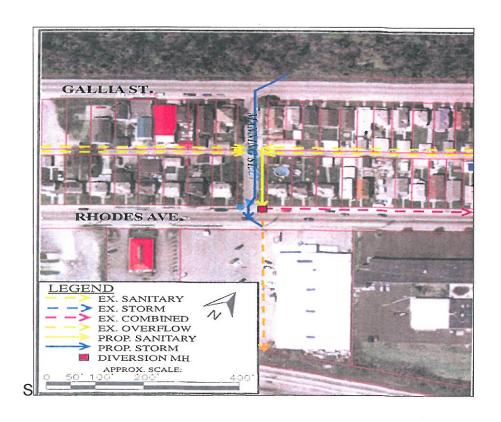


Figure 3 - Munn's Run storm sewer phases 1, 2 and 3 and Peebles and Manning Street separations below.





percent interest loan for the balance. Borrowing on these terms will save the Village \$2,700,000 compared to borrowing the entire amount of \$3,353,904 at the market rate of 5.14.

The WPCLF zero percent loan will be recovered from the addition of \$1.50 per thousand gallons for customers using up to 50,000 gallons annually, to go into effect January 1, 2014 (Users of more than 50,000 gallons per year will pay an additional charge for debt retirement). The average residential usage is approximately 44,000 gallons annually. Based on this amount, the average annual residential bill will increase by approximately \$91, bringing the total average annual sewer bill in New Boston to approximately \$550 per year. This is 3.0 percent of the median household income of \$18,563 in New Boston.

## **Environmental Impacts**

No wetlands, state scenic or recreational rivers, state or federal wildlife areas or preserves are present in the project areas.

<u>Surface Water</u>: The proposed outfall construction at Munn's Run is the only work that has the potential to adversely affect a water of the state. New Boston has applied for a permit from the US Army Corps of Engineers for the outfall construction and will not begin the outfall work before it has received the permit. Munn's Run carries an aquatic life use designation of warmwater habitat. Most of the stream fails to attain this designation, due to home sewage treatment systems, urban runoff and road construction and maintenance. The outfall location has been heavily channelized and culverted for major road construction, flood control and nearby development.

Despite the impairments in Munn's Run, the contractor will employ construction best management practices specified in the General Notes, Project Manual, and Storm Water Construction General Permit ("permit") to prevent the sedimentation of Munn's Run from areas cleared near the creek. The permit will apply not only to the footprint of the sewer and outfall, but to all areas where excess excavated material will be placed. Since the placement of excess material in wetlands, 100-year floodplains, and in or near streams can jeopardize water resources, Ohio EPA will screen proposed spoil disposal sites prior to the placement of material in them.

Based on this, the project as designed will have no short-term or long-term adverse on surface waters.

Terrestrial and Aquatic Habitat and Endangered Species: The US Fish and Wildlife Service notes that Scioto County is in the range of the following endangered species: the Indiana bat, numerous mussel species (the clubshell, the fanshell, the northern riffleshell, the pink mucket, the rayed bean, the sheepnose and the snuffbox), running buffalo clover and two threatened plant species (the small whorled and Virginia spirea).

With most construction confined to paved and mown areas, the habitat for these species is not present. The bank of Munn's Run at the proposed outfall site is treeless and supports thick stands of Japanese knotweed and poison hemlock. The Indiana bat prefers a treed habitat with numerous crevices for maternal roosting. Depending on species, the mussels' preferred habitat can include large or small streams with packed sand and gravel substrates, swift currents, riffles and shallow water. The bed of Munn's Run at the outfall site supports none of this habitat. The park and the bank of Munn's Run do not support the habitat preferred by the listed plant species.

Based on this, the project as designed will have no short-term or long-term adverse impact to threatened and endangered species or their habitat.

<u>Cultural Properties</u>: The project areas have undergone extensive prior disturbance for the construction of underground utilities, roads and buildings. These areas are unlikely to have intact archaeological sites that are eligible for the National Register of Historic Places. The buildings along the construction routes are not listed on the Ohio Historic Inventory or the National Register of Historic Places, nor do they appear to be eligible for the latter. The Ohio Historic Preservation Office concurs with this finding.

Based on this, the project will have no adverse short-term or long-term effect on cultural properties.

Noise, Dust, Odors: Construction-related noise, dust and odors are unavoidable, but temporary, effects of the proposed work. The contractor will determine and utilize typical best management practices (BMPs) to minimize construction-related noise, control the entrainment of dust into the atmosphere and reduce diesel odors generated by construction equipment. Sewage odors are not expected to be substantial because new sanitary sewers will be in place before existing sanitary sewers drain into them. The effects of noise, dust and odors will not outlast construction.

Based on this, the project will have no adverse long-term effects with respect to noise, dust and odors.

Air Quality: Scioto County is in attainment of the national ambient air quality standards for all federally regulated air pollutants (lead, sulfur dioxide, ozone, small particulate matter, carbon monoxide, and nitrogen dioxide). Construction equipment will have the potential to add pollutants through diesel emissions, but this will be controlled, as will dust that could add to particulate matter, using BMPs. Based on this and due to its limited scope and duration, the project as designed will not be sufficient to place Scioto County out of attainment with air quality standards.

<u>Hazardous Waste and Ground Water/Drinking Water</u>: The potential contaminant source inventory on GIS shows no sources, such as underground storage tanks (UST), in the proposed work areas. Since some sources may not be listed, the Village will require contractors to stop work immediately if UST or contaminated soils are encountered until proper cleanup has been effected. It will comply with the Storm Water Construction

General Permit for handling potential contaminants, such as fuels used in construction. Most local drinking water is provided by the City of Portsmouth, which draws raw water from the Ohio River rather than a local ground water source. The Ohio Department of Natural Resources has no well logs in the project area, although there are some wells probably for industrial usage near the Ohio River

Based on this, the project as designed will have no short term or long-term adverse impacts on ground water or drinking water from hazardous wastes.

<u>Traffic Management</u>: Traffic along Rhodes Avenue is heavy and fast. It will be controlled in construction zones with properly-deployed cones, barrels, signs, barricades, flaggers and other devices as needed. One-way traffic will be maintained on streets at all times. Roadways will not be closed or obstructed without the approval of New Boston. Access will be maintained at all times for emergency vehicles. Traffic will resume its normal patterns after construction.

Based on this, the project will have no adverse long-term effect on local traffic.

<u>Local Economy</u>: To limit the debt burden on residential customers, the Village wanted the annual costs with the repayment of the WPCLF loan added to be approximately 2.8 percent of MHI after application of new debt charges. The Village has come very close to this percentage with the funding package, so it is considered affordable.

## **Public and Governmental Oversight**

A widely-advertised public meeting was held on July 2, 2013. It was attended by approximately ten residents and officials of New Boston, Portsmouth, US EPA and Ohio EPA. The presentation covered the need for the project, the status of enforcement, a description of the proposed sewer separation program, its water quality and benefits, its probable costs as known at the time, the favorability of the potential WPCLF 2013 funding package, and debt repayment's potential impact to sewer bills. In addition to taking questions directly from the attendees, New Boston addressed questions that had come to the attention of Village officials before the meeting. This is considered adequate public participation for a project of this scope and type.

#### Conclusion

Based on the planning information provided in the Facilities Plan, detail plans, associated communications and comments by interested agencies, we find that the construction and operation of the sewer separation project as described herein will have no significant adverse long-term impact on surface waters, wetlands, floodplains, ground water, drinking water, aquatic habitat, terrestrial habitat, endangered species, cultural properties, air quality or the local economy. It will have no long-term adverse effects with respect to noise, dust or odors and will have no adverse secondary impacts such as prime farmland loss.

The proposed project will decrease street flooding and activation of CSOs to the Ohio River, will reduce bacterial loadings to the Ohio River and will have a beneficial effect on the wet-weather flows that reach Portsmouth's wastewater treatment plant.

For further information please contact:

Judy Buckinger, Division of Environmental and Financial Assistance Ohio EPA 50 West Town Street Columbus, OH 43215

Telephone: 614-644-3662

Email: Judith.buckinger@epa.state.oh.us