



GRETCHEN WHITMER  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF  
ENVIRONMENT, GREAT LAKES, AND ENERGY  
LANSING



LIESL EICHLER CLARK  
DIRECTOR

February 1, 2021

TO: All Interested Citizens, Organizations, and Government Agencies

SUBJECT: **DRINKING WATER STATE REVOLVING FUND (DWSRF)  
CATEGORICAL EXCLUSION  
City of Livonia, Wayne County  
DWSRF Project Number: 7453-01 (Phase 2)**

The purpose of this notice is to advise interested parties of a proposed decision by the Michigan Department of Environment, Great Lakes, and Energy (EGLE) that the criteria for qualifying for a Categorical Exclusion are met and this project will not have a significant adverse impact on the environment or public health, and thus, qualifies for a Categorical Exclusion under Section 5408 of 1994 PA 451. Consequently, an Environmental Assessment or an Environmental Impact Statement is not required to implement the water supply project discussed in the attached document.

### CRITERIA USED IN MAKING THE DETERMINATION

Part 54 of the Safe Drinking Water Assistance Act specifies six exclusionary criteria that must be met before EGLE can conclude that a proposed project qualifies for a Categorical Exclusion. The criteria are as follows:

- (1) The project must not result in an increase in residuals and sludge generated by drinking water processes which would negatively impact the performance of the waterworks system or the disposal methods or would threaten an aquifer recharge zone.*
- (2) The proposed facilities must not be designed to provide service to a population greater than 30 percent of the existing population, unless population projections required in section 5405(3)(e) support projected needs.*
- (3) The proposed public water supply project must not be expected, to directly or indirectly affect cultural areas, fauna or flora habitats, endangered or threatened species, or environmentally important natural resource areas.*
- (4) The proposed public water supply project must not directly or indirectly involve the extension of transmission systems to new service areas.*
- (5) The proposed public water supply project has been shown to be the cost-effective alternative.*
- (6) The proposed public water supply project will not cause significant public controversy.*

### PROJECT DETAIL

An attachment describing the proposed project is provided. This information is also available on our website at [Michigan.gov/DWSRF](http://Michigan.gov/DWSRF) under "Related Links." It presents information related to the proposed project, including the alternative selected, rationale for our decision to grant a Categorical Exclusion, and other pertinent information. Map(s) showing the location of the proposed project are also included.

The attachment provides information and allows appropriate federal cross-cutter agencies and state agencies an opportunity to submit information that may impact EGLE's decision prior to its effective date. Significant issues raised by these agencies could result in EGLE staff preparing a full Environmental Assessment.

**WHERE DO I SUBMIT COMMENTS?**

Any comments regarding this decision should be submitted to:

Mr. Jonathan Berman, Project Manager  
Water Infrastructure Financing Section  
Finance Division  
Michigan Department of Environment, Great Lakes, and Energy  
P.O. Box 30457  
Lansing, Michigan 48909-7957

**EFFECTIVE DATE OF THE EGLE DECISION ON THE CATEGORICAL EXCLUSION**

Absent comments that introduce significant information contrary to EGLE's final determination, the Categorical Exclusion will become effective upon conclusion of the 30-day comment period.

Questions regarding this project can be directed to Mr. Jonathan Berman, project manager, Water Infrastructure Financing Section, Finance Division, by phone at 517-897-3634, by email at [Bermanj@michigan.gov](mailto:Bermanj@michigan.gov), or by mail at EGLE, P.O. Box 30457, Lansing, Michigan, 48909-7957; or you may contact me. Your interest in this process is greatly appreciated.

Sincerely,



Kelly Green, Administrator  
Water Infrastructure Financing Section  
Financing Division  
517-284-5433

Attachment

**DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY**  
**Drinking Water State Revolving Fund**  
**City of Livonia, Wayne County**  
**Water Main Replacement**  
**Categorical Exclusion**  
**February 2021**

**PROJECT IDENTIFICATION**

**Applicant:** City of Livonia, Wayne County

**Authorized Representative:** Mr. Jacob Rushlow  
Superintendent of Public Works

**Address:** 33000 Civic Center Drive  
Livonia, Michigan 48154

**Project No.:** 7453-01 (Phase 2)

**PROJECT OVERVIEW**

The City of Livonia (Livonia) is seeking a low-interest Drinking Water State Revolving Fund (DWSRF) loan (1.875 percent for a 20-year term) in the current Fiscal Year (FY) 2021 to finance Phase 2 of its multi-year project replacement of aging break-prone water main pipe. The water main slated for replacement ranges in size from 6- to 8-inches in diameter and will be replaced with 8-inch main. The 6-inch diameter mains which will be upgraded to 8-inch, will also improve the water pressure. Phase 2 is expected to cost \$5,387,750 and servicing the associated loan debt is estimated to result in an increase of \$0.53 a month (\$6.36 annually) to the typical residential customer of Livonia's system. Livonia is anticipated to receive \$20,400 in principal forgiveness for lead service line replacement. Construction is anticipated to begin in Spring of 2021 and to be completed by Spring of 2022.

**EXISTING SYSTEM**

Livonia is a 36 square mile community located northwest of the city of Detroit in Wayne County. Livonia has a residential population of 94,060 according to the Southeast Michigan Council of Governments. The service population is expected to increase only slightly to 94,228 by 2045 and thus drinking water demand is not anticipated to change significantly in the next 20 years.

Livonia obtains its potable water from the Great Lakes Water Authority (GLWA). The water is treated at the Springwell Water Treatment Plant in Dearborn. There are no storage facilities or pump stations in Livonia. The city's system has four pressure districts: northwest, north, west, and east and consists of 485 miles of water main ranging from 4 to 36 inches in diameter. Approximately 76 percent of the city's system consists of cast iron pipe, much of which is old and prone to rust buildup. The remainder of the pipe is comprised of ductile iron (13 percent), high density polyethylene (10 percent), asbestos cement, and prestressed concrete (1 percent). The city's oldest water mains were installed in the 1920s and most are greater than 50 years in age. The system hydrants and valves are the same age as the mains and will be replaced as mains are replaced. Residential service lines in the city range from 5/8-inch to 1-inch diameter and the majority are copper. Less than three percent of the service lines are lead and when encountered

will be replaced with copper from the water main to the meter. Livonia has an active water meter replacement program and is replacing meters at a rate of about 400 per month.

## **PROJECT NEED**

Livonia experienced 987 water main breaks from 2013 through August 2018. Replacing old, corroded, break-prone water main is needed to improve flow capacity, customer water pressure, and reduce the frequency of breaks that disrupt service to the customers and put the system at risk for cross-contamination. Livonia's 2019 Water System Master Plan identified 14 project areas where water main replacements are recommended over the next five years. This Categorical Exclusion will focus on the three projects proposed to be built in 2021 to 2022 (See Figure A).

## **ALTERNATIVES**

### No-Action Alternative

The no-action alternative would result in an increased frequency of water main breaks and poor flow compromising service to the system users, reducing reliability. This is not a feasible alternative.

### Optimization of Existing Facilities Alternative

Optimization of existing facilities by lining the water mains would not address the need to upsize many of the neighborhood mains from 6-inch-diameter to 8-inch-diameter. Additionally, there is a lot of tuberculation in the systems' water mains. The success of a lining project relies heavily on the ability to prepare the interior of the water main to obtain a good bond between the liner and the main, which is not feasible for these mains. The option of reducing system pressure would result in low flows. Therefore, this alternative was not considered further.

### Regional Alternative

Livonia receives its potable water from GLWA; therefore, this alternative was not considered further.

### Replace Existing Water Main Alternative

Replacement of the aging break-prone water mains, including upsizing of the 6-inch diameter main to 8-inch main, will improve water quality due to fewer water main breaks. Public side water service lines will be replaced with new copper pipe during the project. If a lead line is found on the private side of the curb box Livonia will contact the resident to schedule a full-service line replacement from water main to water meter.

The selected alternative for the Phase 2 project is detailed below:

### **Project Area #4- Water Main Replacement for Botsford Park Subdivision**

The water main in this residential area along the roads of Angling, Antago, Deering, Bridge, Rensellor, and Saint Francis was constructed primarily during the 1950s. This water main has experienced at least 13 breaks since 2013. The work involves replacing approximately 11,600 linear feet (lft) of water main with ductile iron or pipe bursting with high-density polyethylene (HDPE) pipe including new valves, hydrants, and water service lines.

**Project Area #5- Water Main Replacement for Thomas F. O’Connor’s Park View Acres**

The water main in this residential area along Floral and Lathers Roads was installed in the 1920s and 1960s. Due to its age, the water main in this location encounters numerous breaks. The work replaces an estimated 6,700 lft of water main with ductile iron or pipe bursting with HDPE with new valves, hydrants, and service lines.

**Project Area #6- Water Main Replacement for Garden Farms Subdivision**

The water main in this residential area on Goff and Pershing Roads was built in the 1950s. The old cast iron material has contributed a significant number of breaks. The work will replace approximately 2,300 lft of water main with ductile iron or pipe bursting with HDPE including new valves, hydrant, and service lines.

Below is a table with estimated project costs for the selected alternative.

**Table 1 – Estimated Costs**

| <b>Project Area</b>                                    | <b>Cost</b>        |
|--|--------------------|
| Project Area #4  | \$2,608,772        |
| Project Area #5  | \$1,513,158        |
| Project Area #6  | \$528,070          |
| <b>Total Project Construction Costs</b>                | <b>\$4,650,000</b> |
| Engineering, legal, financial, and administrative fees | \$737,750          |
| <b>Total Project Cost</b>                              | <b>\$5,387,750</b> |

**EXISTING ENVIRONMENT AND POTENTIAL IMPACTS**

The water main replacement will have an immediate benefit to existing customers of limiting both interruptions in service and poor water quality due to breaks. The project will be constructed using trenchless pre-chlorinated pipe bursting methods. No impacts are anticipated to wetlands, floodplains, or the quality of the groundwater or surface water. If underground contamination is encountered the water main will be installed using directional drilling and ductile iron pipe, which will limit exposure and protect the quality of the drinking water.

Construction impacts will be short term including temporary noise, dust, and traffic disruptions. Water outages will be minimized, limited to off peak times, customers will be notified prior to any outage, and the reestablishment of water services is anticipated to be the same day they are taken offline which will eliminate the need for a temporary water supply system. For the most part, project working hours will be between 7 a.m. and 7 p.m., Monday through Saturday.

The State Historic Preservation Office (SHPO) was consulted on the project (File No. ER21-45) and determined that no historic properties will be affected within the area of potential effects. Federally identified tribes for the county were contacted, requesting comments as to any potential impact to tribal historic, religious, or cultural resources, though no comments have been received.

The United States Fish and Wildlife Service (FWS) determined the project will have “No Effect” on the Eastern prairie fringed orchid or Northern Riffleshell Clam based on a lack of suitable habitat and so they are unlikely to be present or affected. Further, the U.S. FWS expects any potential effects on the Eastern Massasauga Rattlesnake, Indiana Bat, or Northern Long Eared Bat to be insignificant due to implementing recommended general best management practices

along with no tree removals or trimmings and so the project is not likely to adversely affect these species.

The Michigan Natural Features Inventory (MNFI) found that several at-risk species have been documented within one mile of the proposed project. However, the occurrences are historic and/or removed from the site and so it is not likely that negative impacts will occur.

There are no anticipated operational or secondary impacts as a result of the proposed project. The proposed project will greatly improve the system reliability and improve drinking water quality and water pressure for customers.

## **PUBLIC PARTICIPATION**

A public hearing to discuss the proposed project was held at 7 pm on March 27, 2019, at Livonia City Hall. The hearing was advertised on February 24, 2019, and March 3, 2019, in *The Livonia Observer* and the project plan was available for viewing at Livonia City Hall. All public comments and questions for clarification purposes were answered at the hearing. A resolution adopting the project plan and implementation of the selected alternative was unanimously approved by the Livonia City Council on March 27, 2019.

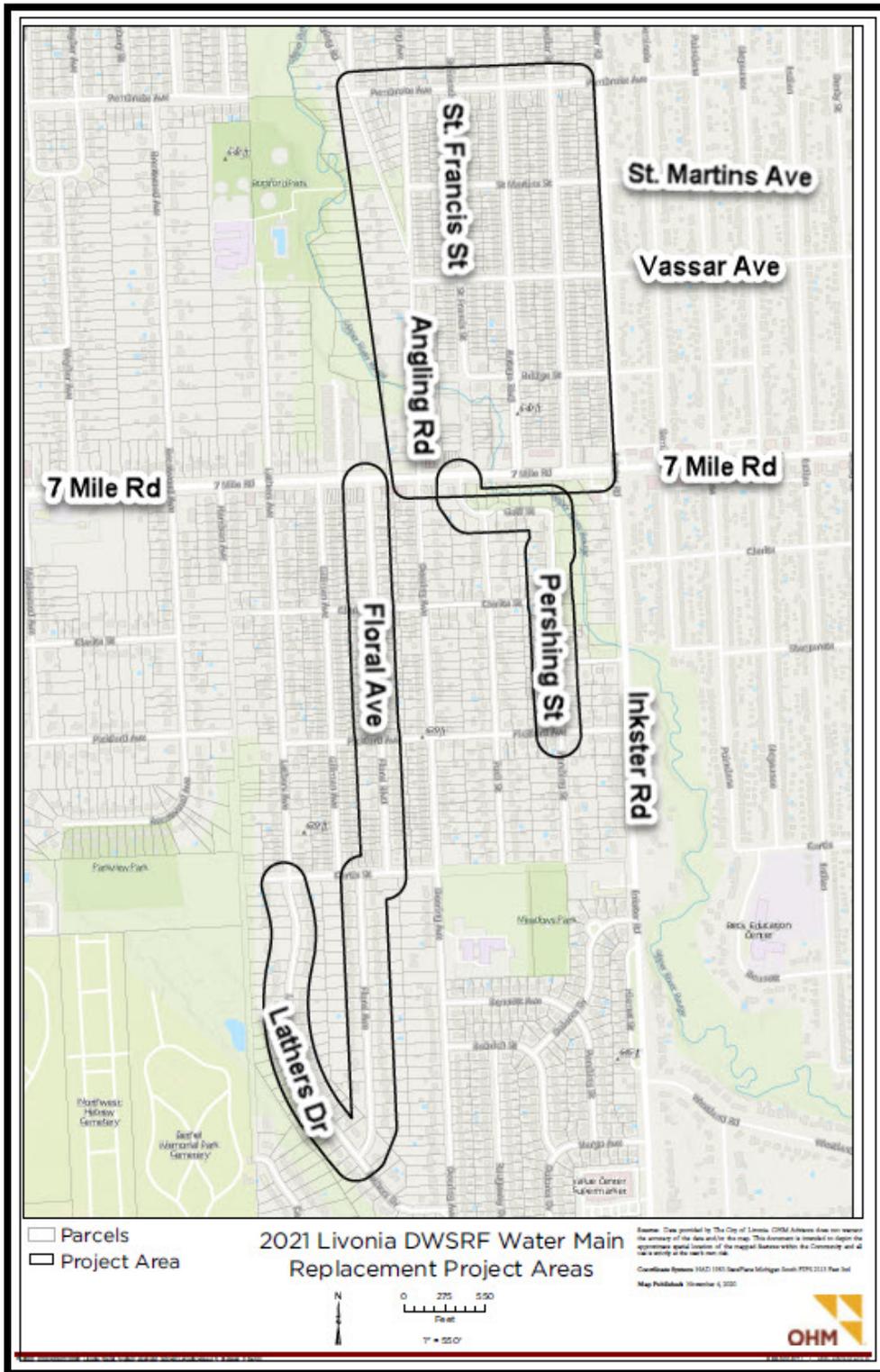
## **RATIONALE FOR CATEGORICAL EXCLUSION**

In accordance with Part 54, Safe Drinking Water Assistance, of Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, Section 5408(5) specifies criteria that must be met to grant a Categorical Exclusion from further environmental review activity to a proposed DWSRF assisted project. The Department of Environment, Great Lakes, and Energy staff has carefully reviewed the Phase 2 Livonia water main replacement project and related documents and has determined that no significant adverse impacts are anticipated by implementation.

Questions regarding this Categorical Exclusion should be directed to:

Mr. Jonathan Berman, Project Manager  
Water Infrastructure Financing Section  
Finance Division  
Michigan Department of Environment, Great Lakes, and Energy  
P.O. Box 30457  
Lansing, Michigan 48909-7957  
Telephone: 517-897-3634  
E-Mail: [Bermanj@michigan.gov](mailto:Bermanj@michigan.gov)

**City of Livonia DWSRF Project No. 7453-01 (Phase 2)  
General Location Map – Water Main Replacement**



**FIGURE A**