



# ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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JB PRITZKER, GOVERNOR

JOHN J. KIM, DIRECTOR

## Project Summary and Preliminary Environmental Impacts Determination

Date: FEB 15 2023

Loan Applicant: Village of Pecatonica, IEPA Loan Project Number: L176138

To all interested persons:

Section 662.330 of the Illinois Procedures for Issuing Loans from the Public Water Supply Loan Program requires that the Illinois Environmental Protection Agency (IEPA) conduct an assessment of the environmental impacts of proposed public water supply projects to be funded with loans. This review is carried out in conjunction with the Agency's review of the applicant's project plan.

Prior to final approval of the project plan, the public's comments are sought regarding environmental impacts of the proposed project. Unless new information obtained through the public comment process causes reconsideration, the Agency will approve the project plan at the close of the public comment period.

The applicant will make the attached Project Summary and Preliminary Environmental Impacts Determination (PEID) available for public inspection. Within 60 days of receiving this letter, the applicant must conduct a public hearing regarding both the PEID and project planning. Advertisement of the hearing must be made at least 10 days in advance. The advertisement must include the purpose of the project along with the date, time, and location of the hearing. A comment period of at least 10 days shall be provided after the hearing in which written comments may be submitted to the loan applicant or to the IEPA contact person identified in the attached document.

For information purposes only, a copy of this document is being provided to your local newspaper of record.

Your participation in this process is appreciated.

Sincerely,

Heidi Allen  
Pre-Construction Unit Manager  
Infrastructure Financial Assistance Section  
Bureau of Water

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## Attachment

2125 S. First Street, Champaign, IL 61820 (217) 278-5800  
1101 Eastport Plaza Dr., Suite 100, Collinsville, IL 62234 (618) 346-5120  
9511 Harrison Street, Des Plaines, IL 60016 (847) 294-4000  
595 S. State Street, Elgin, IL 60123 (847) 608-3131

2309 W. Main Street, Suite 116, Marion, IL 62959 (618) 993-7200  
412 SW Washington Street, Suite D, Peoria, IL 61602 (309) 671-3022  
4302 N. Main Street, Rockford, IL 61103 (815) 987-7760

## **Project Summary and Preliminary Environmental Impacts Determination (PEID)**

The following project summary and environmental assessment has been prepared by the IEPA to assist the loan applicant in complying with the public notice requirements. This report is based on information submitted to the IEPA by the Village of Pecatonica. Sources of information include the following documents: Lead Service Line Replacement Project 2022 Project Plan, prepared by Fehr Graham Engineering & Environmental, dated February 2022. Additional documentation was obtained from loan application documents and compiled by the Illinois Environmental Protection Agency.

### **Part I – Project Information**

**Project Name:** Lead Service Line Replacement

**Project Number:** L176138

**Loan Applicant:** Village of Pecatonica      **County:** Winnebago

**Current Population:** 2,090

**Future Population (20 Year):** 2,170

**Number Service Connections:** 953

**Project Description:** The project consists of water service upgrades throughout the Village of Pecatonica to replace existing lead service lines. The Village has replaced 18,491-linear-feet of lead service lines in 2021 and plans on replacing an additional 3,423-linear-feet in 2022. By replacing the lead service lines, the Village will eliminate many health and safety concerns facing the Village's residents.

The Village owns, operates, and maintains a drinking water distribution system. Water is currently sourced from two wells referred to as Well No. 1 & No. 2. At the time this report was received a third well is being constructed to serve as a third water source. Water from the wells is injected with chlorine in the well discharge line and the Village also injects fluoride into the pumped deep well water. The distribution system of the Village consists of 81,290-feet of mains ranging in size from 2-inches to 12-inches and a 500,000-gallon elevated water reservoir. The majority of these pipes are made up of cast iron.

**Project Location:** The service lines to be replaced are located throughout the Village distribution system. The attached map depicts the areas where replacement will occur.

**Project Justification:** Service lines are small pipes that carry drinking water from the water mains into homes. Older service lines may be constructed from lead. Household plumbing fixtures and faucets made prior to 1986 may also contain lead. Lead can enter drinking water when corrosion of pipes and/or fixtures occurs. Lead is a toxic metal that can accumulate in the body over time. The adverse health effects of lead exposure in children and adults are numerous and well documented. Eliminating lead service lines will reduce exposure to residents living in homes currently utilizing lead service lines.

**Estimated Construction Start:** April 2023

**Estimated Completion Date:** December 2023

**Project Cost Estimate:** \$1,250,000

## **Part II – Environmental Issues Associated with the Project**

**Project construction impacts:** No project related construction impacts are expected.

The Illinois Department of Natural Resources (IDNR) State Historic Preservation Office (SHPO) reviewed the initial information submitted for the project review and provided a letter dated May 9, 2022, indicating there are no historic properties affected by the proposed project, therefore the project complies with section 106 of the National Historic Preservation Act of 1966.

The project was also submitted for review through the IDNR EcoCAT system for compliance with the Illinois Endangered Species Act, Illinois Natural Areas (Section 17 Illinois Administrative Part 1075) and the Illinois Wetlands Act (Section 17 Illinois Administrative Code Part 1090). IDNR issued a letter dated January 1, 2022, stating further review would be necessary because the EcoCAT review indicated the possible presence of protected resources near the project area. After reviewing the project information, a joint consultation for Part 1075 and Part 1090 was issued April 21, 2022, concluding that adverse effects are unlikely.

Floodplain and wetland maps were submitted showing that all project work is occurring outside of any floodplains or wetlands.

## **Part III – Project Affordability for Residents and Utility Customers**

The applicant is proposing to finance the project costs with a \$1,250,000 loan from the IEPA Public Water Supply Loan Program (PWSLP). The loan program rules include provisions for incentives such as reduced interest rates, partial principal forgiveness (a reduction in the amount of principal borrowed that would otherwise have to be repaid), and extended repayment periods for qualifying applicants. The final decision for incentive qualification will be determined at the time a loan agreement is issued using updated Census Bureau and Department of Labor data. The Agency adjusts qualifying criteria annually on July 1<sup>st</sup>.

Using current data, the Village of Pecatonica is eligible to receive a 20-year loan term, small community interest rate, environmental discount rate reduction, and partial principal forgiveness. Principal forgiveness is not guaranteed until a loan agreement is issued. A \$1,250,000 loan with an estimated interest rate of 1.24% for a twenty (20) year period, would have an annual repayment of approximately \$70,602. The final loan and annual repayment amounts will be based on the as-bid project costs, and the loan terms in effect on the date the loan agreement is issued. A rate increase is necessary to repay the loan.

Should lead service line principal forgiveness not be available, the loan program rules also include provisions for incentives such as reduced interest rates, partial principal forgiveness, and extended repayment periods for qualifying applicants. The criteria used to determine incentive qualification are found in Sections 662.210 and 662.250 of the Procedures for Issuing Loans from the PWSLP which is available on the Agency's website. The final decision for incentive qualification will be determined at the time a loan agreement is issued using updated Census Bureau and Department of Labor data. Using current data, the Village is eligible for the Small Community reduction in the interest rate, as well as the environmental discount rate, combined. The Village would also qualify for normal principal forgiveness, which is a percentage of the total project cost, the terms of which are outlined in the Agency's Intended Use Plan.

**Source of Loan Repayment:** The Village intends to utilize the Agency's lead service line replacement principal forgiveness program as the entire funding source for the project. However, should lead service line principal forgiveness not be available, the Village could explore financing the project using a traditional loan. The standard source of funding utilized for applicants to finance traditional loans is through proceeds from user rate fees. The following information is representative of criteria used in consideration of standard loan financing.

**Current Average Monthly Residential Water Use:** 3,708 gallons

**Current Average Monthly Residential Cost of Service:** \$51.28

**Projected Average Monthly Residential Cost of Service:** \$57.40

**How is the monthly residential rate/cost of service calculated?**

The Village measures usage in gallons and bills monthly. Current monthly charges include a base rate of \$20.50 and then \$0.83 per 100-gallons of water used. An average user of 3,708-gallons would have a bill that equates to:

$$\$20.50 + (\$0.83 \times (3,708\text{-gallons used} / 100\text{-gallons})) = \underline{\$51.28}$$

**How will the monthly residential rate/cost of service be calculated?**

In order to repay the loan, the Village plans on implementing a base rate increase of \$6.12 per month. An average user of 3,708-gallons would have a bill that equates to:

$$\$26.62 + (\$0.83 \times (3,708\text{-gallons used} / 100\text{-gallons})) = \underline{\$57.40}$$

**Median Household Income (MHI):** \$62,250

**Percentage of MHI needed to pay the projected average residential cost of service:**

1.11%

**Financial Evaluation of the proposed project:** To evaluate the costs of the proposed project for the community, a percentage comparison of the MHI to the average, annual cost for water service is utilized. The MHI listed above is from the current fiscal year's census information. The proposed annual water cost of \$688.80 (\$57.40/month) is 1.11% of the MHI for the area. The percentage is for comparison only and has no impact on whether a project qualifies for funding from the IEPA. The percentage comparison and MHI are two of several criteria used to determine whether a loan project qualifies for interest rate reductions or principal forgiveness.

**Public comments are invited on the proposed project. For further information, contact:**

Bryan Smith, Project Manager  
Infrastructure Financial Assistance Section  
Illinois Environmental Protection Agency  
Bureau of Water  
1021 North Grand Avenue East  
P.O. Box 19276  
Springfield, Illinois 62794-9276  
(217)782-2027

PECATONICA  
LEAD WATER SERVICES  
VILLAGE OF PECATONICA  
WINNEBAGO COUNTY, ILLINOIS  
JANUARY 2022

LEGEND  
■ LEAD SERVICE REPLACEMENTS

Scale: 1" = 100' 0"

North Arrow

Map of Pecatonica, Illinois, showing a grid of streets and property lots. A large, dark, irregularly shaped area in the center of the map indicates a lead service replacement project. The map includes a north arrow in the top left corner and a scale bar. A legend in the bottom right corner identifies the dark area as 'LEAD SERVICE REPLACEMENTS'. The map is titled 'PECATONICA LEAD WATER SERVICES VILLAGE OF PECATONICA WINNEBAGO COUNTY, ILLINOIS JANUARY 2022'.

**FEHR GRAHAM**  
ENGINEERING & ENVIRONMENTAL

W. J. G. DE VRIES ET AL.

Vol. 10, No. 10, 1987

$$\begin{aligned} \text{mean } \mu &= 1.4, \\ \text{variance } \sigma^2 &= 2.75, \\ \text{p.d.f. } &= \frac{1}{\sqrt{2\pi}} e^{-x^2/2\sigma^2} \\ \text{c.d.f. } &= \Phi\left(\frac{x-\mu}{\sigma}\right) \end{aligned}$$

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