

**VILLAGE OF NEWBERRY
VILLAGE COUNCIL PUBLIC HEARING
MICHIGAN DRINKING WATER SRF PROJECT PLAN
6:00 P.M., TUESDAY, JUNE 21
Meeting Location: 307 E. McMillan Avenue**

- 1. CALL TO ORDER**
- 2. PLEDGE OF ALLEGIANCE**
- 3. ROLL CALL**
- 4. APPROVAL OF AGENDA**
- 5. PRESENTATION AND DISCUSSION OF DRINKING WATER STATE REVOLVING FUND (DWSRF) FINAL PROJECT PLAN FOR WATER SYSTEM IMPROVEMENTS**
 - Matt Treado, P.E., U.P. Engineers & Architects, Inc.

Items to be covered (may not take place in order)

 - a. Description of water quality problems being addressed by the project and principal alternatives that were considered
 - b. Description of the recommended alternative, including its capital costs and a cost breakdown by project components
 - c. Discussion of project financing and costs to users, including the proposed method of project financing and estimated monthly debt retirement; the proposed annual, quarterly, or monthly charge to the typical residential customer; and any special fees that will be assessed.
 - d. Description of the anticipated social and environmental impacts associated with the recommended alternative and the measures that will be taken to mitigate adverse impacts.
- 6. PUBLIC COMMENT-** Citizens must identify themselves by name and address prior to speaking. Comments are limited to 3 minutes.
- 7. CLOSING OF THE OFFICIAL PUBLIC COMMENTS PERIOD ON THE PROPOSED PROJECT & ADJOURNMENT OF PUBLIC HEARING**

**VILLAGE OF NEWBERRY
PUBLIC HEARING
Michigan Drinking Water SRF Project Plan Water System Improvements
6:00 P.M., TUESDAY, June 21, 2022
Village of Newberry Council Chambers
307 E. McMillan Avenue, Newberry, Michigan**

PLEASE TAKE NOTICE that the Village Council for the Village of Newberry will hold a public hearing on the proposed Water System Improvements SRF Project Plan for the purpose of receiving comments from interested persons.

The hearing will be held Tuesday, June 21, at 6:00 p.m. (or as soon thereafter as possible) at the Village of Newberry, 307 E. McMillan Ave, Newberry, MI.

The purpose of the proposed project is upgrades, repairs, rehabilitation, and replacement of the water system including actions needed for state and federal compliance. This includes removal and replacement of lead and galvanized water services encountered during future USDA-RD improvement projects.

Project construction will involve the removal and replacement of lead or galvanized water services encountered during the proposed USDA RD Water Main Removal and Replacement Project.

Impacts of the proposed project include improved water system quality and compliance with state and federal mandates.

The total proposed project cost is estimated at \$2,675,260.00. The estimated cost to users for the proposed project is estimated at a \$10 increase in water REU flat rate per month per user.

Copies of the plan detailing the proposed project are available for inspection at the following locations: Physical copy: Village of Newberry Office, 302 E. McMillan Avenue, Newberry, MI 49868 during regular business hours, Monday-Friday, 8:00a.m. to Noon and 1:00p.m. to 4:30p.m. or UP Engineers & Architects, Inc located at 424 S Pine Street, Ishpeming, MI 49849. Electronic copy: Village of Newberry website: www.villageofnewberry.com.

The Village Council welcomes comments regarding this topic. Any written comments received before the hearing record is closed, Tuesday, June 21, 2022, will receive responses in the final project plan. Written comments should be sent to: Allison Watkins, Village of Newberry, 302 E. McMillan Avenue, Newberry, MI 49868 or emailed to awatkins@newberry.mi.gov.



GRETCHEN WHITMER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY
MARQUETTE DISTRICT OFFICE



LIESL EICHLER CLARK
DIRECTOR

TO: Upper Peninsula Community Water Systems

FROM: Tom Flaminio, P.E., District Supervisor

DATE: June 6, 2022

SUBJECT: EGLE COVID/Federal Infrastructure Grant Funding

As you are aware, EGLE has received significant federal money from COVID relief the American Rescue Plan Act, (ARPA) and the Infrastructure Investment and Jobs Act (IIJA). EGLE Drinking Water received \$1.1 billion. Attached is a fact sheet summarizing the funding. The funds will be distributed through the Drinking Water Revolving Fund (DWRf) program since it has the administration in-place to distribute grants.

The DWRf Intent to Apply Form (ITA) will be used to access this new funding, which will be provided as loans, loan forgiveness, or grants. If you submitted an ITA by January 31, 2022, for 2023 DWRf projects, this ITA also serves as an application form for the new federal funding, provided you are completing the required steps in the DWRf process (such as completing a Project Plan). Projects for 2023 using ARPA/IIJA funds will be selected in October 2022 based on the existing ITAs, though some projects may be selected in July 2022.

The ITA application deadline for 2024 DWRf projects and 2024 ARPA/IIJA funded projects is **November 1, 2022**. If you did not submit an ITA in January 2022 or did but did not proceed with it, then you have until November 1, 2022, to submit one.

If you need more information, please contact your EGLE District Engineer:

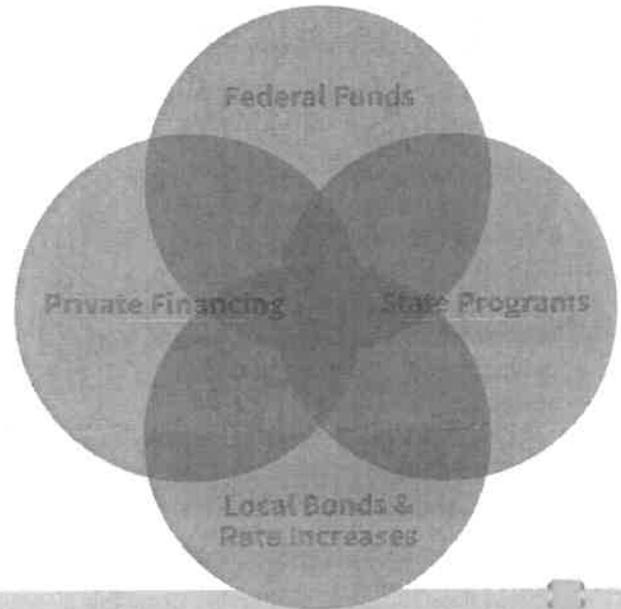
- Amy Douville, 906-236-4277, DouvilleA1@Michigan.gov, District 82, Eastern U.P.
- Mike Westra, 906-869-8823, WestraM@Michigan.gov, District 81, Western U.P.
- Natalie Kentner, 906-202-4378, KentnerN@Michigan.gov, District 83, small Type I water systems (apartment complexes, mobile home parks).

Thank you.

TF:cw

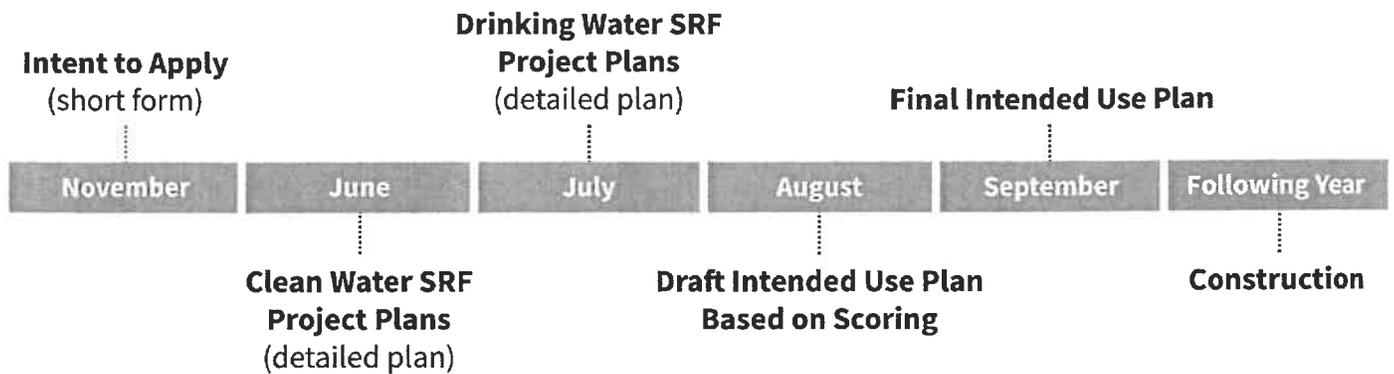
CLOSING THE GAP

How do we close the infrastructure gap? The key is partnerships at multiple levels. The State Revolving Fund plays an important role, but it isn't intended to be the only option. Federal programs, including those provided by the United States Department of Agriculture Rural Development or portions of the new federal infrastructure funds, can provide assistance. Additionally, local units of government can bond or move forward with private financing through user fees to support the needs of the community.



STATE REVOLVING FUND OVERVIEW

Michigan has two State Revolving Funds: Drinking Water and Clean Water. Both require a 20% state match component. The Drinking Water Fund receives \$25-\$30 million annually in federal funds, and the program can support up to \$200 million in projects. The Clean Water Fund receives \$65-\$70 million annually, and the program can support up to \$800 million in projects annually. Loans provide some principal forgiveness options, and the selection process between the funds is similar.



TOTAL FINANCING PROVIDED

More than \$7 billion has been allocated since 1988 for 1,100 projects under the Revolving Funds, an average of \$205 million spread among 32 projects per year.

DRINKING WATER STATE REVOLVING FUND

\$1.5 billion and 345 projects financed since 1998

- Intake Structures
- Pumping Stations
- Storage Tanks
- Treatment Plants
- Distribution System Improvements (main pipelines from plant to service lines)
- Water Service Lines (replacement of lead and galvanized lines leading to homes)
- Municipal Wells

MI CLEAN WATER

\$191.4 million and 195 projects funded since 2021

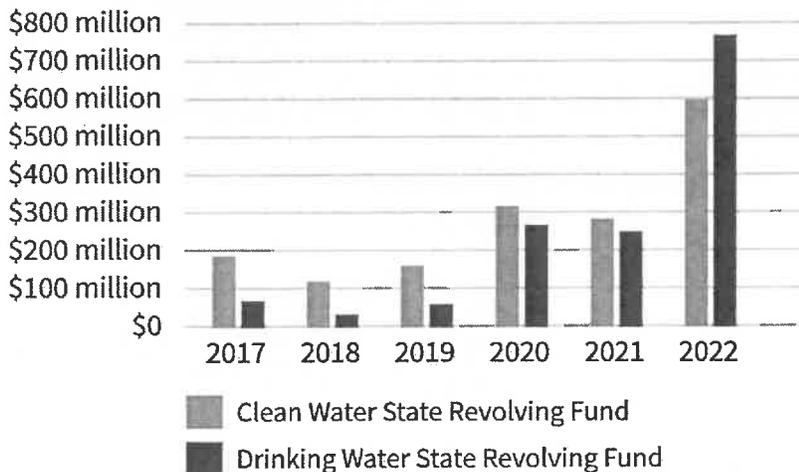
- Asset Management (awarded \$31.4 million for 94 projects)
- Consolidation and Contamination Risk Reduction (awarded \$20.9 million for 9 projects)
- Affordability and Planning (awarded \$1.9 million for 27 projects)
- Drinking Water Infrastructure (awarded \$35 million for 28 projects)
- Lead Service Line Replacements (awarded \$102.2 million for 37 projects)

CLEAN WATER STATE REVOLVING FUND*

\$5.4 billion and 642 projects financed since 1988

- Elimination of Combined Sewer Overflows
- Wastewater Treatment Systems
- Collection Systems
- Major Sewer Rehabilitation
- Pump Stations
- Nonpoint Source Projects
- Stormwater Treatment

**In addition, 597 projects totaling \$405.2 million were funded through the Stormwater, Asset Management, and Wastewater (SAW) program in support of clean water efforts.*

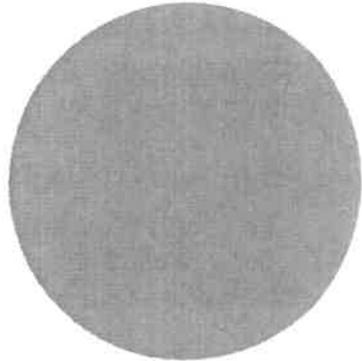


Requested amount is 13 times more than average projects financed in the past

More than \$2.8 billion for 250 projects based on initial intent to apply submissions for 2023

IMPLEMENTATION OF PA 53 OF 2022 (SB 565)

Public Act 53, signed by Governor Gretchen Whitmer in April of 2022, seeks to reduce the financial burden to communities and address infrastructure needs to protect public health and the environment. Act 53 provides \$4.7 billion of infrastructure funding, including \$1.9 billion to be administered by EGLE. Funding is included from three separate funds: American Rescue Plan Act, Infrastructure Investment and Jobs Act, and General Fund. EGLE’s implementation of Act 53 will focus on the following guiding principles:



Addressing environmental and public health priorities	Decreasing the cost of treating, collecting, and distributing water	Prioritizing funding to communities implementing asset management plans
Prioritizing funding to disadvantaged communities	Facilitating economic growth in communities while fostering sustainability and resiliency	Supporting the “dig once” philosophy
Coordinating with federal, state, and local partners		

NEW FUNDING

WILL
<ul style="list-style-type: none"> • Support needed projects • Provide grant and loan funds with the majority being grants • Build on the success of the SRF programs

WILL NOT
<ul style="list-style-type: none"> • Fund 100% of Statewide water infrastructure needs • Violate federal and state statute • Decrease current water rates

WHAT FUNDS CAN COMMUNITIES APPLY FOR WITHIN PA 53?

Infrastructure Investment and Jobs Act

- \$500 million loans and loan forgiveness
- Submit project plans in accordance with SRF process

American Rescue Plan Act

- \$1 billion grant funding
 - \$600 million drinking water, \$400 million clean water
- Submit project plans in accordance with SRF process

One intent to apply form triggers conversation for multiple sources of funding:
State Revolving Fund Traditional
State Revolving Fund Infrastructure
Investment and Jobs Act
American Rescue Plan

FUNDING PROCESS



Earmark grants issued by July 2022



Communities who applied for 2023 SRF cycle are eligible for IIJA and ARP funding (funding determinations will be made by October 2022)



Communities who have not applied for 2023 SRF cycle can apply by November 2022 to be eligible for 2024 funding (funding determinations will be made by October 2023)

SRF Project Scoring Criteria

- Defined in statute, Part 54, Safe Drinking Water Assistance, of Public Act 451 of 1994, as amended, and in Administrative Rules for Clean Water

Calculation of Various Factors

- Severity
- Compliance
- Population
- Disadvantaged
- Type of Project

SRF Disadvantaged Communities

- Defined in statute, Part 53, Clean Water Assistance, and Part 54, Safe Drinking Water Assistance, of Public Act 451 of 1994, as amended

Calculation of Various Factors

- Median Household Income
- Operation and Maintenance Costs
- System Debt

CONTACT INFORMATION

Visit EGLE's Grants and Financing webpage to learn about funding opportunities for your community: [Grants and Financing \(michigan.gov\)](https://www.michigan.gov/grants). For general information regarding funding opportunities, contact Water Infrastructure Financing Section staff at 5 17-284-5433 or email: EGLE-WIFS@michigan.gov. **Note: Communities that have already applied for funding have been assigned an EGLE project manager and an engineer to assist them through the process.**

Michigan.gov/EGLE | 800-662-9278

The Michigan Department of Environment, Great Lakes, and Energy does not discriminate on the basis of race, sex, religion, age, national origin, color, marital status, disability, political beliefs, height, weight, genetic information, or sexual orientation in the administration of any of its programs or activities, and prohibits intimidation and retaliation, as required by applicable laws and regulations.

To request this material in an alternative format, contact EGLE-Assist@Michigan.gov or call 800-662-9278.

05/2022

DRINKING WATER REVOLVING FUND
PROJECT PLAN FOR WATER SERVICE REPLACEMENT PROJECT
NEWBERRY, MICHIGAN
May, 2022

UP Engineers & Architects

424 South Pine Street

Ishpeming, MI 49849

Project No: N24-

PROJECT BACKGROUND

Delineation of Study Area

The study area includes the entire Village of Newberry Water System. The Village is supplied by three different wells located around the village.

The Newberry Water System has one 100,000 gallon storage tank which is shown on the system map, included in Appendix C to this report, and discussed further in the existing facilities section of this project plan.

The proposed water service replacement project will take place along with a USDA funded project.

Appendix B, Figure 1 shows a delineation of the project location within the Village of Newberry.

Land Use in Study Area

The current land use for the Village of Newberry is shown in the land use map included in Appendix D to this report.

The existing land use within the proposed project area is zoned as central business district, community commercial, industrial, and residential.

POPULATION DATA

Population data for Newberry is in the tables below:

Table 1. Village of Newberry - Historic Population

Name	1970	1980	1990	2000	2010	2020
Village of Newberry	2,334	2,112	1,837	2,086	1,519	1,280

Table 2. Village of Newberry - Projected Population

	Existing Population	+5 years	+10 years	+20 years
Village of Newberry	1,280	1,280	1,280	1,280

Historical population data and projections for the Village were obtained from the U.S. Census Bureau.

The Village of Newberry has seen little population change over time. There is no reason to think there will be any significant population changes in the service area. Newberry's water demand will likely not change significantly over time either.

WATER DEMAND

The Newberry system services one industrial user and a few large commercial users, but the system services mostly residential users. With little projected population growth there is no reason to believe that there will be an increase in water demand.

EXISTING FACILITIES

The Village's water system was originally constructed in 1913 with major upgrades around 2015.

A. *The condition of source facilities (e.g., wells, intakes, cribs, etc.).*

Water is supplied to Newberry by three wells. Well house #4 is located northeast of the Wisconsin Central railroad tracks in a concrete masonry well house. The well is operated by a 50 HP pump. The pump motor was replaced in 2004 leaving the well house in good working condition. Wells #6 and #7 are located southwest of the village and were installed in 2004. The wells are located outside of a well house with the controls inside. Both wells are operated by 75 HP motors and both wells are in excellent working condition. Wells #1, 2, 3, and 5 are no longer in use and are disconnected from the system.

B. *The method of water treatment, as well as the location and physical condition of facilities, including years in service of major components.*

Current Treatment Process

C. *An evaluation of storage tank and pump station capacities, including the adequacy and reliability of pump stations in maintaining system integrity.*

The System has one 100,000 gallon elevated steel storage tank. The tank is located by the village offices and garage off of Harrie Street. The tank was constructed in 1937 and has undergone maintenance on the interior and exterior most recently in 2012. The tank is undersized. Newberry's average daily usage is 250,000 gallons and the system should be able to store equal to one day's use of water. There are no pump stations in use by the system.

D. *The condition of service lines.*

Newberry has many old watermains that likely supply water to customers through galvanized or lead service lines. Galvanized services are not approved by EGLE and will have to be replaced where they are present. Some of the newer water services are copper or PVC, but the number of these services is unknown.

E. *The type of conveyance system and the condition of any existing transmission and distribution mains.*

The Newberry water system was originally constructed between 1913 and 1930 and most of the pipe installed was sand cast iron pipe with leaded joints. The system currently is comprised of 76,887 feet of watermain. A lot of this pipe has been upgraded since then, but some of it is still the original sandcast iron and some of it is undersized. There is a high presence of iron bacteria in these old mains that due to the sand cast pipes not having a cement lining. This makes the old, deteriorated watermain is susceptible to breaks, leaky joints, and provide an environment

for undesirable iron bacteria growth. The old main in the system experiences a large amount of leakage

F. **The method of residuals handling and disposal, if applicable.**

Not Applicable

G. **The Condition of Water Meters**

The Village meters all users in the system and the meters are in working condition.

H. **A discussion of operation and maintenance including any problems, as well as an evaluation of opportunities to maximize operation and maintenance to improve drinking water quality.**

The Newberry water system currently has a high presence of iron bacteria. This is caused by old sandcast iron pipe materials in the system and also inadequate flushing velocities. Also the system experiences a large amount of leakage. Replacing the existing distribution system with new ductile iron watermain would improve these issues by removing the old and undersized mains. This would reduce leakage, limit areas where iron bacteria can grow, and would include replacing inoperable gate valves and hydrants. Increasing the main size and replacing inoperable valves and hydrants would help the village adequately flush the main during maintenance of the system.

I. *The design capacity of the waterworks system and existing uses of available capacity.*
Design Capacity Issues

J. Evaluation of the System's climate Resiliency

Summary of Project Need

The Village of Newberry likely has many water services that are made out of galvanized or lead materials and are not in compliance with EGLE and EPA standards. It will be efficient and cost effective to replace them along with upcoming watermain replacement projects.

Compliance with the drinking water standards defined in the Administrative Rules for Act 399.

A. Any acute violations of a Maximum Contaminant Level or surface water treatment technique.
None

B. Any non-acute violations of a Maximum Contaminant Level or surface water treatment technique.
None

C. **An evaluation of the existing treatment facility as conducted and/or reviewed by EGLE or other appropriate regulatory agency. The evaluation should compare the existing treatment facility to the requirements of Act 399.**
None

D. **A description of any waterborne disease outbreaks, their magnitude, and their apparent causes.**
None

- E. A Reliability Study/ Master Plan which substantiates water supply needs and outlines deficiencies that warrant correction.
Attached in Appendix A of this project plan is the Reliability Study/ Master Plan. Performed by Stantec in 2013.

Orders or Enforcement Actions

Please provide a copy of any court or enforcement order against the water supplier, including written enforcement actions, such as a Notice of Violation, Consent Agreement, or Department Order to correct deficiencies and achieve compliance with Act 399.

No official documentation from the EGLE in regards to these items.

Drinking Water Quality Problems

- A. Drinking water quality problems being experienced by the water supplier should be identified. The aesthetic quality of the drinking water supply should also be discussed.

The system has high amounts of iron bacteria in areas where there are old, sandcast iron water mains. The water system also contains many galvanized or lead water services that are not approved for use by EGLE.

- B. Where the community is proposing to provide new service to areas currently served by individual wells, the project plan must document the nature, number and location of wells that are malfunctioning based on the DEQ, and/or local health department records, and/or sanitary surveys. The site characteristics (e.g., groundwater levels, soil permeability, geology) contributing to the problems must be documented. The system failures and limiting site characteristics must be plotted on a map along with existing habitation.

No proposed expansion of water main into new areas to serve customers that currently operate private wells.

- C. Where surface water or groundwater contamination is of concern, point and nonpoint sources of pollution should be examined. For groundwater contamination, aquifer condition and type should be identified. Where surface water contamination is of concern, describe and evaluate the impact of these problems on the quality of drinking water.

PROJECTED NEED FOR THE NEXT 20 YEARS

The proposed project, in conjunction with the USDA RD Water Improvements Project, will address a significant portion of the projected 20-year capital improvements. Work associated with the lead/copper rules requirements will be added to the Capital Improvements Plan once the Final DSMI Report is completed and we have an accurate projection on the financial burden this will place on the water system.

EXPLORATORY WELL INVESTIGATIONS/WELL SITE SELECTION/TEST WELL DRILLING PROCEDURES

Not Applicable

ANALYSIS OF ALTERNATIVES

Identification of Potential Alternatives

No-Action

With a 'No-Action' alternative, the removal and replacement of deficient lead or galvanized water services will not occur along with proposed water projects and will have to be done at a later date after the project is completed and will lead to higher costs for the village including redoing surface restoration. No-Action is not an approved by EGLE regulatory requirements associated with the current Lead and Copper Rules.

Replacement of Old Deficient Service Lines

This recommended proposed alternative, as outline in the project plan, includes the placement of new type K copper water services where lead or galvanized services are present.

Optimum Performance of Existing Facilities

The optimal performance of the Village of Newberry water system would require upgrades outlined in the proposed project plan. By performing the upgrades outlined in this plan, the reliability and performance of the system will be increased. To continue to strive towards optimum performance of the system, the Village will continue to pursue funding options for all of the items outlined in the 20-year improvements plan.

Regional Alternatives

There are no nearby water systems to tie into, so there are no regional alternatives.

ANALYSIS OF PRINCIPLE ALTERNATIVES

The only alternative presented is the "No-Action" alternative which would cause the water services to be replaced at a later date to comply with EGLE and EPA standards. This would lead to higher restoration costs for the city.

The recommended option is the replacement of deficient service lines where they are discovered within the upcoming watermain replacement project areas.

The Engineer's Opinion of Cost is:

Item #	Description	Units	Quantity	Unit Price	Total
W1	Mobilization	LS	1	\$150,000	\$150,000
W2	Curb Stop	EA	350	\$300	\$105,000
W3	Corp Stop	EA	350	\$300	\$105,000
W4	1" Water Service	LFT	17,500	\$60	\$1,050,000
W5	Connect to Ex Water Service	EA	400	\$200	\$80,000
W6	HMA Restoration	SYD	17,500	\$30	\$525,000
W7	Grass Restoration	SYD	17,500	\$7	\$122,500
W8	Misc	LS	1	\$100,000	\$100,000
				Construction Subtotal	\$2,237,500
				Engineering (15%)	\$335,625.00
				Admin	\$102,135
				Project Total Cost	\$2,675,260

Cost Effective Analysis

A. Present Worth – Proposed Option of Distribution Upgrades

i. No Action

Not Applicable – Required by Lead/Copper Rule Requirements to complete this portion of the project

ii. Proposed Project – Open Cut Installation of Ductile Iron Watermain

If the RD Project proceeds, this project is mandatory.

iii. Alternative – Directional Bore Installation of HDPE Watermain

Mobilization costs associated with directionally boring each individual service is cost prohibitive due to the open cut method taking place for the water main at the same time. This is not a cost-effective approach.

B. Discount Rate

1.2%

C. Salvage Value

Not Applicable. There is no salvage value for buried water services in either option.

D. Escalation

Leakage could increase slightly over time for the deficient water services, but they will need to be replaced in the near future anyway to comply with EGLE and EPA standards.

- E. Interest During Construction
- F. CMAR, PDB, or FPDB Delivery Method

Environmental Evaluation

A. Cultural Resources

No anticipated cultural impacts since the project is removing and replacing/repairing existing infrastructure. If it appears that cultural resources are being impacted, work would be immediately ceased, and the State would be contacted.

B. The Natural Environment

The environmental impacts of the proposed project are limited due to the locations of the water service improvements. The project will be taking place just outside of Village right-of-way.

Climate

The Village of Newberry is located in the Eastern Upper Peninsula. It has a temperate climate with major influence from Lake Superior. Recent extreme winters have played a significant role in the overall impact that weather plays on water system infrastructure within the UP. The winter of 2013 was the worst winter in recent memory with frost depths reaching down to over 9 feet.

Air Quality

N/A – no measurable impact by the proposed project

Coastal Zones

Final project to be reviewed by EGLE during the design phase of the project. Correspondence included in Attachment B.

Major Surface Waters

There are no major bodies of water in the village of Newberry.

Wild and Scenic Rivers

According to the “Clean Water State Revolving Fund Project Plan Preparation Guidance” and the Michigan DNR website, there are no wild and scenic rivers located within the project area. Review letter response included in Attachment B.

Floodplains

The proposed project will include no surface improvements beyond the removal and replacement of valve boxes and fire hydrants. Thus the project will have no impact on the floodplain.

Wetlands

The proposed project is not expected to impact any wetlands that are located within the vicinity of the proposed project.

Topography

See Appendix B for study area topographic map.

Geology and Soils

Geology and Soils maps included in Appendix B.

Protected Plans and Animals

None

A permit would be submitted to the EGLE for review during the design phase of the project.

National Natural Landmarks

None

Unique Features

None

MITIGATION

Minor mitigation is expected to handle construction related environmental issues.

Mitigation Short-Term Impacts

Short-term impacts shall be addressed with all necessary construction permits. Soil Erosion and Sedimentation Control permit shall be required to be obtained by the contractor prior to construction. Minor inconveniences will exist for the residential population located within the project area. The contractor shall be required to accommodate local traffic to the best of their ability during the construction process.

Mitigation Long-Term Impacts

Long-term impacts from the proposed project include increased reliability and water quality to the project area. A Reduction in loss due to leakage will result in reduced water treatment and pumping costs.

Implementability and Public Participation

Public Participation into the selection of an alternative is a key aspect of the Drinking Water Revolving Fund Process. The two possible options, water main replacement and “No-Action” would be provided to the public for review during the public information meeting.

Technical and Other consideration

Option 1 – Upgrades to the existing water services would take place along with the upcoming watermain replacement projects.

Option 2 – “No-Action”

This option would result in the water services being replaced at a later date.

Residuals

A. Industrial/Commercial/Institutional

There is one industrial user and a few other large-scale users on the system.

B. Growth Capacity

Not Applicable

Contamination

There are a few locations of known contamination. Along the downtown corridor there are four contamination sites near the northern end of town. There is also one closed, leaking underground storage tank in the western part of town.

NEW/INCREASED WATER WITHDRAWALS

No projected new water users or changes in water demand.

SELECTED ALTERNATIVE

Description

The selected alternative is the project outlined in the project plan.

Relevant Design Parameters

- A. **Major process features.**
Removal and replacement of lead and galvanized water services where they are discovered during upcoming water projects in the Village of Newberry.
- B. **Unit processes and sizes as related to service area needs.**
Areas where upcoming water projects are proposed are shown in the project map.
- C. **Schematic flow diagram.**
Not Applicable for a water service replacement project
- D. **Design criteria (e.g., process loading, existing and projected design flows, and other aspects of the preliminary basis of design).** Per 2014 10-States Standards and Michigan EGLE regulations.
- E. **Residuals management such as haul routes, times, and frequencies.**

Haul routes, construction means and methods are to be determined by the contractor. The engineer shall be responsible for oversight to ensure that they follow permit requirements issued by the Luce County Road Commission

- F. **Wells and intakes.**
Not Applicable. No Improvements planned for wells or intakes
- G. **Water distribution system. Provide details including pipe lengths and sizes, street names, and proposed routes.** The route details are not expected to be known at a design level of specificity, but citizens should be able to read the description of the selected alternative and know if major construction is being considered for their street.
See Attached Project Map, Appendix C.
- H. **Pump station types and sizes, including provisions for standby power, telemetry, etc.**
Not Applicable. No Improvements Planned for Pump Stations
- I. **Storage facilities.**
Not Applicable. No Improvements planned for storage facilities
- J. **Schedule for design and construction.**
- July 1 2022: Submitted Project Plan
 - October 2022: Receive funding for water service replacements
 - October 2022: Begin design engineering process
 - January 2023: Part 1 of Application Submitted
 - February 2023: Part 2 of Application Submitted
 - March 2023: Bid Advertisement
 - April 2023: Bid Opening
 - June 2023: Loan Closing
 - October 2023: Construction complete, project close out

Hydrogeological Analysis

Finalization of Well Design

Not Applicable

Schedule for Design and Construction

- July 1 2022: Submitted Project Plan
- October 2022: Receive funding for water service replacements
- October 2022: Begin design engineering process
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Engineers Opinion of Cost

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W5	Connect to Ex Water Service	EA	400	\$200	\$80,000
W6	HMA Restoration	SYD	17,500	\$30	\$525,000
W7	Grass Restoration	SYD	17,500	\$7	\$122,500
W8	Misc	LS	1	\$100,000	\$100,000
				Construction Subtotal	\$2,237,500
				Engineering (15%)	\$335,625.00
				Admin	\$102,135
				Project Total Cost	\$2,675,260

User Costs

- Engineers Opinion of Cost*
\$2,675,260
- Estimated operation and maintenance costs, including replacement of equipment which may be necessary to ensure **that** the waterworks function properly throughout its useful life.*

See **Appendix E** for a summary of Water Budget Expenses including O & M costs. 2021 operation and maintenance costs were \$318,461.23
- Other costs to be incurred by the system users.*
Existing Debt Service ~~Interest~~ Payments (2021 Budget)

Total Debt Service ~~Interest~~ for 2021 was \$367,565.78
- An analysis of the impacts of the annual user costs for water supply on the system users.*
848 Users consuming a total of 1,192 Residential Equivalent Units. The proposed project impact is calculated using the 20 year, 2.5% DWRP interest rate and term. The annual payment costs associated with this loan amount to \$12.00 per REU per month.
- A demonstration of the water supplier’s ability to repay the incurred debt, including discussion on how the project costs will be financed.*
Debt Service fee shall be increased to pay for the new debt incurred by the proposed project. The debt service fee will increase by \$12.00 per REU per month.

Disadvantaged Community

See Attachment A Disadvantaged Community Worksheet.

Ability to Implemented Selected Alternative

The Village of Newberry is the sole municipality involved in the proposed project plan. A Support Resolution will be adopted by the Board to accept the project. Resolution to be included in Attachment.

Environmental Evaluation

A. Cultural Resources

No anticipated cultural impacts since the project is removing and replacing/repairing existing infrastructure. If it appears that cultural resources are being impacted, work would be immediately ceased, and the State would be contacted.

B. The Natural Environment

The environmental impacts of the proposed project are limited due to the locations of the lift station improvements. The project will be taking place within Township right-of-way.

Climate

The Village of Newberry is located in the Eastern Upper Peninsula. It experiences a temperate climate with major influence from Lake Superior. Recent extreme winters have played a significant role in the overall impact that weather plays on water system infrastructure within the UP.

Air Quality

N/A – no measurable impact by the proposed project

Coastal Zones

Final project to be reviewed by EGLE during the design phase of the project. Correspondence included in Attachment B.

Major Surface Waters

No major waters nearby.

Wild and Scenic Rivers

According to the “Clean Water State Revolving Fund Project Plan Preparation Guidance” and the Michigan DNR website, there are no wild and scenic rivers located within the project area. Review letter response included in Attachment B.

Floodplains

The proposed project will include no surface improvements beyond the removal and replacement of sanitary manholes. Thus the project will have no impact on the floodplain.

Wetlands

The proposed project is not expected to impact any wetlands that are located within the vicinity of the proposed project. However, a letter was sent by UPEA to the EGLE for review and approval of the proposed project without any need for a wetland permit. An onsite review will need to take place between UPEA and the EGLE concerning the project locations to determine no impact to the adjacent wetlands, as outline in the EGLE response. Response letter included in Attachment B.

Topography

See Appendix B for study area topographic map.

Geology and Soils

Geology and Soils maps included in Appendix B.

Protected Plans and Animals

None

A permit would be submitted to the EGLE for review during the design phase of the project.

National Natural Landmarks

None

Unique Features

None

Agricultural Land

No Agricultural land is present in the Village of Newberry.

Social/Economic Impact

Not Applicable

Construction/Operational Impact

The contractor will be responsible to accommodate the needs of the residence within the project area during construction. Once the upgrades are completed, the Township will be able to operate its system with a higher level of reliability.

Indirect Impacts

- A. Changes in the rate, density, or type of development, including residential, commercial, industrial, and the associated transportation changes.
There are no anticipated changes to the rate, density, or type of development as this project will only address existing service lines.
- B. Changes in land use (e.g., open space, floodplains, prime agricultural land, and coastal zones).
None

- C. **Changes in air or water quality stemming from primary and secondary development.**
Minor impact to air quality during construction due to construction activities. This impact would include necessary dust control measures.
- D. **Changes to the natural setting or sensitive ecosystems, or jeopardy to endangered species resulting from secondary growth.**
None
- E. **Impacts on cultural, human, social, and economic resources.**
None
- F. **Resource consumption over the useful life of the facility and the generation of wastes.**
None
- G. **Aesthetic and other impacts.**
There will be surface restoration in areas disturbed by the project.

MITIGATION

Minor mitigation is expected to handle construction related environmental issues.

Mitigation Short-Term Impacts

Short-term impacts shall be addressed with all necessary construction permits. Soil Erosion and Sedimentation Control permit shall be required to be obtained by the contractor prior to construction. Minor inconveniences will exist for the residential population located within the project area. The contractor shall be required to accommodate local traffic to the best of their ability during the construction process.

Mitigation Long-Term Impacts

Long-term impacts from the proposed project include increased reliability and water quality to the project area. Replacing the services with the upcoming watermain project will prevent these areas from being excavated in the future.

PUBLIC PARTICIPATION

Public Meetings on Proposed Alternatives

Due to the lack of feasible or competitive alternatives to this project, it is the opinion of UP Engineers & Architects and the Village of Newberry that additional meetings above and beyond Village Board Meetings would be an unnecessary requirement of the decision making process.

The Formal Public Hearing

Scheduled to take place in June, 2022 to provide sufficient time to receive and react to public feedback.