

# **Lead Service Line Replacement**

---

**City of Buchanan FY 2027  
Drinking Water Project Planning Document**

**DWSRF Project No. XXXX-XX**

Prepared for  
**City of Buchanan**

April 2026

2240749

# Contents

---

<b>1</b>	<b>INTRODUCTION</b>	<b>1</b>
<b>2</b>	<b>BACKGROUND</b>	<b>1</b>
2.1	Study Area	1
2.2	Existing Environmental Evaluation	2
2.3	Existing System	5
2.4	Summary of Project Needs	6
2.5	Projected Needs for the Next 20 Years	6
<b>3</b>	<b>ANALYSIS OF ALTERNATIVES</b>	<b>6</b>
3.1	Lead Service Line Replacements	6
<b>4</b>	<b>SELECTED ALTERNATIVE</b>	<b>7</b>
4.1	Lead Service Line Replacements	7
<b>5</b>	<b>Environmental and Public Health Impacts</b>	<b>9</b>
5.1	Direct, Indirect, and Cumulative Impacts	9
5.2	Indirect Impacts	10
5.3	Other impacts	10
<b>6</b>	<b>MITIGATION</b>	<b>10</b>
6.1	Short Term Construction Related Mitigation	10
<b>7</b>	<b>Public Participation</b>	<b>11</b>
7.1	11	
7.2	11	
7.3	11	

---

## **Tables**

Table 1	Historical and Projected Population
Table 2	Water System Demands
Table 3	Annual Water Use
Table 4	Residential Equivalent Units (REUs)
Table 5	Estimated Monthly Payment per REU

## **Figures**

Figure 1	Map of Existing Water System
Figure 2	Map of Lead Service Line Replacement Locations

## **Appendices**

Appendix A	Wetlands, Lakes, and Streams Map
Appendix B	FEMA Mapped Floodplains
Appendix C	Soils Map
Appendix D	Contaminated Sites
Appendix E	US Fish and Wildlife Species Survey
Appendix F	Project Cost Estimates
Appendix G	Present Worth Analysis
Appendix H	Public Meeting Advertisement
Appendix I	Public Meeting Summary
Appendix J	Resolution of Project Planning Document Approval
Appendix K	Overburdened Worksheet
Appendix L	Scoring Worksheet

# 1 INTRODUCTION

This Project Planning Document (PPD) is prepared on behalf of the City of Buchanan, Berrien County, Michigan, for the purpose of obtaining a Drinking Water State Revolving Fund (DWSRF) loan from the State of Michigan for the construction of improvements to City of Buchanan’s water system. The applicant is City of Buchanan (hereinafter the “City”).

The City occupies approximately 2.57 square miles with the St. Joseph River forming its northeastern limits. It is located west of US-31, approximately 50 miles southwest of the City of Kalamazoo and approximately 12 miles northwest of South Bend, Indiana. It is located in the southeastern portion of Berrien County, bordered to the west by Buchanan Township and to the east by Niles Township.

The City has a population of approximately 4,300 people, and an estimated total service population of 4,700. The City water system pumps and treats groundwater from four wells, supplying two elevated towers and the water distribution system in the City limits. The City water system also provides limited service to the adjacent Township of Niles Township and Buchanan Township.

The City has been in the process of identifying and replacing lead or potential lead services in the City of Buchanan’s water system for the past several years. Pursuant to current State of Michigan requirements, the City has implemented a program to replace lead lines in their water system.

By completing a Water System Reliability Study and an Asset Management Plan, the City has prioritized the following water system improvements for completion in the next five years.

- a. Lead Service Line Replacements (FY2027-2031)

The purpose of the Project Planning Document (PPD) is to determine the needs for the 20-year period, conduct alternatives analysis, estimate project costs, conduct environmental evaluations, and include the public in the planning process for replacement of lead service lines.

## 2 BACKGROUND

### 2.1 Study Area

The study area comprises the water system distribution area, including areas within the City limits as well areas in the neighboring Township. The study area and complete service area are

shown in **Figure 1**. All existing water services, suspected to potentially contain lead, must be replaced in the project area. The City has identified 860 water services that require replacement, and **Figure 2** is a map of the property locations where services are proposed to be replaced.

The City provides retail service to neighboring municipalities of Buchanan Township and Niles Township. The historic on projected population is shown in **Table 1**.

## **2.2 Existing Environmental Evaluation**

### **2.2.1 Cultural and Historic Resources**

If the project is determined by EGLE to be an equivalency project, the City will contact all the local tribal organizations and confirm there are no known cultural resources which may be impacted within the project areas. Additionally, the City will prepare and submit a section 106 application to the Michigan State Historic Preservation Office (SHPO). A historical evaluation will be performed by Orbis Environmental Consulting who is a State of Michigan approved consultant for this work as well. It is not anticipated that the construction will impact cultural and historic resources because the project involves the replacement of existing water services in previously developed areas.

### **2.2.2 Air Quality**

The air quality of Berrien County is generally rated as good by the U. S. Environmental Protection Agency (EPA). It is not anticipated that the proposed project would facilitate the growth of residential or commercial development because the project is focused on replacing existing water service lines within the existing infrastructure. Therefore, the projects would not negatively impact air quality in the project area.

### **2.2.3 Wetlands**

There are wetlands that may exist within the project area (see map in **Appendix A**). However, wetlands are not anticipated to be a significant issue because the construction includes the replacement of existing water services in previously developed areas. If necessary, water services can be constructed using trenchless installation methods to mitigate or eliminate impacts to wetland areas.

#### **2.2.4 Great Lakes Shorelands, Coastal Zones, and Coastal Management Areas**

The City is located more than 13 miles from the Great Lakes shoreline. None of the projects identified in the PPD will affect great lakes shorelands, coastal zones, and coastal management areas.

#### **2.2.5 Floodplains**

McCoy Creek and the St. Joseph River have a defined flood zone, floodway, and base flood elevations as determined by the Federal Emergency Management Agency. The approximate floodplain boundaries are included in **Appendix B**. No service replacements are within McCoy Creek or St. Joseph River floodplain areas and no cut or fill activities are proposed so there will be no impact to the floodplain.

#### **2.2.6 Natural or Wild and Scenic Rivers**

No designated wild, scenic, or natural rivers or tributaries exist within the study area. There is no project work which will affect these areas.

#### **2.2.7 Major Surface Waters**

There is no project work which will affect either McCoy Creek or the St. Joseph River.

#### **2.2.8 Topography**

There are no proposed topographical changes in the project.

#### **2.2.9 Geology**

There are no proposed changes to local geology nor is any dewatering anticipated.

#### **2.2.10 Soil Types**

A soil map for the study area was generated from the Natural Resources Conservation Service's Web Soil Survey, and is included in **Appendix C**. The predominant soil type is riddles loam and Crosier silt loam. No import or export of native material is anticipated.

#### **2.2.11 Contaminated Sites**

A screening was conducted for known or suspected sources of contamination using available tools, displayed in **Appendix D**. Based on the screening, there are several potential sources

of contamination within the City limits, focused on the downtown area. A cursory review of proposed project areas indicates the known sites do not appear to represent any issues as no material will be removed from the sites.

### **2.2.12 Agricultural Resources**

All of the proposed water services will be placed within existing road right-of-way and will not impact on any adjacent farmlands.

### **2.2.13 Fauna and Flora**

The proposed project work is within and directly adjacent to existing road right-of-way and will not impact fauna or flora within the project areas.

Federally threatened and endangered (T&E) species in the project area were identified utilizing the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) online system, included in **Appendix E**. The IPaC system identified 10 possible species. These include the Eastern Massasauga Rattlesnake, Copperbelly Water Snake, northern long-eared bat, Indiana Bat, Tricolored Bat, Rufe Red Knot, Whooping Crane, Mitchell's Satyr Butterfly Monarch Butterfly, and Pitcher's Thistle. No Critical Habitats were located within the project area.

Conservation measures will be utilized and as identified by the USFWS IPaC system include:

- Avoid removing trees greater than 3-inches in diameter from April 1 to September 30, the active season of protected bat species.
- Use wildlife safe erosion control materials and methods.
- Ensure those implementing the project first review the FWS EMR factsheet and the MDNR's "60-Second Snakes: The Eastern Massasauga Rattlesnake" video (available at [https://www.youtube.com/watch?v=-PFnXe\\_e02w](https://www.youtube.com/watch?v=-PFnXe_e02w)).
- At the conclusion of the action, revegetate all disturbed areas with appropriate plant species, and monitor all restoration plantings for establishment.

Although the habitats of the bats have the potential to be encountered as they typically roost under bark or in crevices in trees, no tree removals or trimming are planned as part of the project.

## 2.3 Existing System

The City water system is supplied by four groundwater wells. Three wells are located in McCoy Creek Recreation Area in the south-central portion of the City, while the fourth is located in the woods in the southwest portion of the City. The City of Buchanan currently obtains water from groundwater using four wells, three of which were installed prior to 1970 and are located just north of McCoy Creek Drive. The fourth well was drilled in 2009 and is located at the west end of McCoy Creek Trail. Water treatment is provided at the Water Treatment Plant just downstream of the wells.

All well fields are hydraulically connected to McCoy Creek which flows east through the City to the St. Joseph River. The well houses are located in the floodplain of McCoy Creek, and the well casings extend two feet higher than the 100-year flood elevation.

The City of Buchanan has a complex network of water mains providing transmission and distribution to City and surrounding Township customers. The service area covers approximately 3.2 square miles and is supplied through a water distribution network consisting of approximately 37 miles of water mains ranging from 3 to 15 inches in diameter. The watermain is of varying ages with the earliest dating back to the 1920s, and significant construction of watermain occurring in 1920s, 1950s, and again in 1990s.

The historical and projected maximum day demands (MDD) shown in **Table 2**.

The City of Buchanan's water system has approximately 2,091 Residential Equivalent Units currently served. In review of current system records, 200 lead/galvanized water services were identified. The proposed project will complete the replacement of 200 the 860 lead/galvanized water services (23%). A full summary and analysis of the water system is available in the City of Buchanan's Water Reliability Study and CDSMI inventory list.

## **2.4 Summary of Project Needs**

### **2.4.1 Standards Compliance and Reliability**

The City of Buchanan's water system is currently in compliance with all drinking water standards and has the capacity to serve the affected area. However, the water service replacements are needed to meet the requirements of the State of Michigan Lead and Copper Rule (LCR).

### **2.4.2 Orders of Enforcement Action**

The City of Buchanan does not have any orders of enforcement actions at this time.

### **2.4.3 Health Violations**

The City of Buchanan does has had no health-based violations in the past 5 years.

### **2.4.4 Drinking Water Quality Problems**

The proposed project is required to provide potable water, free of lead, to the City of Buchanan's residents in the affected areas. The City is proposing to replace 200 water services using DWSRF FY2027 funding.

## **2.5 Projected Needs for the Next 20 Years**

The area is currently nearly fully developed, and land use is not expected to change. A comprehensive review of the current and future needs can be found in the City of Buchanan's Water Reliability Study.

## **3 ANALYSIS OF ALTERNATIVES**

### **3.1 Lead Service Line Replacements**

The City has prioritized the need for replacement of existing lead service lines as required in the water system. Below is an evaluation of alternatives to fulfill this project need.

#### **3.1.1 No Action**

The City must identify and replace LSLs to be compliant with the LCR. The proposed projects will assist the City in complying with the LCR by replacing LSLs. Therefore, the no action alternative was not considered further.

### **3.1.2 Optimum Performance of Existing System**

There are no alternatives available under this category that would satisfy the LCR requirement to replace LSLs. Pipelining technologies are available which could mitigate potential lead release by lining the interior of the pipe. However, EGLE has determined this technology to be non-compliant with the LSL replacement requirements of the LCR.

### **3.1.3 Regionalization**

The water system needs within the system are not regional issues; they are City specific issues. There are no regionalization alternatives for water service replacement. Regional alternatives are not discussed further.

### **3.1.4 Replacement**

The proposed project will replace existing water services as required for compliance with the LCR.

### **3.1.5 Monetary Evaluation**

The proposed project will replace existing water services as required for compliance with the LCR. No alternative evaluation is required. The proposed project costs are included in **Appendix F**.

### **3.1.6 Environmental Evaluation**

The proposed project will replace existing water services as required for compliance with the LCR. The service replacements will be completed using trenchless technology which is the least intrusive method and causes the least amount of surface impact.

## **4 SELECTED ALTERNATIVE**

### **4.1 Lead Service Line Replacements**

#### **4.1.1 Design Parameters**

The proposed project is required to provide potable water, free of lead, to the residents of the City of Buchanan in the affected areas. The City is proposing to replace 200 of the 860 water services using DWSRF FY2027 funding.

#### 4.1.2 Useful Life

The new copper water services are expected to have a useful life of 75 years.

#### 4.1.3 Schedule for Design and Construction

The project is planned to meet Quarter 3 of the FY 2027 Financing Schedule. Service replacement addresses are already completed. No permits are required for lead service replacement. Bidding would occur in Spring of 2027 and construction is anticipated to begin in summer 2027.

#### 4.1.4 Project and User Costs

**Appendix F** contains detailed cost estimates for the proposed water system improvements. The estimated \$2,300,000 dollar project costs for FY2027 include construction, engineering, administration, and contingency costs.

If the estimated DWSRF loan is \$2,300,000 with an estimated 3% interest rate for a 20-year period, the expected annual debt service for the proposed project based on the DWSRF loan criteria will be approximately \$154,596 per year.

The total number of REUs served is estimated to be 2,091 based on the calculation in **Table 4**. The increase due to the improvements translates to a monthly cost of about \$6.16 per average residential customer. This calculation is presented in **Table 5**. The total present worth including anticipated salvage value is included in **Appendix G**.

In the event principal forgiveness is awarded for the proposed projects, it is expected the user charge estimate would decrease commensurate to the forgiveness.

#### 4.1.5 Overburdened Community

EGLE will make a determination of Overburdened or Significant Overburdened Communities based upon documentation submitted along with the PPD. EGLE has provided a support calculation worksheet to guide the planning process. It is anticipated the City will likely not qualify as Overburdened.

A completed *Overburdened and Significantly Overburdened Community Status Determination Worksheet* is included in **Appendix K**. The worksheet shows on a

blended median household income (MAHI) and taxable value per capita (TVPC), which is based on the average billed water for the City and the surrounding townships from **Table 3**. There are approximately 167 services in Buchanan Township and Niles Township. These data provide the basis for the blended MAHI and TVPC shown in **Appendix K**.

#### **4.1.6 Project Scoring & Implementation**

Implementation of the proposed project is based on the assumption that the project will be financed by a low-interest loan from the DWSRF program. To assist EGLE in project ranking, a draft Scoring Worksheet is included in **Appendix L**. The City has the necessary legal, institutional, financial, and managerial resources available to ensure the construction, operation, and maintenance of the proposed facilities.

The City of Buchanan has not received DWSRF financing for the past 5 years.

The proposed project is included in a current asset management (AM) plan and the City manager has successfully completed the Michigan Infrastructure Council's AM Champions Program.

## **5 Environmental and Public Health Impacts**

### **5.1 Direct, Indirect, and Cumulative Impacts**

#### **5.1.1 Social/Economic Impact**

The proposed projects will have a massively positive impact on the economics of the project area. Residents with services affected by high levels of lead have been recommended to not utilize the water for drinking or food preparation/canning. Given the multiple impacts of lead on humans and other organisms, there is an atmosphere of fear which reduces the current quality of life in the area and is potentially affecting property values. The proposed installation of copper water services and connection to a reliable, safe potable water supply will significantly reduce or eliminate the current social and economic impacts associated with lead service lines.

## **5.1.2 Construction/Operational Impact**

### **5.1.2.1 Natural and Man-made Features**

The proposed water service installations will either follow the path of the existing service or be directly adjacent to the existing service. The service paths are previously disturbed space and efforts will be taken during design and construction to minimize construction impacts.

### **5.1.2.2 Contamination**

Corridors have been reviewed and it has been determined that contamination may be encountered within the project area (See **Appendix D**). During project design, the areas of potential contamination will be reviewed in more detail. Where contamination is anticipated, procedures will be in place to properly dispose of contaminated material in accordance with state and local regulations.

## **5.2 Indirect Impacts**

No long-term impacts to the environment are anticipated.

## **5.3 Other impacts**

Once construction is completed, there are no anticipated permanent, detrimental impacts to the community.

# **6 MITIGATION**

## **6.1 Short Term Construction Related Mitigation**

Standard procedures used in the construction industry will be included in the construction contract documents to mitigate construction activities.

### **6.1.1 Traffic Disruption**

The proposed projects are located in road rights-of-way where streets and driveways will be impacted. All components of the project will be coordinated carefully with residences and businesses in the area, and construction methods will be selected to minimize disruptions.

Standard traffic and safety control devices such as barricades and lighted barrels will be in place if necessary to warn and protect residents during construction activities.

### **6.1.2 Dust and Noise**

Given the use of trenchless installation techniques, no dust control is anticipated. All public roadways will be maintained to assure residents access to the area. Construction equipment will be maintained in good condition to decrease noise.

### **6.1.3 Soil Erosion**

Given the use of trenchless installation techniques, no soil erosion is anticipated. All public roadways will be maintained to assure residents access to the area.

### **6.1.4 Water Service Disruption**

During construction of new water services and connections to home water systems, drinking water will be provided to the residents and connection to the municipal system made as quickly as possible.

### **6.1.5 Potential Loss of Wildlife / Habitat**

The proposed project work is within and directly adjacent to existing road right-of-way and will not impact fauna or flora within the project areas. Since tree removal is not anticipated, there would be no loss of habitat or roost trees for the endangered Indiana bat or the threatened Northern long-eared bat. No other habitat impacts are anticipated.

## **7 Public Participation**

The public is given opportunity to review and provide feedback on the PPD, following the updated EGLE guidelines for public participation.

## Tables

---

Table 1	Historical and Projected Population
Table 2	Water System Demands
Table 3	Service Connections by Type
Table 4	Residential Equivalent Units (REUs)
Table 5	Estimated Monthly Payment per REU

**Table 1 - Historical and Projected Population**

	Population*				Forecasted Population**			
	2000	2010	2020	2026	2030	2035	2040	2045
City of Buchanan	4,681	4,456	4,300	4,225	4,151	4,078	4,007	3,937

\*From U.S. Census Bureau

\*\*Based on projected growth rate from the MDOT Population Projections. City of Buchanan projections represent approximately 0.037% decreases per year in population through 2030. This has been further projected through 2040 at that rate.

**Table 2 - Water System Demands**

Year	Average Day Demand (GPD)	Maximum Day Demand (GPD)
2013	569,000	947,000
2014	527,000	680,000
2015	475,000	703,000
2016	443,000	994,000
2017	538,000	1,045,000
2018	545,000	1,124,000
2019	399,000	1,012,000
2020	383,000	980,000
2021	402,000	816,000
2022	653,000	2,322,000
2023	489,000	2,779,000
2024	323,000	1,313,000
2025	378,000	1,540,000
2030	455,000	1,047,000
2035	455,000	1,048,000
2040	455,000	1,049,000
2045	455,000	1,050,000

**Table 3 - Annual Water Use (Gallons)**

<b>Fiscal Year:</b>	<b>2024-2025</b>
City of Buchanan	85,197,000
Township Customers	8,286,000
<b>Grand Totals</b>	<b>93,483,000</b>

**Table 4 - Residential Equivalent Units (REUs)**

<b>Type</b>	<b>Total REU</b>
Buchanan - Single Family	1696
Buchanan - Other Customers	228
Buchanan Twp - Single Family	142
Buchanan TWP - Other Customers	8
Niles TWP - Single Family	17
Niles Township - Other Customers	0
<i>Total Residential Equivalent Units:</i>	<b>2091.00</b>

*The City REU are provided from the BS&A data and "other" customers REU is calculated based on the average flow of a single family residential = 194 gpd/REU*

**Table 5 - Estimated Project Costs**

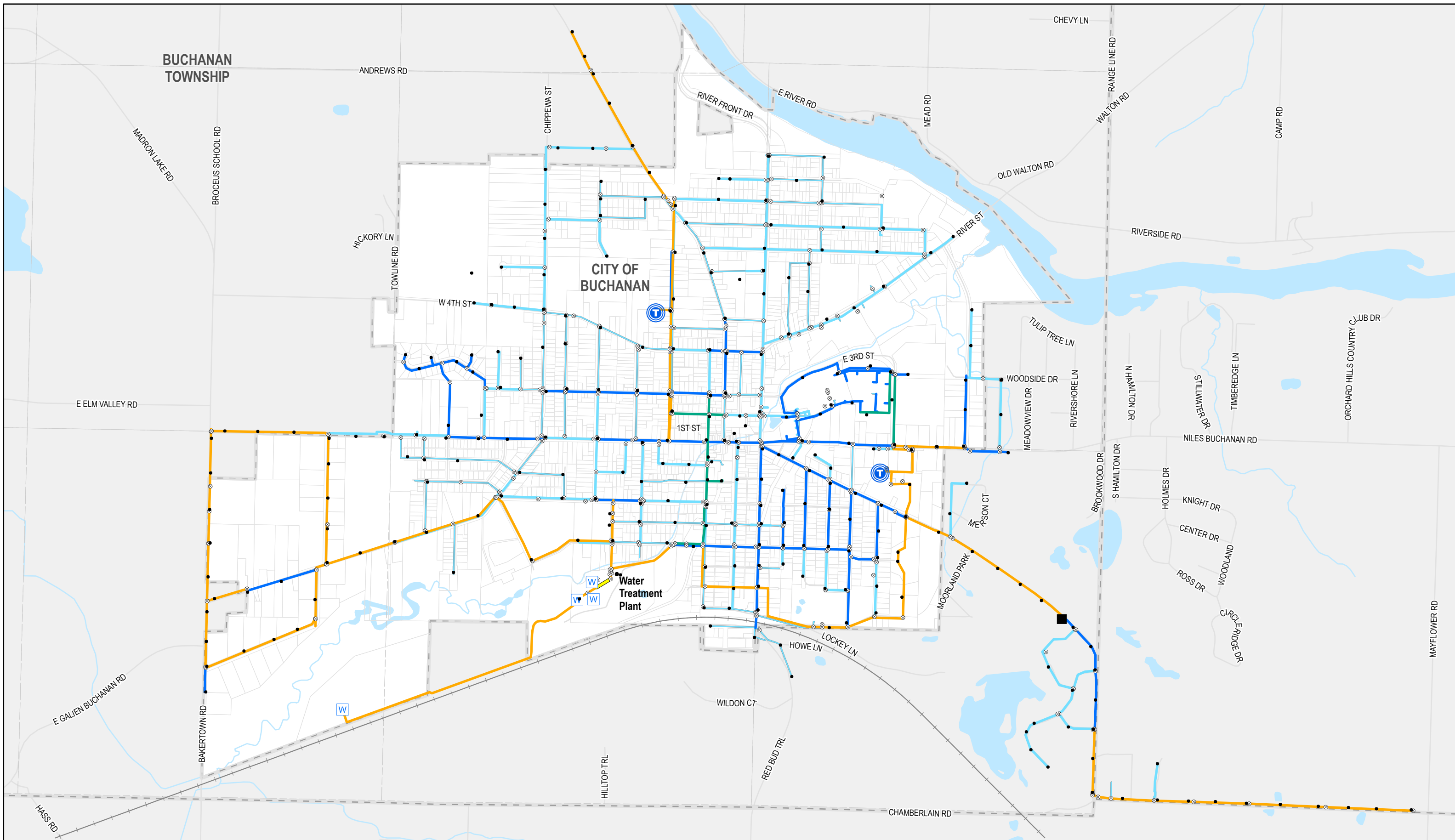
	<b>FY2027</b>
DWSRF-Eligible Project Costs	<b>\$2,300,000</b>
Annual Payment- Estimated*	<b>\$154,596</b>
Monthly Payment- Estimated*	<b>\$12,883</b>
Monthly Payment/REU- Estimated*	<b>\$6.16</b>

\*Assumed 20 year term at 3% with no principal forgiveness

## Figures

---

Figure 1 Map of Lead Service Line Replacement Locations



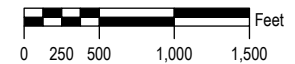
BUCHANAN  
TOWNSHIP

CITY OF  
BUCHANAN

Water  
Treatment  
Plant

**LEGEND**

- |                            |     |         |                 |
|----------------------------|-----|---------|-----------------|
| <b>Water Main Diameter</b> | 10" | Hydrant | Well            |
| 4" and Smaller             | 12" | Valve   | Water Tower     |
| 6"                         | 15" |         | Booster Station |
| 8"                         |     |         |                 |



CITY OF BUCHANAN  
BERRIEN COUNTY, MI  
DRINKING WATER REVOLVING FUND

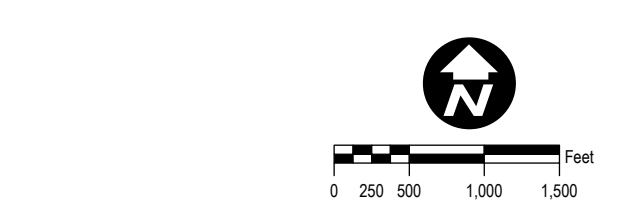
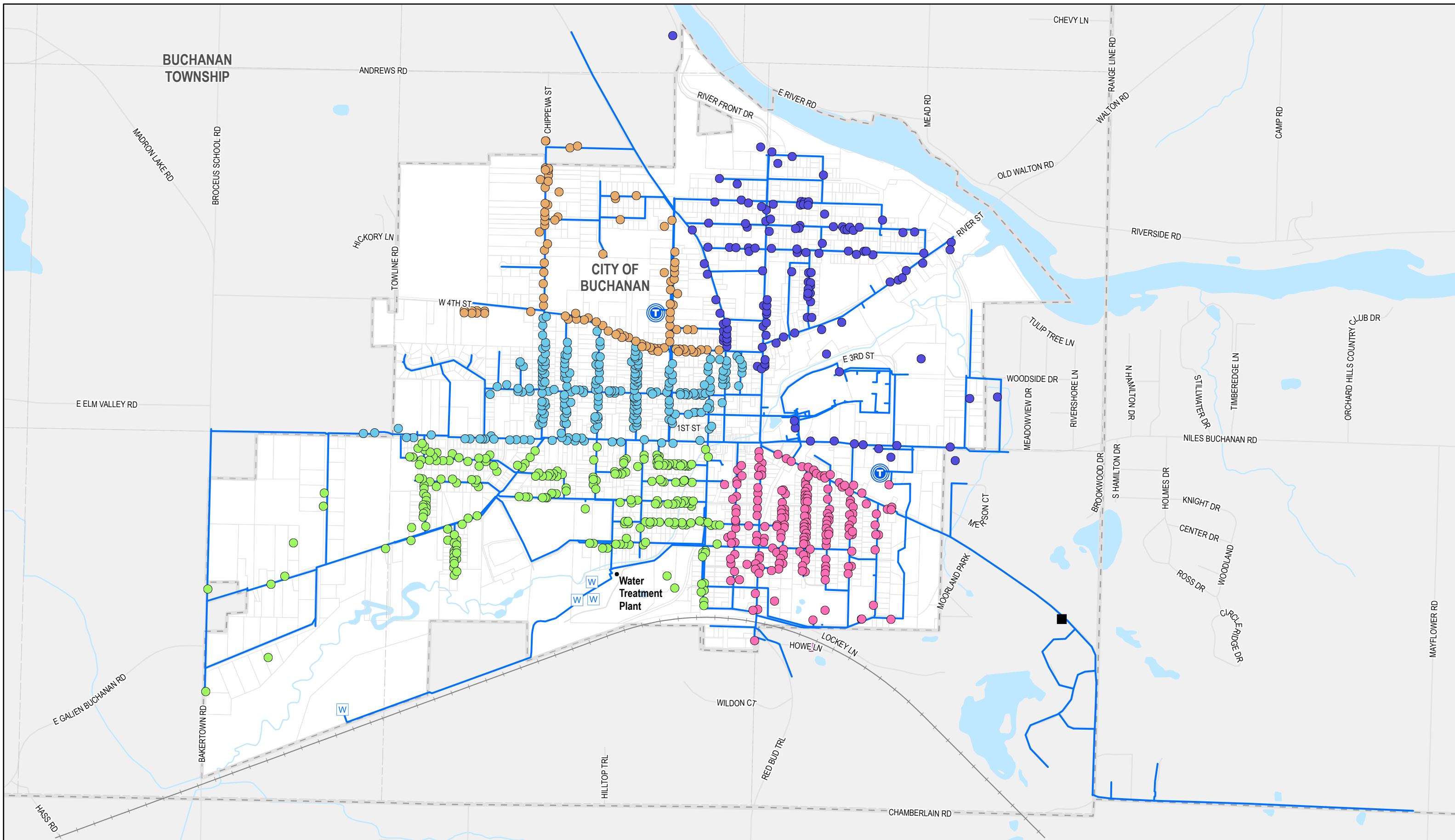


**FIGURE 1: EXISTING WATER SYSTEM**

APRIL 2026

Prein&Newhof  
2240749

J:\GIS\_Client\Berrien-GD\Buchanan-GD\City\_Projects\2240749\_TMF\2240749\_Buchanan\_DWSRF\_Maps.aprx-feria-41/3/2026 10:05 AM



**LSLR Locations by Replacement Year**

- 2027
- 2028
- 2029

**LEGEND**

- 2030
- 2031
- Water Main
- W Well
- T Water Tower
- Booster Station

J:\GIS\_Client\Berrien-GD\Buchanan-GD\City\_Projects\2240749\_TMF\2240749\_Buchanan\_DWSRF\_Maps.aprx-feria- 4/13/2026 10:05 AM

# Appendix A

---

## Wetlands, Lakes, and Streams Map



CITY OF BUCHANAN  
BERRIEN COUNTY, MICHIGAN  
DRINKING WATER REVOLVING FUND




# APPENDIX A: WETLANDS, LAKES, AND STREAMS

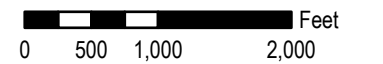
FEBRUARY 2026

Prein&Newhof  
2240749

## LEGEND

### Wetlands

-  Marsh, Swamp, Bog, Prairie
-  River
-  Lake, Reservoir



Source: Esri Living Atlas (National Wetlands Inventory, produced by the US Fish and Wildlife Service)

J:\GIS\_Client\Berrien-GD\Buchanan-GD\City\_Projects\2240749\_TMF\2240749\_Buchanan\_DWSRF\_Maps.aprx:fileia-2/8/2026 12:24 AM

# Appendix B

---

## FEMA Mapped Floodplains



CITY OF BUCHANAN  
BERRIEN COUNTY, MICHIGAN  
DRINKING WATER REVOLVING FUND



## APPENDIX B: FEMA MAPPED FLOODPLAIN

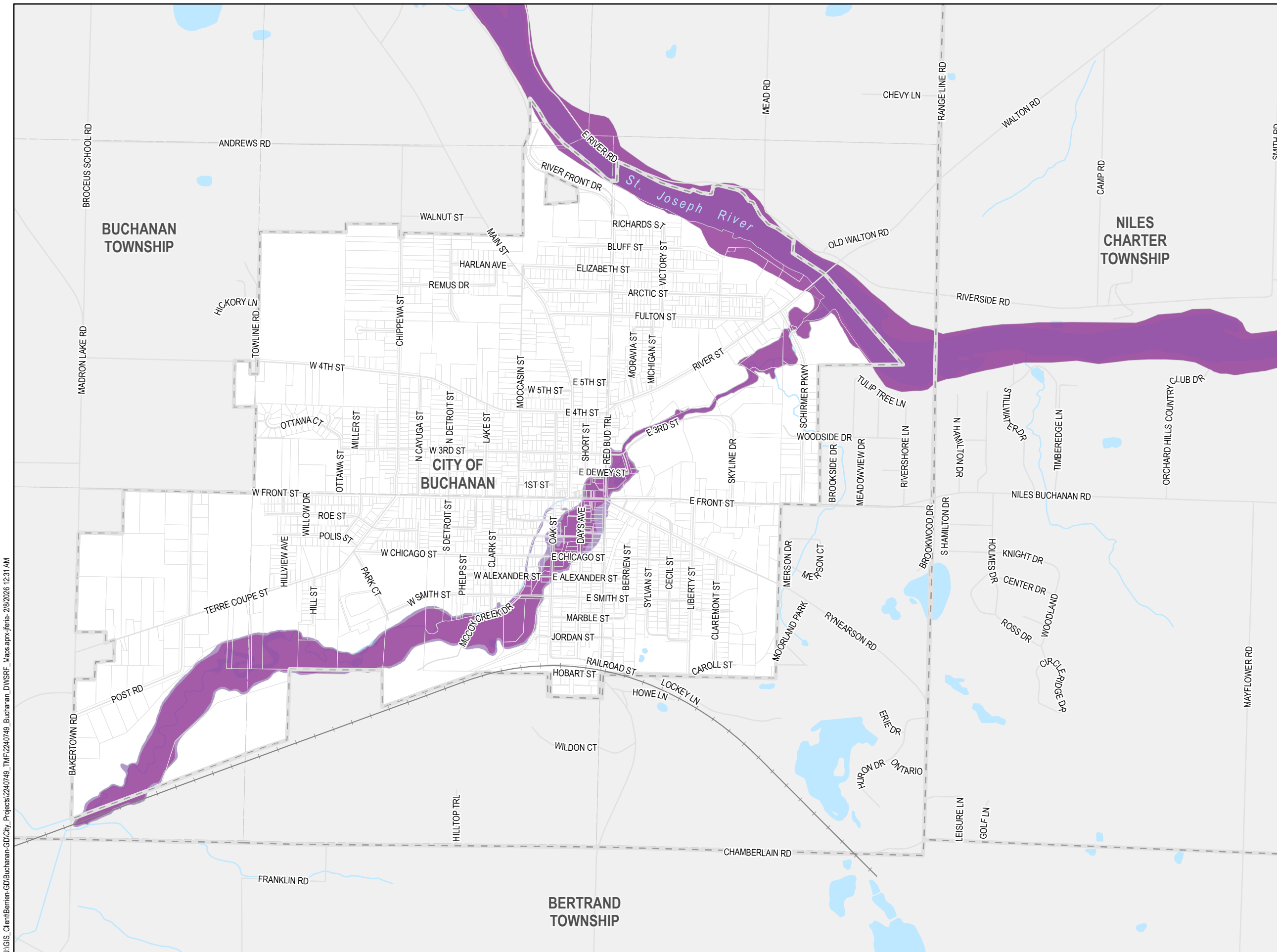
FEBRUARY 2026

Prein&Newhof  
2240749

### LEGEND

#### Flood Hazard Areas

-  0.2% Annual Chance Flood Hazard
-  1% Annual Chance Flood Hazard



0 500 1,000 2,000 Feet

# Appendix C

---

## Soils Map



# Appendix D

---

## Sites of Known Contamination



CITY OF BUCHANAN  
 BERRIEN COUNTY, MICHIGAN  
 DRINKING WATER REVOLVING FUND

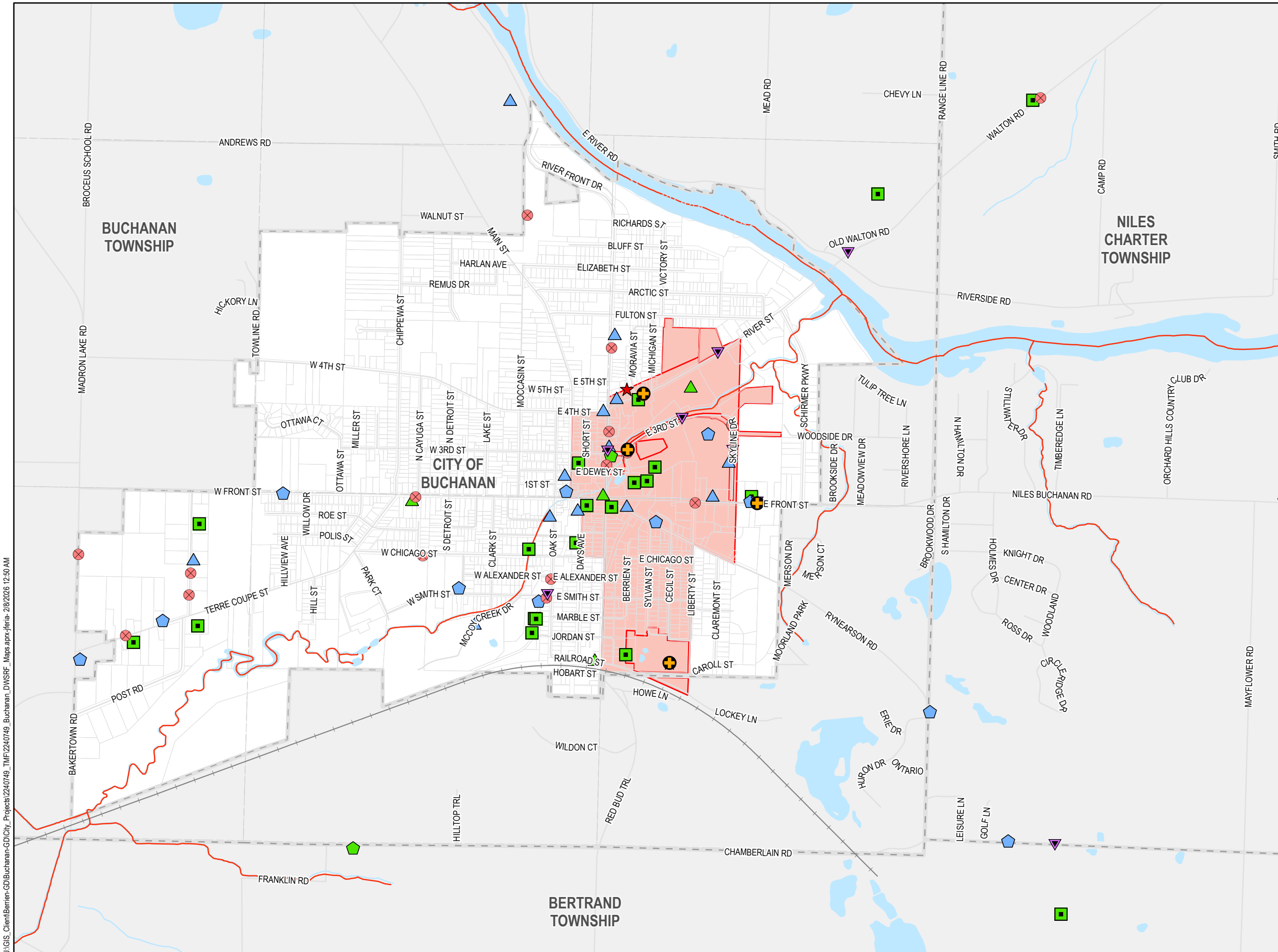
## APPENDIX D: SITES OF KNOWN CONTAMINATION

FEBRUARY 2026

Prein&Newhof  
 2240749

### LEGEND

- Part 201 Environmental Contamination Sites
- Leaking Storage Tank - Open (Part 213)
- Leaking Storage Tank - Closed (Part 213)
- Underground Storage Tank - Active (Part 211)
- Underground Storage Tank - Closed (Part 211)
- Superfund Site
- Hazardous Waste Site
- NPDES
- Toxic Release
- Impaired Streams
- Land Resource Use Restriction



J:\GIS\_Client\Berrien-GD\Buchanan-GD\City\_Projects\2240749\_TMF\2240749\_Buchanan\_DWSRF\_Maps.aprx:heria-2/8/2026 12:50 AM

Source: Michigan Department of Great Lakes and Energy (EGLE) Environmental Mapper and U.S. Environmental Protection Agency (EPA) EnviroMapper.

# Appendix E

---

## US Fish and Wildlife Species Survey



## United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Michigan Ecological Services Field Office  
2651 Coolidge Road Suite 101  
East Lansing, MI 48823-6360  
Phone: (517) 351-2555 Fax: (517) 351-1443

In Reply Refer To:

03/31/2026 18:03:13 UTC

Project Code: 2026-0070181

Project Name: Buchanan FY27 DWSRF

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

### **Official Species List**

The attached species list identifies any Federally threatened, endangered, proposed and candidate species that may occur within the boundary of your proposed project or may be affected by your proposed project. The list also includes designated critical habitat if present within your proposed project area or affected by your project. This list is provided to you as the initial step of the consultation process required under section 7(c) of the Endangered Species Act, also referred to as Section 7 Consultation.

Under 50 CFR 402.12(e) (the regulations that implement section 7 of the Endangered Species Act), the accuracy of this species list should be verified after 90 days. You may verify the list by visiting the IPaC website (<https://ipac.ecosphere.fws.gov/>) at regular intervals during project planning and implementation. To update an Official Species List in IPaC: from the My Projects page, find the project, expand the row, and click Project Home. In the What's Next box on the Project Home page, there is a Request Updated List button to update your species list. Be sure to select an "official" species list for all projects.

### **Consultation requirements and next steps**

Section 7 of the Endangered Species Act of 1973 requires that actions authorized, funded, or carried out by Federal agencies not jeopardize Federally threatened or endangered species or adversely modify designated critical habitat. To fulfill this mandate, Federal agencies (or their designated non-Federal representative) must consult with the Fish and Wildlife Service if they determine their project may affect listed species or critical habitat.

There are two approaches to evaluating the effects of a project on listed species.

Approach 1. Use the All-species Michigan determination key in IPaC. This tool can assist you in making determinations for listed species for some projects. In many cases, the determination key

will provide an automated concurrence that completes all or significant parts of the consultation process. Therefore, we strongly recommend screening your project with the **All-Species Michigan Determination Key (Dkey)**. For additional information on using IPaC and available Determination Keys, visit <https://www.fws.gov/media/mifo-ipac-instructions> (and click on the attachment), or for a video overview, please visit: <https://www.youtube.com/watch?v=FfcerNCiL0I>. Please carefully review your Dkey output letter to determine whether additional steps are needed to complete the consultation process.

Approach 2. Evaluate the effects to listed species on your own without utilizing a determination key. Once you obtain your official species list, you are not required to continue in IPaC, although in most cases using a determination key should expedite your review. If the project is a Federal action, you should review our section 7 step-by-step instructions before making your determinations: <https://www.fws.gov/office/midwest-region-headquarters/midwest-section-7-technical-assistance>. If you evaluate the details of your project and conclude “no effect,” document your findings, and your listed species review is complete; you do not need our concurrence on “no effect” determinations. If you cannot conclude “no effect,” you should coordinate/consult with the Michigan Ecological Services Field Office. The preferred method for submitting your project description and effects determination (if concurrence is needed) is electronically to [EastLansing@fws.gov](mailto:EastLansing@fws.gov). Please include a copy of this official species list with your request.

For all **wind energy projects**, please contact this field office directly for assistance, even if no Federally listed plants, animals or critical habitat are present within your proposed project area or may be affected by your proposed project.

### **Migratory Birds**

Please see the “Migratory Birds” section below for important information regarding incorporating migratory birds into your project planning. Our Migratory Bird Program has developed recommendations, best practices, and other tools to help project proponents voluntarily reduce impacts to birds and their habitats. The Bald and Golden Eagle Protection Act prohibits the take and disturbance of eagles without a permit. If your project is near an eagle nest or winter roost area, see our Eagle Permits website at <https://www.fws.gov/program/eagle-management> to help you avoid impacting eagles or determine if a permit may be necessary.

Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/partner/council-conservation-migratory-birds>.

We appreciate your consideration of threatened and endangered species during your project

planning. Please include a copy of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

## **OFFICIAL SPECIES LIST**

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Michigan Ecological Services Field Office**

2651 Coolidge Road Suite 101

East Lansing, MI 48823-6360

(517) 351-2555

## PROJECT SUMMARY

Project Code: 2026-0070181  
Project Name: Buchanan FY27 DWSRF  
Project Type: Water Supply Pipeline - Maintenance/Modification - Below Ground  
Project Description: Replacement of lead and galvanized water service lines.  
Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@41.82937455,-86.36002268430062,14z>



Counties: Berrien County, Michigan

## ENDANGERED SPECIES ACT SPECIES

There is a total of 10 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 2 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

- 
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

**MAMMALS**

NAME	STATUS
Indiana Bat <i>Myotis sodalis</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/5949">https://ecos.fws.gov/ecp/species/5949</a>	Endangered
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>	Endangered
Tricolored Bat <i>Perimyotis subflavus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/10515">https://ecos.fws.gov/ecp/species/10515</a>	Proposed Endangered

**BIRDS**

NAME	STATUS
Rufa Red Knot <i>Calidris canutus rufa</i> There is <b>proposed</b> critical habitat for this species. Your location does not overlap the critical habitat. This species only needs to be considered under the following conditions: <ul style="list-style-type: none"> <li>▪ Only actions that occur along coastal areas during the Red Knot migratory window of MAY 1 - SEPTEMBER 30.</li> </ul> Species profile: <a href="https://ecos.fws.gov/ecp/species/1864">https://ecos.fws.gov/ecp/species/1864</a>	Threatened
Whooping Crane <i>Grus americana</i> Population: Eastern Migratory NEP - U.S.A. (AL, AR, FL, GA, IL, IN, IA, KY, LA, MI, MN, MS, MO, NC, OH, SC, TN, VA, WI, WV) No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/758">https://ecos.fws.gov/ecp/species/758</a>	Experimental Population, Non- Essential

**REPTILES**

NAME	STATUS
Copperbelly Water Snake <i>Nerodia erythrogaster neglecta</i> Population: Indiana north of 40 degrees north latitude, Michigan, Ohio No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/7253">https://ecos.fws.gov/ecp/species/7253</a>	Threatened
Eastern Massasauga (=rattlesnake) <i>Sistrurus catenatus</i> No critical habitat has been designated for this species. This species only needs to be considered under the following conditions: <ul style="list-style-type: none"> <li>▪ For all Projects: Project is within Tier1 Habitat</li> <li>▪ For all projects: Project is within Tier2 Habitat</li> <li>▪ For all Projects: Project is within EMR Range</li> </ul> Species profile: <a href="https://ecos.fws.gov/ecp/species/2202">https://ecos.fws.gov/ecp/species/2202</a> General project design guidelines: <a href="https://ipac.ecosphere.fws.gov/project/BN34BGPNNFHRHFUELJ254NBTR4/documents/generated/5280.pdf">https://ipac.ecosphere.fws.gov/project/BN34BGPNNFHRHFUELJ254NBTR4/documents/generated/5280.pdf</a>	Threatened

## INSECTS

NAME	STATUS
Mitchell's Satyr Butterfly <i>Neonympha mitchellii mitchellii</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/8062">https://ecos.fws.gov/ecp/species/8062</a>	Endangered
Monarch Butterfly <i>Danaus plexippus</i> There is <b>proposed</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Proposed Threatened

## FLOWERING PLANTS

NAME	STATUS
Pitcher's Thistle <i>Cirsium pitcheri</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/8153">https://ecos.fws.gov/ecp/species/8153</a>	Threatened

## CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

## USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

## BALD & GOLDEN EAGLES

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act <sup>2</sup> and the Migratory Bird Treaty Act (MBTA) <sup>1</sup>. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

- 
1. The [Bald and Golden Eagle Protection Act](#) of 1940.
  2. The [Migratory Birds Treaty Act](#) of 1918.
  3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

There are Bald Eagles and/or Golden Eagles in your [project](#) area.

### Measures for Proactively Minimizing Eagle Impacts

For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the [National Bald Eagle Management Guidelines](#). You may employ the timing and activity-specific distance recommendations in this document when designing your project/activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to [Bald Eagle Nesting and Sensitivity to Human Activity](#).

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional [Migratory Bird Office](#) or [Ecological Services Field Office](#).

If disturbance or take of eagles cannot be avoided, an [incidental take permit](#) may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the [Do I Need A Permit Tool](#). For assistance making this determination for golden eagles, please consult with the appropriate Regional [Migratory Bird Office](#) or [Ecological Services Field Office](#).

### Ensure Your Eagle List is Accurate and Complete

If your project area is in a poorly surveyed area in IPaC, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the [Supplemental Information on Migratory Birds and Eagles](#), to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. <a href="https://ecos.fws.gov/ecp/species/1626">https://ecos.fws.gov/ecp/species/1626</a>	Breeds Dec 1 to Aug 31

## PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

### Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

### Breeding Season (■)

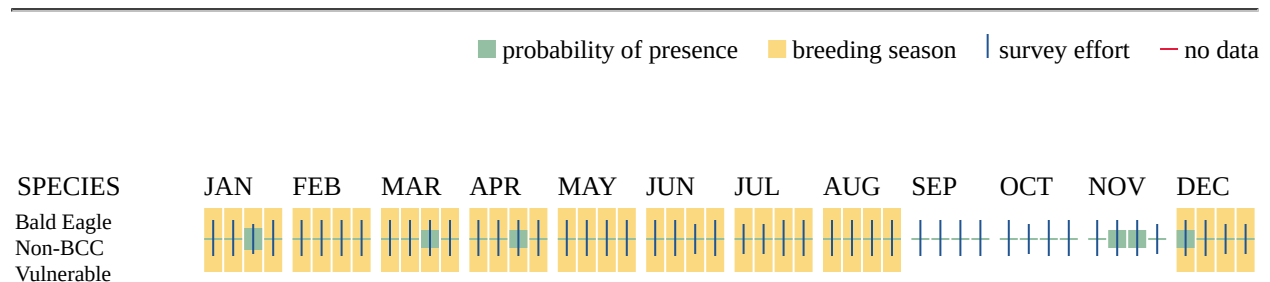
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

### Survey Effort (|)

Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

### No Data (—)

A week is marked as having no data if there were no survey events for that week.



Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide avoidance and minimization measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

## MIGRATORY BIRDS

The Migratory Bird Treaty Act (MBTA) <sup>1</sup> prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service).

- 
1. The [Migratory Birds Treaty Act](#) of 1918.
  2. The [Bald and Golden Eagle Protection Act](#) of 1940.
  3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
<p><b>Bald Eagle <i>Haliaeetus leucocephalus</i></b>            This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.  <a href="https://ecos.fws.gov/ecp/species/1626">https://ecos.fws.gov/ecp/species/1626</a></p>	Breeds Dec 1 to Aug 31
<p><b>Canada Warbler <i>Cardellina canadensis</i></b>            This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="https://ecos.fws.gov/ecp/species/9643">https://ecos.fws.gov/ecp/species/9643</a></p>	Breeds May 20 to Aug 10
<p><b>Cerulean Warbler <i>Setophaga cerulea</i></b>            This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="https://ecos.fws.gov/ecp/species/2974">https://ecos.fws.gov/ecp/species/2974</a></p>	Breeds Apr 22 to Jul 20
<p><b>Chimney Swift <i>Chaetura pelagica</i></b>            This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="https://ecos.fws.gov/ecp/species/9406">https://ecos.fws.gov/ecp/species/9406</a></p>	Breeds Mar 15 to Aug 25
<p><b>Eastern Whip-poor-will <i>Antrostomus vociferus</i></b>            This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="https://ecos.fws.gov/ecp/species/10678">https://ecos.fws.gov/ecp/species/10678</a></p>	Breeds May 1 to Aug 20
<p><b>Grasshopper Sparrow <i>Ammodramus savannarum perpallidus</i></b>            This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA  <a href="https://ecos.fws.gov/ecp/species/8329">https://ecos.fws.gov/ecp/species/8329</a></p>	Breeds Jun 1 to Aug 20
<p><b>Lesser Yellowlegs <i>Tringa flavipes</i></b>            This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="https://ecos.fws.gov/ecp/species/9679">https://ecos.fws.gov/ecp/species/9679</a></p>	Breeds elsewhere
<p><b>Pectoral Sandpiper <i>Calidris melanotos</i></b>            This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="https://ecos.fws.gov/ecp/species/9561">https://ecos.fws.gov/ecp/species/9561</a></p>	Breeds elsewhere
<p><b>Red-headed Woodpecker <i>Melanerpes erythrocephalus</i></b>            This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="https://ecos.fws.gov/ecp/species/9398">https://ecos.fws.gov/ecp/species/9398</a></p>	Breeds May 10 to Sep 10

NAME	BREEDING SEASON
<b>Rusty Blackbird <i>Euphagus carolinus</i></b> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA <a href="https://ecos.fws.gov/ecp/species/9478">https://ecos.fws.gov/ecp/species/9478</a>	Breeds elsewhere
<b>Wood Thrush <i>Hylocichla mustelina</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9431">https://ecos.fws.gov/ecp/species/9431</a>	Breeds May 10 to Aug 31

## PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

### Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

### Breeding Season (■)

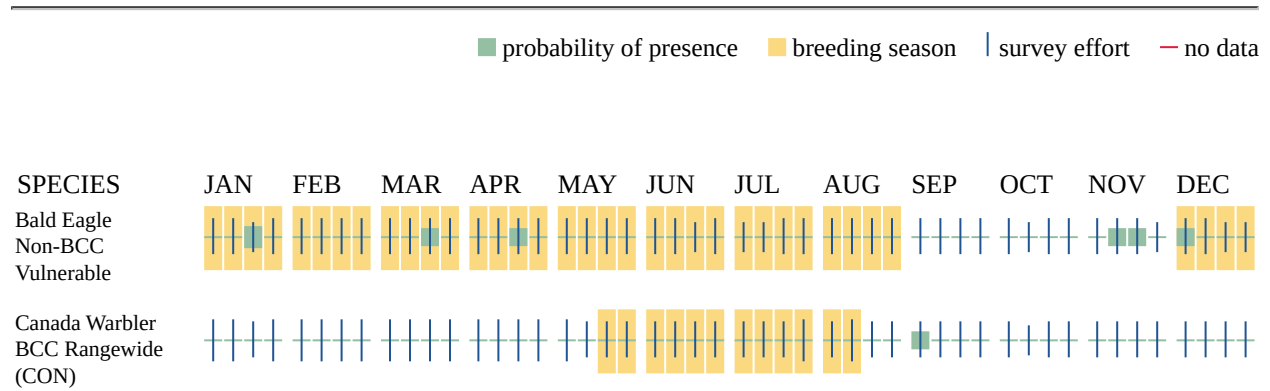
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

### Survey Effort (|)

Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

### No Data (—)

A week is marked as having no data if there were no survey events for that week.





Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

## WETLANDS

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

FRESHWATER EMERGENT WETLAND

- PEM1C

FRESHWATER POND

- PUBHx

FRESHWATER FORESTED/SHRUB WETLAND

- PFO1C

RIVERINE

- R2UBH

## **IPAC USER CONTACT INFORMATION**

Agency: Prein&Newhof  
Name: Ernie Sarkipato  
Address: 3355 Evergreen Dr NE  
City: Grand Rapids  
State: MI  
Zip: 49525  
Email: esarkipato@preinnewhof.com  
Phone: 6165508764



## United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Michigan Ecological Services Field Office  
2651 Coolidge Road Suite 101  
East Lansing, MI 48823-6360  
Phone: (517) 351-2555 Fax: (517) 351-1443

In Reply Refer To:  
Project code: 2026-0037976  
Project Name: City of Buchanan LSLR

01/19/2026 17:05:39 UTC

Subject: Technical Assistance letter for 'City of Buchanan LSLR' for specified federally threatened and endangered species and designated critical habitat that may occur in your proposed project area consistent with the Michigan Determination Key for project review and guidance for federally listed species (Michigan Dkey).

Dear Michael Schwartz:

The U.S. Fish and Wildlife Service (Service) received on **January 19, 2026** your effect determination(s) for the 'City of Buchanan LSLR' (the Action) using the Michigan DKey within the Information for Planning and Consultation (IPaC) system. The Service developed this system in accordance with the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based on your answers and the assistance of the Service's Michigan DKey, you made the following effect determination(s) for the proposed Action:

<b>Species</b>	<b>Listing Status</b>	<b>Determination</b>
Copperbelly Water Snake ( <i>Nerodia erythrogaster neglecta</i> )	Threatened	No effect
Eastern Massasauga (=rattlesnake) ( <i>Sistrurus catenatus</i> )	Threatened	May affect
Indiana Bat ( <i>Myotis sodalis</i> )	Endangered	NLAA
Mitchell's Satyr Butterfly ( <i>Neonympha mitchellii mitchellii</i> )	Endangered	No effect
Monarch Butterfly ( <i>Danaus plexippus</i> )	Proposed Threatened	No effect
Northern Long-eared Bat ( <i>Myotis septentrionalis</i> )	Endangered	NLAA
Pitcher's Thistle ( <i>Cirsium pitcheri</i> )	Threatened	No effect
Rufa Red Knot ( <i>Calidris canutus rufa</i> )	Threatened	No effect
Tricolored Bat ( <i>Perimyotis subflavus</i> )	Proposed Endangered	NLAA

Whooping Crane (*Grus americana*)

Experimental      No effect  
Population, Non-  
Essential

**Please carefully review this letter. Your Endangered Species Act requirements are not complete.**

You received a “may affect” (MA) determination for at least one species. A MA determination means that you could not get to a “not likely to adversely affect” (NLAA) or “no effect” (NE) determination using our automated system and its supporting Standing Analysis. This could be because you didn’t agree to conservation measures offered for listed species on your species list, or there is a potential for impacts that need further evaluation. We recommend reviewing your answers to ensure they are accurate and revise as needed. If they are correct, we may be able to provide additional technical assistance that arrives at a determination of NE or NLAA. **Please email [MIFO\\_Dkey@fws.gov](mailto:MIFO_Dkey@fws.gov) with a copy of this letter to request our technical assistance for the species for which you got a MA determination.** If you are applying for a state wetland permit, having a copy of a follow up email exchange and resolution is necessary and will expedite your environmental review process.

**Eastern Massasauga (EMR):**

EMR may be present in the Action area. The following projects are not within the scope of the Michigan DKey: prescribed fire; new roads or trails that create a permanent barrier to EMR movement; projects that alter hydrology permanently, or temporarily if during the inactive season; projects that are large in scale; and projects that do not apply recommended conservation measures. Project-specific review is needed for these types of projects. **Please coordinate with the Michigan Ecological Services Field Office to further evaluate effects of the Action on EMR.**

**Tricolored Bat:**

Tricolored bat was proposed for listing as endangered on September 13, 2022. White-nose syndrome (WNS) has caused estimated declines of more than 90 percent in affected tricolored bat colonies and is currently present across 59 percent of the species’ range. During winter, tricolored bats hibernate in caves, abandoned mines, and tunnels ranging from small to large in size. During spring, summer and fall months, they roost primarily among leaf clusters of live or recently dead deciduous/hardwood trees.

In Michigan, the tricolored bat was rare pre-WNS and is exceedingly rare post-WNS. The species has been observed in 12 Michigan counties to date, largely during the fall or winter (September through mid-March) in or near hibernation sites. Most known hibernacula are abandoned mines in the western Upper Peninsula, although the species has been detected hibernating in three additional Lower Peninsula sites. Observed hibernating populations have been small (e.g., <10 individuals per site) since before WNS. With very few exceptions, the species has not been observed in Michigan in the summer, and no maternity colonies have been documented, despite repeated and extensive mist netting and other survey efforts in suitable summer habitat.

Certain actions (e.g., tree cutting, prescribed burning, pesticides) conducted at certain times of year within the tricolored bat's range may result in adverse effects to the species. Forested habitat near known or potential hibernacula is especially likely to be occupied by tricolored bats during the fall/spring and possibly summer months. If listed, protections would only go into place after the final rule is published. Section 7 conferences are required if a federal action is likely to jeopardize the continued existence of a proposed species. Our agency has developed tools and guidance for tricolored bat, which can be found on the [Species' Page](#) and will be applicable in the event that the tricolored bat is listed.

### **Bats of Conservation Concern:**

Implementing protective measures for bats, including both federally listed and unlisted species, indirectly helps to protect Michigan's agriculture and forests. Bats are significant predators of nocturnal insects, including many crop and forest pests. For example, Whitaker (1995) estimated that a single colony of 150 big brown bats (*Eptesicus fuscus*) would eat nearly 1.3 million pest insects each year. Boyles et al. (2011) noted the "loss of bats in North America could lead to agricultural losses estimated at more than \$3.7 billion/year, and Maine and Boyles (2015) estimated that the suppression of herbivory by insectivorous bats is worth >1 billion USD globally on corn alone. In captive trials, northern long-eared bats were found to significantly reduce the egg-laying activity of mosquitoes, suggesting bats may also play an important role in controlling insect-borne disease (Reiskind and Wund 2009). Mosquitoes have also been found to be a consistent component of the diet of Indiana bats and are eaten most heavily during pregnancy (6.6%; Kurta and Whitaker 1998). Taking proactive steps to help protect bats may be very valuable to agricultural and forest product yields and pest management costs in and around a project area. Such conservation measures include limiting tree clearing during the bat active season (varies by location) and/or the non-volant period (June through July), when young bats are unable to fly, and minimizing the extent of impacts to forests, wetlands, and riparian habitats.

### **Monarch butterfly and other pollinators:**

Monarch butterfly was proposed for listing as threatened on December 12, 2024. Through May 19, 2025, we are gathering input through an extended public comment period to encourage the submission of any new information. We will review these comments and then will ultimately issue a final rule. If listed, protections would only go into place after the final rule is published. Section 7 conferences are required if a federal action is likely to jeopardize the continued existence of a proposed species.

For all projects, we recommend the following best management practices (BMPs) to benefit monarch and other pollinators.

#### Monarch and Pollinator BMP Recommendations

Consider monarch and other pollinators in your project planning when possible. Many pollinators are declining, including species that pollinate key agricultural crops and help maintain natural plant communities. Planting a diverse group of native plant species will help support the nutritional needs of Michigan's pollinators. We recommend a mix of flowering trees, shrubs, and herbaceous plants so that something is always blooming and pollen is available during the active periods of the pollinators, roughly early spring through fall (mid-March to mid-October). To

benefit a wide variety of pollinators, choose a wide range of flowers with diverse colors, heights, structure, and flower shape. It is important to provide host plants for any known butterfly species at your site, including native milkweed for Monarch butterfly. Incorporating a water source (e.g., ephemeral pool or low area) and basking areas (rocks or bare ground) will provide additional resources for pollinators. Many pollinators need a safe place to build their nests and overwinter. During spring and summer, leave some areas unmowed or minimize the impacts from mowing (e.g., decrease frequency, increase vegetation height). In fall, leave areas unraked and leave plant stems standing. Leave patches of bare soil for ground nesting pollinators. Avoid or limit pesticide use. Pesticides can kill more than the target pest. Some pesticide residues can kill pollinators for several days after the pesticide is applied. Pesticides can also kill natural predators, which can lead to even worse pest problems. Planting native wildflowers can also reduce the need to mow and water, improve bank stabilization by reducing erosion, and improve groundwater recharge and water quality. Resources:

<https://www.fws.gov/initiative/pollinators/save-monarch>

<https://www.fws.gov/initiative/pollinators>

### **Bald and Golden Eagles:**

Bald eagles, golden eagles, and their nests are protected under the Bald and Golden Eagle Protection Act (54 Stat. 250, as amended, 16 U.S.C. 668a-d) (Eagle Act). The Eagle Act prohibits, except when authorized by an Eagle Act permit, the “taking” of bald and golden eagles and defines “take” as “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb.” The Eagle Act’s implementing regulations define disturb as “...to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior.”

If the Action may impact bald or golden eagles, additional coordination with the Service under the Eagle Act may be required. For more information on eagles and conducting activities in the vicinity of an eagle nest, please visit <https://www.fws.gov/library/collections/all-about-eagles>. In addition, the Service developed the National Bald Eagle Management Guidelines (May 2007) in order to assist landowners in avoiding the disturbance of bald eagles. The full Guidelines are available at <https://www.fws.gov/media/national-bald-eagle-management-guidelines-0>.

If you have further questions regarding potential impacts to eagles, please contact Chris Mensing, [Chris\\_Mensing@fws.gov](mailto:Chris_Mensing@fws.gov) or 517-351-2555.

**Coordination with the Service is not complete if additional coordination is advised above for any species.** Please email our office at [MIFO\\_DKey@fws.gov](mailto:MIFO_DKey@fws.gov) and attach a copy of this letter, so we can discuss methods to avoid or minimize potential adverse effects to those species.

### **Bat References**

Boyles, J.G., P.M. Cryan, G.F. McCracken, T.H. Kunz. 2011. Economic Importance of Bats in Agriculture. *Science* 332(1):41-42.

Kurta, A. and J.O. Whitaker. 1998. Diet of the Endangered Indiana Bat (*Myotis sodalis*) on the Northern Edge of Its Range. *The American Midland Naturalist* 140(2):280-286.

Reiskind, M.H. and M.A. Wund. 2009. Experimental assessment of the impacts of northern long-eared bats on ovipositing *Culex* (Diptera: Culicidae) mosquitoes. *Journal of Medical Entomology* 46(5):1037-1044.

Whitaker, Jr., J.O. 1995. Food of the big brown bat *Eptesicus fuscus* from maternity colonies in Indiana and Illinois. *American Midland Naturalist* 134(2):346-360.

**Summary of conservation measures for your project** You agreed to the following conservation measures to avoid adverse effects to listed species and our concurrence is only valid if the measures are fully implemented. These must be included as permit conditions if a permit is required and/or included in any contract language.

**Eastern Massasauga:** Materials used for erosion control and site restoration must be wildlife-friendly. Do not use erosion control products containing plastic mesh netting or other similar material that could entangle eastern massasauga rattlesnake (EMR). Several products for soil erosion and control exist that do not contain plastic netting including net-less erosion control blankets (for example, made of excelsior), loose mulch, hydraulic mulch, soil binders, unreinforced silt fences, and straw bales. Others are made from natural fibers (such as jute) and loosely woven together in a manner that allows wildlife to wiggle free.

**Eastern Massasauga:** To increase human safety and awareness of EMR, those implementing the project must first review the EMR factsheet (available at <https://www.fws.gov/media/eastern-massasauga-rattlesnake-fact-sheet>), and watch MDNR's "60-Second Snakes: The Eastern Massasauga Rattlesnake" video (available at [https://www.youtube.com/watch?v=-PFnXe\\_e02w](https://www.youtube.com/watch?v=-PFnXe_e02w)).

**Eastern Massasauga:** During project implementation, report sightings of any federally listed species, including EMR, to the U.S. Fish and Wildlife Service within 24 hours.

**Eastern Massasauga:** Do not impact more than 1.0 acres of suitable EMR habitat.

**Eastern Massasauga:** The project will not result in permanent loss of more than one acre of wetland or conversion of more than 10 acres of EMR upland habitat (uplands associated with high quality wetland habitat) to other land uses.

**Eastern Massasauga:** The project will not result in a permanent barrier to snake movement, such as a new road or widening of an existing road, changing the road substrate from dirt to pavement, new trail or canal or other permanent barrier.

**Eastern Massasauga:** Minimize vehicle activity in known/presumed occupied EMR habitat to the extent possible. During EMR active season, speed limits at facilities and access roads (i.e., 2-track and gravel) in occupied habitat should be <15 MPH, to the extent practicable.

**Eastern Massasauga:** At the conclusion of the action, revegetate all disturbed areas with appropriate plant species (i.e., native species or other suitable non-invasive species present on-site prior to disturbance), and monitor all restoration plantings for establishment (and implement supplemental planting as necessary to ensure restorations are of equal or better-quality habitat than previous condition).

**Eastern Massasauga:** Avoid spread of invasive species into EMR habitat by following best practices. This includes inspecting and cleaning equipment and vehicles between work sites as needed to avoid the spread of invasive plant materials. If your project needs an EGLE permit, follow EGLE's standard decontamination best practices.

**Listed Bats:** Project activities will not impact potential Indiana bat roost trees (trees  $\geq 5$  inches in diameter [at breast height] with cracks, crevices and/or exfoliating bark).

**Listed Bats:** The action will not include temporary or permanent lighting of roadway(s), facility(ies), and/or parking lot(s).

**Listed Bats:** Project activities will not impact potential northern long-eared bat roost trees (trees  $\geq 3$  inches in diameter [at breast height] with cracks, crevices, cavities, and/or exfoliating bark).

**Listed Bats:** Project activities will not impact potential tricolored bat roost trees (trees  $\geq 4$  inches in diameter with clusters of live or dead leaves or beard lichen).

**Listed Bats:** The project will not include the application or potential drift of insecticides, fungicides, or rodenticides into forested habitats.

**Listed Bats:** The action will not include tree cutting/trimming of any kind.

**Listed Bats:** The action will not include prescribed burning within or adjacent to (within 200 feet of) mature forest.

**Action Description**

You provided to IPaC the following name and description for the subject Action.

**1. Name**

City of Buchanan LSLR

**2. Description**

The following description was provided for the project 'City of Buchanan LSLR':

Replacement of lead and galvanized water services

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@41.82910165,-86.3598864569687,14z>



## QUALIFICATION INTERVIEW

1. Are there any possible effects to any listed species or to designated critical habitat from your project or effects from any other actions or projects subsequently made possible by your project?

**Note:** select "**Yes**" even if the expected effects to the species or critical habitat are expected to be 1) extremely unlikely (discountable), 2) can't meaningfully be measured, detected, or evaluated (insignificant), or 3) wholly beneficial. Select "No" to confirm that the project details and supporting information allow you to conclude that listed species and their habitats will not be exposed to any effects (including discountable, insignificant, or beneficial effects) and therefore, you have made a "no effect" determination for all species. If you are unsure, select YES to answer additional questions about your project.

*Yes*

2. This determination key is intended to assist the user in the evaluating the effects of their actions on Federally listed species in Michigan. It does not cover other prohibited activities under the Endangered Species Act (e.g., for wildlife: import/export, Interstate or foreign commerce, possession of illegally taken wildlife, purposeful take for scientific purposes or to enhance the survival of a species, etc.; for plants: import/export, reduce to possession, malicious destruction on Federal lands, commercial sale, etc.) or other statutes.

Click **yes** to acknowledge that you must consider other prohibitions of the ESA or other statutes outside of this determination key.

*Yes*

3. Is the action approval of a Federal Land Management Plan (e.g., USFS Forest plan), INRMP, FERC licenses/relicensing, NRC licenses/relicensing, or similar plan? These efforts are beyond the scope of this dkey; users should answer yes to this question and contact the Michigan Ecological Services Field Office for assistance with section 7 consultation requirements.

*No*

4. Is the action being funded, authorized, or carried out by a Federal agency?

*Yes*

5. Does the action require a Michigan EGLE/Army Corps of Engineers joint permit?

*No*

6. Is this an NRCS-funded Forest Management Plan?

*No*

7. Does the action involve wind energy?

*No*

8. Does the action involve solar energy?

*No*

9. Are there at least 30 days prior to your action occurring?

Endangered species consultation must be completed before taking any action that may have effects to listed species. **If you have already started some components of the project on the ground (e.g., removed vegetation) before completing this Dkey, answer “no” to this question.** The only exception is if you have received approval from the Michigan Field Office to use the Dkey less than 30 days before the action will occur. The U.S. Fish and Wildlife Service also needs time to review projects before we can verify conclusions in some dkey output letters.

*Yes*

10. Does the action involve constructing a new communications tower or modifying an existing communications tower?

*No*

11. Does the activity involve aerial or other large-scale application of any chemical (including insecticide, herbicide, lampricide, etc.)?

*No*

12. Does your project include water withdrawal (ground or surface water) greater than 10,000 gallons/day?

*No*

13. Will your action permanently affect hydrology?

*No*

14. Will your action temporarily affect hydrology?

*No*

15. Will your project have any direct impacts to a water body (including Horizontal Directional Drilling (HDD) due to potential for frac out, dredging, hydrostatic testing, stream/road crossings, new storm-water outfall discharge, dams, other in-stream work, changes to water quality or hydrology, etc.)?

*No*

16. Does your project have the potential to indirectly impact a waterbody or riparian zone (e.g., cut and fill, horizontal directional drilling due to the potential for frac out, hydrostatic testing, construction, vegetation removal, discharge, changes to water quality or hydrology, etc.)?

*No*

17. Will your action disturb the ground or existing vegetation?

**Note:** This includes any off road vehicle access, soil compaction, digging, seismic survey, directional drilling, heavy equipment, grading, trenching, placement of fill, pesticide application, vegetation management (including removal or maintenance using equipment or chemicals), tree clearing, cultivation, development, etc.

*Yes*

18. Does the action intersect the **monarch butterfly** species list area?

**Automatically answered**

Yes

19. Monarch butterfly was proposed for listing as threatened on December 12, 2024. Through May 19, 2025, we are gathering input through an extended public comment period to encourage the submission of any new information. We will review these comments and then will ultimately issue a final rule. If listed, protections would only go into place after the final rule is published. We encourage implementing measures that will remove or reduce threats to monarch. If your project will have no effect on monarch butterflies (for example, if your project won't affect their habitat or individuals), then you can make a "no effect" determination for this project.

Are you making a "**no effect**" determination for monarch? Please note that the FWS does not provide concurrence on "no effect" determinations.

Yes

20. Does the action intersect the **Eastern massasauga rattlesnake** species list area?

**Automatically answered**

Yes

21. Will your action impact **less than** 1 acre of [suitable Eastern massasauga rattlesnake habitat](#) ?

Yes

22. Does your action involve prescribed fire?

No

23. Will this action occur entirely in the Eastern massasauga rattlesnake inactive season (October 16 through April 14)?

No

24. Will this action occur entirely in the Eastern massasauga rattlesnake active season (April 15 through October 15)?

No

25. Will the action result in permanent loss of more than one acre of wetland or conversion of more than 10 acres of uplands of potential Eastern massasauga rattlesnake habitat (uplands associated with high quality wetland habitat) to other land uses?

No

26. Will you use [wildlife safe materials](#) for erosion control and site restoration and eliminate the use of erosion control products containing plastic mesh netting or other similar material that could ensnare eastern massasauga rattlesnake? Please note that eastern massasauga rattlesnake have been ensnared in plastic erosion control netting outside known habitat.

Yes

27. Will you watch MDNR's "[60-Second Snakes: The Eastern Massasauga Rattlesnake \(EMR\)](#)" video or review the [EMR factsheet](#) to increase human safety and awareness of EMR?

*Yes*

28. Will all action personnel report any Eastern massasauga rattlesnake observations, or observation of any other listed threatened or endangered species, during action implementation to the Service within 24 hours?

*Yes*

29. Will your action create a new road or trail or alter the horizontal alignment of an existing road or trail?

*No*

30. Will your action result in a new or increased permanent barrier to snake movement? For example, significant widening (>10 ft) of an existing road footprint, converting the surface of an existing road or trail from a non-paved to a paved surface, widening of a paved or gravel trail, or adding new linear features such as fences, canals, or other permanent barriers have the potential to fragment habitat and alter movement and dispersal.

*No*

31. Does the action area contain suitable [hibernation habitat](#), such as small mammal burrows, crayfish burrows, or tree root networks that could provide hibernation habitat? If known hibernacula are present, select YES. If unsure, select YES.

*No*

32. For site access, will you minimize vehicle speeds on roads through suitable eastern massasauga rattlesnake habitat? To do this, can you follow posted speed limits, and minimize speeds at facilities and access roads (e.g., less than 15mph on two-track roads), when possible, during the active season?

If no vehicle activity will occur in eastern massasauga rattlesnake habitat, select YES.

*Yes*

33. Will vehicles or equipment be used off of existing access roads?

*No*

34. At the conclusion of the action, will you revegetate all disturbed areas with appropriate plant species (i.e., native species or other suitable non-invasive species present on site prior to disturbance), as appropriate?

*Yes*

35. Will you monitor all restoration plantings for proper establishment and implement supplemental plantings as necessary to ensure restorations are of equal to or better habitat quality than previous conditions?

*Yes*

36. Will you avoid the spread of invasive species into suitable Eastern massasauga rattlesnake (EMR) habitat by following best practices such as inspecting and cleaning equipment and vehicles for invasive plant materials and seeds before entering EMR habitat areas?  
*Yes*
37. Does the action involve grading, fill, digging, trenching, or other earth moving activity?  
*Yes*
38. Will you properly install and maintain [exclusionary fencing](#) to exclude Eastern massasauga rattlesnake from the area of disturbance during the active season?  
*Yes*
39. Will you clear the project area, using a qualified person, prior to beginning work?  
*No*
40. Does the action area intersect the **Mitchell's satyr** species list area?  
**Automatically answered**  
*Yes*
41. Does the action area intersect the **rufa red knot** species list area?  
**Automatically answered**  
*Yes*
42. Does the action area intersect the **whooping crane (ex. Pop)** species list area?  
**Automatically answered**  
*Yes*
43. Have you determined that the action will have no effect on individuals within the whooping crane nonessential experimental population (NEP)?  
*Yes*
44. Does the action area intersect **copperbelly water snake** species list area?  
**Automatically answered**  
*Yes*
45. Does the action area intersect the **Pitcher's thistle** species list area?  
**Automatically answered**  
*Yes*
46. Does the action area intersect the **Indiana bat** species list area?  
**Automatically answered**  
*Yes*
47. Does the action area contain [potential Indiana bat roost trees](#) (trees ≥5 inches in diameter [at breast height] with cracks, crevices and/or exfoliating bark)?  
*No*
48. Does the action intersect the **tricolored bat** species list area?  
**Automatically answered**  
*Yes*

49. Does the action area contain potential tricolored bat roost trees (trees  $\geq 4$  inches in diameter with clusters of live or dead leaves or beard lichen)?

*No*

50. Does this project intersect the **Northern long-eared bat** species list area?

**Automatically answered**

*Yes*

51. Does the action area contain [potential northern long-eared bat roost trees](#) (trees  $\geq 3$  inches in diameter [at breast height] with cracks, crevices, cavities and/or exfoliating bark)?

*No*

52. Does the action area contain any known or potential hibernacula (natural caves, abandoned mines, or underground quarries)?

*No*

53. Has a presence/absence bat survey or field-based habitat assessment following the [USFWS Range-wide Indiana Bat and Northern Long-eared Bat Survey Guidelines](#) been conducted within the action area?

*No*

54. Does the action involve removal/modification of a human structure (barn, house or other building) known to contain roosting bats?

*No*

55. [Hidden Semantic] Does the action area intersect the third county tier?

**Automatically answered**

*Yes*

56. Does the action include removal/modification of an existing bridge?

*No*

57. Does the action include temporary or permanent lighting of roadway(s), facility(ies), and/or parking lot(s)?

*No*

58. Does the action include the application or potential drift of insecticides, rodenticides, or fungicides (not including herbicides) into forested habitats?

Answer "Yes" if the application may result in transport (e.g., in water) or aerial drift of the pesticide into forested areas.

*No*

59. Does the action include tree cutting/trimming of any kind?

*No*

60. Does the action include prescribed burning within or adjacent to (within 200 feet of) mature forest?

*No*

## **IPAC USER CONTACT INFORMATION**

Agency: Buchanan city  
Name: Michael Schwartz  
Address: 1707 S. Park Street, Suite 200  
City: Kalamazoo  
State: MI  
Zip: 49001  
Email: mschwartz@preinnewhof.com  
Phone: 2693721158

# Appendix F

---

## Project Cost Estimates

Owner:

City of Buchanan

Project Title:

Lead Service Line Replacements

Date:

Apr-26

Project #:

2240749

Item No.	Description	Quantity	Unit	Unit Price	Total Amount
<b><u>Lead Service Line Replacement</u></b>					
1	Replace Lead/Galvanized Services - TBD	200	EA	\$10,000.00	\$2,000,000.00
<b>Subtotal</b>					<b>\$2,000,000.00</b>
Construction Contingencies (10%)					\$200,000.00
Engineering, Administration & Legal (15%)					\$300,000.00
<b>Project Total</b>					<b>\$2,500,000.00</b>

# Appendix G

---

## Present Worth Analysis

<b>Project Description</b>	<u><i>Project LSLR</i></u>	
	<u>FY2027</u>	
<b>Capital Costs (including ELAC)</b>		
Structures (50 yr)	\$2,000,000	
Process Equipment (20 yr)	\$0	
Planning	\$0	
Engineering, Legal, and Administrative	\$300,000	
Project Cost (DWSRF Eligible)	<u>\$2,500,000</u>	
(A) 20-yr Present Worth of Capital Costs <sup>1</sup>	\$1,682,428	
<b>Operation, Maintenance &amp; Replacement (OM&amp;R)</b>		
Energy Cost Savings - <i>Not included/negligible</i>	\$0	
Annual OM&R <sup>2</sup> - <i>Not included/negligible</i>	\$0	
Process Equipment Replacement (10 yr)	\$0	
(B) 20-yr Present worth of OM&R <sup>2</sup>	\$0	
(C) 20-yr Present worth of Energy Cost Savings <sup>3</sup>	\$0	
<b>Salvage Value of Capital</b>		
Salvage value at 20 years	\$1,200,000	
(D) 20-yr Present worth of Salvage <sup>1</sup>	\$807,566	
<b>Total Present Worth (A + B + C - D)</b>	<u><u>\$874,863</u></u>	
<b>Equivalent Annual Cost<sup>4</sup></b>	\$53,504	
Total Existing Residential Equivalent Units (REUs)		
City of Buchanan REUs:	<u>2,091.00</u>	
Unit of Government Responsible for Payment for:		
City of Buchanan	100.00%	
City of Buchanan Annual Cost per REU	\$25.59	
<b>City of Buchanan Monthly Cost per REU</b>	\$2.13	
<b>Total Proposed Project Cost FY2027:</b>	<b>\$2,500,000</b>	
<b>Total Present Worth FY2027:</b>	<b>\$874,863</b>	
<b>Total Equivalent Annual Cost FY2027<sup>4</sup>:</b>	<b>\$53,504</b>	
	<u>Annual<sup>4</sup></u>	/
<b>Total City of Buchanan Cost per REU (FY2027 Projects):</b>	\$25.59	
		<u>Monthly<sup>4</sup></u>
		\$2.13

Notes:

<sup>1</sup> U.S. EPA Discount rate for Year 2026 is 2.00%

<sup>2</sup> Negative value indicates reduction in Annual O&M

<sup>3</sup> Assumed energy cost rate of escalation is 3.75%

<sup>4</sup> Based on Total Present Worth

# Appendix H

---

## Public Meeting Advertisement



**Appendix J**

---

**Resolution of Project Planning Document Approval**

# Appendix K

---

## Overburdened Worksheet

Finance Division

Overburdened Preliminary Determination for FY27 State Revolving Fund Projects

Applicant Information

Applicant: City of Buchanan  
 ITA Tracking Number: 1020-5151  
 Project Name: LSLR  
 Funding Source: DWSRF  
 Regional System:  Yes  No

Contact Information

Name of Applicant Contact and Title	Michael Schwartz
Email	mschwartz@preinnewhof.com
Phone Number	(269) 372-1158

Summary of Determination

Preliminary Determination	Not Overburdened
SRF Loan Minimum to Maintain or Gain Overburdened Status	\$7,549,669.00

The table above displays the preliminary results of the application. If the box displays a significantly overburdened determination than the applicant has a preliminary determination of significantly overburdened for FY27. If the box displays overburdened, whether by calculation or not, the applicant has a preliminary determination of overburdened for FY27.

The following pages break down the information that was submitted and used for the preliminary determination. When a final determination has been made, the applicant will be notified of the result.

### City of Buchanan Blended Community Worksheet

Municipality Name	Percent of Flow	MAHI	TVPC	MAHI Contribution	TVPC Contribution
Buchanan city	91.14	\$56,163.00	\$27,824.00	\$51,187.00	\$25,359.00
Buchanan township- Berrien County	7.65	\$66,783.00	\$55,064.00	\$5,109.00	\$4,212.00
Niles township- Berrien County	1.21	\$63,459.00	\$36,838.00	\$768.00	\$446.00
Flow Total	100			Blended MAHI \$57,064.00	Blended TVPC \$30,017.00

### Initial Overburdened Screening

MAHI Threshold Qualification	Under MAHI Threshold
Overburdened Determination Without Need for Calculation	Not Overburdened

### City of Buchanan Reported Information Used in Calculations

Total amount of anticipated debt for the proposed project (amount of loan requested for FY26 loan)	\$2,000,000.00
Annual payments on the existing debt for the system	\$488,296.00
Total operation, maintenance, and replacement expenses (OM&R) for the system on an annual basis	\$794,060.00
Number of residential equivalent users (REUs) in the system	2,091

### City of Buchanan Calculated Information

New Annual debt from SRF loan	\$134,431.00
Total Annual Cost	\$1,416,787.00
Annual User Cost	\$678.00
MAHI Threshold Dollar Amount	\$855.96
Determination from Calculation	Not Overburdened

For determinations made using anticipated debt (i.e., determinations where the change in loan amount will change the applicant status from overburdened to not or vice versa), a final determination will be made based upon the final loan amount after bids/project scope is finalized and not the anticipated amount provided on this form.

If this applicant has applied for overburdened or significantly overburdened status in prior fiscal years, the numbers in the survey (i.e., breakdown of municipalities and their flow amounts, annual payments on existing debt, total OM&R, and REUs) will be compared to check for discrepancies as most of these numbers should be similar year to year. EGLE will contact the applicant if inconsistencies are found, and the final determination may change if the original numbers need to be updated.

I **Michael Schwartz** on behalf of **City of Buchanan** hereby certify that the information in this form is complete, true, and correct to the best of my knowledge.

Yes

03/23/2026

---

If you need this information in an alternate format, contact [EGLE-Accessibility@Michigan.gov](mailto:EGLE-Accessibility@Michigan.gov) or call 800-662-9278. EGLE 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.

This form and its contents are subject to the Freedom of Information Act and may be released to the public.

# Appendix L

---

## Scoring Worksheet