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GOVERNOR

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



DAN EICHINGER
DIRECTOR

April 10, 2023

TO: All Interested Citizens, Organizations, and Government Agencies

SUBJECT: FINDING OF NO SIGNIFICANT IMPACT
City of St. Joseph, Berrien County
Water Main and Lead Service Line Replacements
Water Treatment Upgrades
Drinking Water State Revolving Fund (DWSRF) Project No. 7488-01

The purpose of this notice is to seek public input and comment on a preliminary decision by the Michigan Department of Environment, Great Lakes, and Energy (EGLE) 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 EGLE to evaluate all environmental implications of a proposed water supply project. EGLE 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. EGLE 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 Michigan.gov/DWSRF 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.

HOW DO I SUBMIT COMMENTS?

Any comments supporting or disagreeing with this preliminary decision should be submitted to me at EGLE, Constitution Hall, P.O. Box 30457, Lansing, Michigan 48909-7957. 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 EGLE should be brought to our attention. If you have any questions, please contact Mr. David J. Worthington, the senior project manager, at 517-554-1835, by email at Worthingtond@michigan.gov, or you may contact me. Your interest in this process and the environment is appreciated.

Sincerely,

Dan Beauchamp

Dan Beauchamp, Section Manager
Water Infrastructure Funding and Financing Section
Finance Division
517-388-3380

Attachment

**DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY
DRINKING WATER STATE REVOLVING FUND (DWSRF)
CITY OF ST. JOSEPH, BERRIEN COUNTY
WATER MAIN AND LEAD SERVICE LINE REPLACEMENT,
WATER TREATMENT PLANT UPGRADES
ENVIRONMENTAL ASSESSMENT
April 2023**

I. PROJECT IDENTIFICATION

Applicant: City of St. Joseph

Address: 700 Broad Street
St. Joseph, Michigan 49085

Authorized Representative: Mr. Tim Zebell, City Engineer

DWSRF Project Number: 7488-01

The city of St. Joseph (St. Joseph) is located in southwest Michigan's Berrien County on the shore of Lake Michigan at the mouth of the St. Joseph River. The city is bounded by the St. Joseph River and the Paw Paw River on the east side and by Lake Michigan on the west side. The St. Joseph River also flows through the northern portion of the city, creating two distinct sections. St. Joseph owns and operates a municipal water system that supplies customers in St. Joseph and the Southwest Michigan Regional Sanitary Sewer and Water Authority (Authority), which comprises St. Joseph Charter Township, Lincoln Charter Township, and Royalton Township. Water is pumped from Lake Michigan, treated at the St. Joseph Water Treatment Plant (SJWTP), and then pumped to the distribution systems owned by St. Joseph and the Authority.

St. Joseph is applying for a low interest DWSRF loan administered by the Michigan Department of Environment, Great Lakes, and Energy (EGLE) to finance the construction of water treatment upgrades and water main and lead service line replacement (LSLR) on Upton Drive (Upton) and in various districts throughout St. Joseph. St. Joseph will also be applying for a Clean Water State Revolving Fund (CWSRF) loan to replace sanitary sewers on Upton in conjunction with the water main replacement portion of the project. The details and cost estimates related to that portion of the project will be presented in a separate Environmental Assessment associated with loan number 5647-02.

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

The following projects are targeted for construction in 2023:

- Upton water main and LSLR
- SJWTP Clarifier and Architectural Improvements
- City-Wide LSLR (approximately 210)

The total project cost related to the DWSRF portion of the project is estimated to be \$13,050,000. St. Joseph will finance \$9,787,500 with a low interest 30-year DWSRF loan at 2.125 percent. In addition, St. Joseph is eligible to receive an American Rescue Plan (ARP) grant not to exceed \$3,262,500. As a result of the DWSRF project the average monthly water rates would increase by approximately \$3.82 per month (\$2.51 per month for Authority

customers) to service the debt. This is a worst-case scenario. Actual rate changes may be smaller since St. Joseph qualifies for an ARP grant.

II. PROJECT BACKGROUND

A. Existing Facilities

An inventory of water mains in the city determined that the pipe material by length is 74 percent cast iron, 25 percent ductile iron, and less than 1 percent plastic. Pipe diameters range from 4-inches to 30-inches, with the majority by length being 6-inch and 8-inch diameter. Ages of the pipe range from 14 percent by length dating from 1890-1919, 31 percent from 1920-1949, 28 percent from 1950-1979, and the remainder 1980 or newer. Old, undersized water mains are on a schedule for replacement in the city's capital improvement plan. Many of these old mains have a history of breaks and capacity issues, with corrosivity and leakage prominent.

A distribution system material inventory has been completed to replace lead water services on a set schedule for compliance with Michigan's Lead and Copper Rule. St. Joseph has approximately 3,941 water services, of which an estimated 2,353 are believed to contain lead, with another 828 services of unknown material that may contain lead or formerly contained lead.

The SJWTP was originally built in 1931 and is designed for a 16 million gallon per day (mgd) capacity. There have been three major expansions since, most recently a new low service pump station and water intake. The plant has five high service pumps outfitted with variable frequency drives. Three clarifiers provide sufficient pretreatment with primary disinfection done with gaseous chlorine.

B. Project Need

Michigan's Lead and Copper Rule places a priority on removing lead from the distribution system. To comply, St. Joseph has embarked on a campaign of water main upgrades and full-length LSLR to protect public health in conjunction with its asset management plan. This document focuses on work targeted to begin construction in 2023 to coordinate water main upgrades with already planned sewer projects to maximize efficiency. City priorities for the LSLR include areas that are part of planned road reconstruction projects; services leaking or associated with water main breaks; services testing high for lead; and services that are galvanized but previously connected to lead. Upton is one of the top priorities for 2023, as well as city-wide LSLR.

A 2017 study identified numerous capital improvement needs at the SJWTP. Clarifiers No.2 and No.3 were constructed in 1975 and are due for an upgrade to maintain reliable capacity, particularly firm capacity when one is being serviced for maintenance. Heating, ventilation, and air conditioning (HVAC) upgrades to the existing control room, lab, and office are needed. There are miscellaneous architectural improvements needed at the main building, as well as lab improvement items and an electrical upgrade for the South Low Lift Pump Station. St. Joseph will prioritize the clarifier and architectural improvements for the Fiscal Year (FY) 2023 DWSRF budget cycle.

C. Population

St. Joseph's population is approximately 7,856, according to the 2020 United States Census. The SJWTP service population is approximately 33,000 customers.

III. PROPOSED ACTION

The following distribution and treatment system alternatives were considered:

A. No Action

Under the no action scenario, the distribution system would not be improved, and lead service lines (LSLs) would remain in service. Public health would be at risk and St. Joseph would be in noncompliance with Michigan's Lead and Copper Rule. No action is unacceptable.

Not improving the treatment system could create plant upsets and degraded treated water quality. Staff would be unable to optimize the plant's operation to achieve its purpose. No action thus is deemed inappropriate to keeping the plant running smoothly.

B. Distribution System Improvements

St. Joseph has proposed the following construction to begin in 2023:

1. Upton Water Main and Water Services

The water mains in this area are old and susceptible to breakage and leaks. The Upton project consists of replacing existing 6-inch, 8-inch, 10-inch, 16-inch and 20-inch diameter water main (to be removed or abandoned in place) with approximately 2,525 LF of new 12-inch and 20-inch diameter water main from the St. Joseph River to Momany Drive. Replacement will consist of new pipe, new valves, and new hydrants in accordance with industry standards and spacing requirements, connecting to existing mains, and with new services to the customer meters. This work is planned to be combined with the city's sanitary sewer replacement project to be financed by CWSRF project number 5647-02.

2. City-Wide Lead Service Lines Replacement

Replacement of LSLs throughout the city would consist of tapping the new or existing water main with a new corporation stop and installing a new copper water service pipe up to the property line with a new curb stop valve and box. A new polyethylene or copper service pipe would be installed from the new curb stop to the water meter or 18-inches within the house or structure. Open cut, directional drilling, or pipe bursting would be used for construction depending on the site-specific configuration. Any existing lead goosenecks on the mains would be removed from the tap sites. Approximately 210 LSLs would be replaced over a two-year construction period, pending actual costs and project budget constraints.

C. Treatment System Improvements

1. Clarifier No.2 and No.3 Upgrades

Each clarifier is proposed to be retrofitted with horizontal flocculators, inclined plate settler basins, sludge removal mechanisms and automated flow split controls between the clarifiers. Capacity would be upgraded to 9 mgd each and 18 mgd total.

2. Architectural Improvements

The architectural improvements proposed in FY 2023 would be renovation of the alum and fluoride feed rooms, addition of office and conference room space, replacement of windows and handrails, wall repair and painting, roof replacement, and HVAC upgrades.

IV. DESCRIPTION OF PROPOSED PROJECT

St. Joseph intends to implement the distribution and treatment system improvements for eliminating LSLs, replacing water mains on Upton, and clarifier/architectural upgrades at the SJWTP as described in the previous section (See Figure 2 for a map of the project locations).

A. Project Cost Breakdown

Table I shows the breakdown of the estimated project cost, which totals \$13,050,000 (DWSRF eligible cost displayed only).

Table I	
Description	Estimated Cost
Upton – Water Main and LSLR	\$1,323,949
Clarifier No.2 and No.3 Upgrades	\$6,600,000
WTP Architectural Improvements	\$1,095,000
City-Wide LSLR	\$2,814,800
Subtotal	\$11,833,749
Engineering/Contingency	\$1,216,251
Total	\$13,050,000

B. Project Schedule and Implementation

St. Joseph will finance \$9,787,500 with a low 30-year DWSRF loan at 2.125 percent. In addition, St. Joseph is eligible to receive an American Rescue Plan (ARP) grant not to exceed \$3,262,500. A rate increase of approximately \$3.82 a month (\$2.51 per month for Authority customers) would be needed to service the DWSRF debt and pay for operation and maintenance. However, this is a worst-case scenario that does not account for the ARP grant St. Joseph is eligible to receive.

St. Joseph anticipates starting construction shortly after the DWSRF loan closing on August 28, 2023. Water main/LSLR construction, and WTP upgrades are expected to require approximately one year to complete, with all improvements operational by late 2024 or early 2025.

V. ENVIRONMENTAL CONSEQUENCES OF PROPOSED ACTION

A. Description of Affected Environment

Cultural Resources

In an earlier phase of the DWSRF project plan, the State Historic Preservation Officer (SHPO) determined that no historic properties would be affected by the proposed projects. Tribal Historic Preservation Officers were likewise notified about the proposed project in an earlier phase, and none expressed any specific concerns. There are no changes to the project scope or affected area that would suggest these prior conclusions would no longer be valid.

Wetlands/Floodplains/Surface Waters

The city's entire western area is a coastal zone. Sensitive features in the study area include beaches and wetlands. Vast stretches of sandy beaches form the Lake Michigan shoreline. Wetlands in the city are primarily adjacent to rivers but there are others to the north and south. Floodplain is primarily confined to the areas immediately adjacent to the St. Joseph River, Paw Paw River, and their tributaries. Some excavation and grading in the floodplain are possible for the Upton project. If needed, a floodplain permit will be obtained in conjunction with the Joint Permit Application required for the sewer portion of the project (CWSRF 5647-02). No adverse impacts on wetlands, floodplains or surface waters are anticipated.

Endangered Species

The United States Fish and Wildlife Service and Michigan Natural Features Inventory reviewed the proposed projects and determined that no threatened or endangered species, critical habitat, or special natural features would be adversely affected. Of the 8 federally listed and 7 state listed endangered/threatened species found in Berrien County, none are likely to be encountered by the project. However, any necessary tree trimming/removals will be conducted between October and March to mitigate potential harm to the Indiana and Northern long-eared bats.

Social Impacts

The proposed project will have a small cost impact to water customers. St. Joseph 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 LSLs. The creation of jobs during construction phase would be a short-term benefit.

B. Mitigation Measures

Impacts of construction activities associated with the project are considered short-term disruptions, that, for the most part, will not extend beyond the construction period. Structural and non-structural measures that avoid, eliminate, or mitigate adverse impacts to the environment have been identified. Work will be confined to designated work hours, minimized on weekends or holidays, and all equipment will be required to have proper exhaust systems and mufflers to mitigate noise impacts. Mitigation measures to minimize the negative effect of dust from construction will be employed. A soil erosion and sedimentation control permit from Berrien County will be required. 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. Tree removals are expected to be minimal.

VI. PUBLIC PARTICIPATION

A public hearing on the DWSRF project plan was held on June 13, 2022. The hearing was advertised in the *Herald Palladium* and on the city's web site. A copy of the draft plan was made available for a 30-day period at the St. Joseph City Hall, the St. Joseph Public Library, and on the city's web site, prior to the hearing. No changes were made to the project because of the hearing. After closing the hearing, the city commission passed a resolution adopting the final project plan and its selected alternatives.

VII. 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, and protects drinking water quality. It is believed that these beneficial impacts significantly outweigh the minor temporary negative impacts.

Questions regarding this Environmental Assessment should be directed to:

Mr. David J. Worthington, Senior Project Manager
Water Infrastructure Funding and Financing Section
Finance Division
Michigan Department of Environment, Great Lakes, and Energy
P.O. Box 30457
Lansing, Michigan 48909-7957
Telephone: 517-554-1835
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FY 23 Water Project Locations

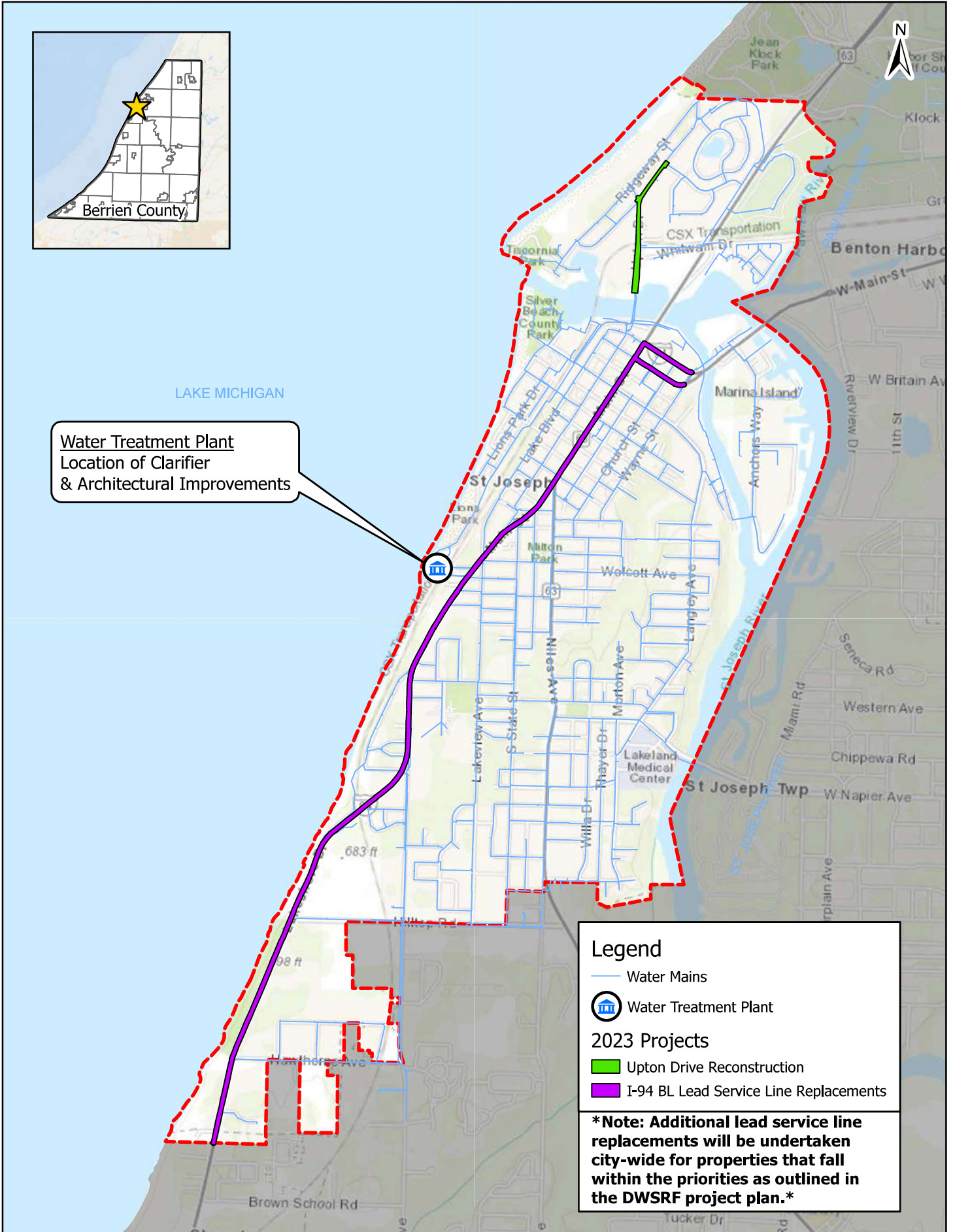


Figure 2