TO: All Interested Citizens, Organizations, and Government Agencies

SUBJECT: FINDING OF NO SIGNIFICANT IMPACT
City of Muskegon
Water Main and Lead Water Services Replacement
Drinking Water Revolving Fund Project No. 7449-01

The purpose of this notice is to seek public input and comment on a preliminary decision by the Michigan Department of Environmental Quality (DEQ) that an Environmental Impact Statement (EIS) is not required to implement recommendations discussed in the attached Environmental Assessment of a water supply project plan submitted by the applicant mentioned above.

HOW WERE ENVIRONMENTAL ISSUES CONSIDERED?

Part 54, Safe Drinking Water Assistance, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, being Sections 324.5401 to 324.5418 of the Michigan Compiled Laws Annotated, requires the DEQ to evaluate all environmental implications of a proposed water supply project. The DEQ has done this by incorporating a detailed analysis of the environmental impact of the proposed alternatives in its review and approval process. A project plan was prepared by the applicant and reviewed by the State. The DEQ has prepared the attached Environmental Assessment and found that the proposed project does not require the preparation of an EIS.

WHY IS AN EIS NOT REQUIRED?

Our environmental review concluded that no significant environmental impacts would result from the proposed action. Any adverse impacts have either been eliminated by changes in the project plan or will be reduced by the implementation of the mitigative measures discussed in the attached Environmental Assessment.

HOW DO I GET MORE INFORMATION?

A map depicting the location of the proposed project is attached. This information is also available on our website at www.michigan.gov/cleanwaterrevolvingfund under “Related Links.” The Environmental Assessment presents additional information on the project, alternatives that were considered, impacts of the proposed action, and the basis for our decision. Further information can be obtained by calling or writing one of the contact people listed below.
Finding of No Significant Impact  
Page 2  
April 15, 2019

HOW DO I SUBMIT COMMENTS?

Any comments supporting or disagreeing with this preliminary decision should be submitted to me at DEQ, Drinking Water and Municipal Assistance Division, Revolving Loan Section, Constitution Hall, P.O. Box 30817, Lansing, Michigan 48909-8311. We will not take any action on this project 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 applicant will then be eligible to receive loan assistance from this Agency to construct the proposed project.

Any information you feel should be considered by the DEQ should be brought to our attention. If you have any questions, please contact David J. Worthington, the senior project manager, at 517-284-5423, or you may contact me. Your interest in this process and the environment is appreciated.

Sincerely,

[Signature]

Karol Patton, Acting Manager  
Revolving Loan Section  
Drinking Water and Municipal Assistance Division  
517-284-5433

Attachments
ENVIRONMENTAL ASSESSMENT
DRINKING WATER REVOLVING FUND (DWRF)
CITY OF MUSKEGON, MUSKEGON COUNTY
WATER MAIN AND LEAD WATER SERVICES REPLACEMENT
APRIL 2019

I. PROJECT IDENTIFICATION

Applicant: City of Muskegon
1350 East Keating
Muskegon, Michigan 49442

Authorized Representative: Mr. Leo Evans, Director of Public Works

DWRF Project Number: 7449-01

The city of Muskegon is proposing to sell bonds to finance the construction of water main upgrades and water service lines to replace lead in various districts throughout the city of Muskegon. Muskegon is the largest city in Muskegon County, which is located on the western edge of Lake Michigan. Muskegon Lake and the Muskegon River form its northern boundary.

A study area has been delineated that incorporates the entire city limits. See Figure 1.

The following projects are urgently needed:

- Beidler Street Water Main and Water Services
- Crowley Street Water Main and Water Services
- Westwood Street Water Main and Water Services
- Jefferson Street and Strong Street Water Services
- Spring Street Water Main and Water Services

Total project cost is estimated to be $1,488,000. Average monthly water rates may rise from a current estimate of $8.99 per month to approximately $9.18 per month. This is a “worst case scenario,” as actual rate changes may be smaller. The city of Muskegon intends to finance the projects with a DWRF loan at 2.0 percent over 20 years. As a “disadvantaged” community, Muskegon qualifies for 20 percent principal forgiveness of the total project cost.

II. PROJECT BACKGROUND

A. Existing Facilities

1. Water Supply / Treatment

An intake in Lake Michigan draws water to the city’s Water Filtration Plant on the lakeshore. Water supply needs at the plant will be addressed in a 2020 plan currently under preparation.

2. Storage

Three elevated tanks provide more than adequate storage for the city’s water.
3. Distribution System

The city’s complex water distribution network consists of 215 miles of water mains ranging from 2- to 48-inch in diameter. The majority of the mains are cast iron or ductile iron material, with a great quantity of pipe dating from the 1920s or even earlier.

4. Service Lines

Of the approximately 12,900 water services in the city, it is estimated that 89% may be composed of lead or galvanized pipe with a lead gooseneck on the water main or were once lead but did not get replaced to copper in full.

5. Meters

Customer meters are read remotely. They get replaced when broken; otherwise, the meters are on a 20-year cycle for replacement.

B. Project Need

The new Lead and Copper Rule places a priority on “getting the lead out” of the distribution system. To comply, the city will embark on a campaign of water main upgrades and full-length lead service line replacements to protect public health. This document focuses on work targeted to begin construction in 2019 to take advantage of a special financing opportunity and to coordinate water work with already planned sewer projects to maximize efficiency. A 2018 grant awarded to the city is also helping fund Lead Service Line (LSL) replacement and asset inventory.

C. Population Projections

Muskegon’s population is approximately 38,500, which is a slight decline from 2000 when it was a little over 40,000. Table I shows the projected population figures provided by the West Michigan Shoreline Regional Development Commission. There is some seasonal summer growth, but not enough to have noticeable impact on water demand.

<table>
<thead>
<tr>
<th>Table I. City of Muskegon</th>
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<tbody>
<tr>
<td>Year</td>
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<tr>
<td>------</td>
</tr>
<tr>
<td>1990</td>
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<td>2000</td>
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<td>2010</td>
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<tr>
<td>2020</td>
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<td>2030</td>
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<tr>
<td>2040</td>
</tr>
</tbody>
</table>
III. PROPOSED ACTION

The following distribution system alternatives were considered:

A. No Action

Under this “do nothing” scenario, the distribution system would not be improved. Public health would be at risk through noncompliance with the Lead and Copper Rule. No action is rejected as unacceptable.

B. Eliminate Lead Via Distribution System Improvements

Muskegon has proposed the following to begin in 2019:

1. Beidler Street Water Main and Water Services
   
   To coordinate with a 2019 sewer project, there are approximately 26 LSL that need to be replaced. The water mains in this area are old, undersized, and susceptible to breakage.

2. Crowley Street Water Main and Water Services
   
   To coordinate with a 2019 force main project, there are approximately 32 LSL replacements needed. Water main in the neighborhood is old and unreliable and recommended to be replaced.

3. Westwood Street Water Main and Water Services
   
   To coordinate with a 2019 sewer project, there are approximately 30 LSL replacements needed. Water main on Westwood Street should be replaced at the same time as the services and sewer.

4. Jefferson Street / Strong Street Water Services
   
   To coordinate with a 2019 sewer project, there are approximately 15 LSL replacements needed.

5. Spring Street Water Main and Water Services
   
   To coordinate with a 2019 sewer project, a 1920s vintage 16-inch lead-joint transmission main should be replaced, including one lead water service.

IV. DESCRIPTION OF PROPOSED PROJECT

Muskegon intends to implement the five distribution system improvements for eliminating lead and replacing ancient water mains as described in the previous section. See Figure 2 for a map of the projects.

A. Project Cost Breakdown

Table II shows the breakdown of the project cost, which totals $1,488,000.
Table II.

<table>
<thead>
<tr>
<th>Description</th>
<th>Estimated Cost</th>
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<tbody>
<tr>
<td>Beidler Street – Water Main and Water Services</td>
<td>$271,000</td>
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<tr>
<td>Crowley Street – Water Main and Water Services</td>
<td>$467,000</td>
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<tr>
<td>Westwood Street Water Main and Water Services</td>
<td>$340,000</td>
</tr>
<tr>
<td>Jefferson and Strong Streets Water Services</td>
<td>$90,000</td>
</tr>
<tr>
<td>Spring Street Water Main and Water Services</td>
<td>$320,000</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>$1,488,000</strong></td>
</tr>
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</table>

B. **Project Schedule and Implementation**

A DWRF loan at 2.0-percent interest rate is anticipated to finance the work. The DWRF program is administrated by the DEQ and the Michigan Finance Authority. The repayment period is 20 years. The city of Muskegon has the authority, capability, and willingness to plan, finance, build, operate, and maintain the water distribution system.

Typical average rates of a water customer are about $8.99 per month. A rate increase of approximately $0.19/month would be needed to service the DWRF debt and pay for operation and maintenance, resulting in an average monthly cost of $9.18 for a typical home. However, Muskegon qualifies for disadvantaged status and is expected to receive a subsidy consisting of loan principal forgiveness.

The city anticipates completing the bidding process and starting construction as soon as the DWRF application will allow. The DWRF loan closing is targeted for August 30, 2019. Construction will probably require one to two years to complete, but the improvements should be operational by late 2020 or early 2021.

V. **ENVIRONMENTAL CONSEQUENCES OF PROPOSED ACTION**

A. **Description of Affected Environment**

**Cultural Resources**

The State Historic Preservation Officer (SHPO) determined that no historic properties will be affected by the proposed project. In addition, none of the Indian tribes historically known to have inhabited the area expressed any concern about the proposed project.

**Air Quality**

Air quality in the study area will not be negatively impacted by the proposed project. Construction activities will generate noise and dust in the immediate area of work. Any dust problems will be confined to the construction period and minimized as much as feasible.
Wetlands/Floodplains/Surface Waters

All projects are located above the high-water mark. Nearby creeks and streams will be protected using standard soil erosion and sedimentation measures.

Agricultural Land

There will be no impact. The study area does not contain prime and unique agricultural land.

Endangered Species

The United States Fish and Wildlife Service and Michigan Natural Features Inventory have reviewed the proposed project and determined that no threatened or endangered species, critical habitat, or special natural features will be adversely affected.

Social Impacts

The proposed project will have a small cost impact to residents. The city carefully weighed all alternatives to select the most cost-effective solution for correcting the problems occurring in the areas described. Public health will be protected by eliminating lead water pipes.

The creation of jobs during construction phase would be a short-term benefit.

A. Mitigation Measures

Structural and non-structural measures that avoid, eliminate, or mitigate adverse impacts to the environment have been identified. The cost of mitigation was considered in the cost-effectiveness analysis of the principal alternatives.

Dust Controls

Mitigation measures to minimize the negative effect of dust on the site will be defined in the project specifications. Calcium chloride or water will be used to control dust.

Noise Control

Noise levels will increase during construction due to the equipment needed to complete the proposed upgrades. Work will be confined to designated work hours and minimized on weekends or holidays. All equipment will be required to have proper exhaust systems and mufflers.

Soil Erosion/Sedimentation Control

A soil erosion and sedimentation control permit from Muskegon County will be required. Mitigative Best Management Practices will include silt fencing, rip-rap, hay bales, erosion control fencing, etc.
Restoration

All areas disturbed by construction will be restored to existing conditions with compacted backfill, sand, gravel, and asphalt or concrete surfacing. Seeding and mulching will be performed promptly following land disturbance. Significant plants, such as trees and shrubs, will be protected from damage or replaced if damage is unavoidable.

VI. PUBLIC PARTICIPATION

A public hearing on the DWRF project plan was held on March 12, 2019. The hearing was advertised in the Muskegon Chronicle and on the city’s web site. A copy of the draft plan was made available for a 30-day period at the Muskegon City Hall, 933 Terrace Street, prior to the hearing. No changes were made to the project as a result of the hearing. On March 13, 2019, the city commission passed a resolution adopting the final project plan and its selected alternatives.

VII. AGENCIES CONSULTED

West Michigan Shoreline Regional Development Commission
Michigan Department of Environmental Quality, DWMAD
Michigan Department of History, Arts, and Libraries, SHPO
Michigan Natural Features Inventory
United States Fish and Wildlife Service
Tribal Historic Preservations Officers:
   Little River Band of Ottawa Indians
   Little Traverse Bay Band of Odawa
   Grand Traverse Band of Ottawa and Chippewa Indians

VIII. REASONS FOR CONCLUDING NO SIGNIFICANT IMPACTS

Expected adverse impacts from the proposed project appear to be minor or largely temporary in nature. There is a social cost to paying for the water system upgrade and operating and maintaining the system. However, completing this upgrade results in increased reliability and minimizes risk to public health and the environment from lead contamination. This helps protect drinking water quality. It is believed that these beneficial impacts significantly outweigh the minor negative impacts.

Questions regarding this Environmental Assessment should be directed to:

Ms. Karol Patton, Acting Manager
Revolving Loan Section
Drinking Water and Municipal Assistance Division
Michigan Department of Environmental Quality
P.O. Box 30817
Lansing, Michigan 48909-8311
Telephone: 517-284-5433
E-Mail: Pattonk@michigan.gov
DWRF #1: Beidler Street WM and LSL Replacement

DWRF #2: Crowley Street WM and LSL Replacement

DWRF #3: Westwood Street WM and LSL Replacement

DWRF #4: Jefferson Street and Strong Street LSL Replacement

DWRF #5: Spring Street WM and LSL Replacement

LEGEND

Proposed DWRF Project Areas