



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397

JB PRITZKER, GOVERNOR

JOHN J. KIM, DIRECTOR

Project Summary and Preliminary Environmental Impacts Determination

Date: MAR 06 2020

Loan Applicant: Village of Beecher, Loan numbers: L175759, L175791, L175792, L175793

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

HA:CLN Beecher LSLR PEID cover letter

Attachment

4302 N. Main Street, Rockford, IL 61103 (815) 987-7760
595 S. State Street, Elgin, IL 60123 (847) 608-3131
2125 S. First Street, Champaign, IL 61820 (217) 278-5800
2009 Mall Street Collinsville, IL 62234 (618) 346-5120

9511 Harrison Street, Des Plaines, IL 60016 (847) 294-4000
412 SW Washington Street, Suite D, Peoria, IL 61602 (309) 671-3022
2309 W. Main Street, Suite 116, Marion, IL 62959 (618) 993-7200
100 W. Randolph Street, Suite 4-500, Chicago, IL 60601

Project Summary and Environmental Assessment

The Village of Beecher has applied to the Illinois Environmental Protection Agency's (IEPA) Public Water supply loan program to request funding to help finance a drinking water distribution system project. The following project summary and environmental assessment has been prepared by the IEPA to assist the loan applicant comply with the public notice requirements.

This report is based on information submitted to the IEPA by the Village of Beecher. Sources of information include the following documents: the November 2019, Village of Beecher, Lead Service Line Replacement & Water Meter Improvements Project Plan information, with November 13, 2019 transmittal letter; and the additional planning information, with February 24, 2020 cover letter that was in response to the February 19, 2020 IEPA planning review letter. This information was prepared by Robinson Engineering.

Part I – Project Information

Loan Applicant: Village of Beecher

County: Will

Project Name: lead service line replacements and meter replacements

Project Numbers: L175759 (Phase 1)
L175791 (Phase 2)
L175792 (Phase 3)
L175793 (Phase 4)

Current Population: 4,460

Future Population (20 year): 7,293

Project Description: The project consists of the replacement of approximately 375 existing lead service lines and 150 existing water meters and will include construction site restoration. New High-Density Polyethylene (HDPE) water service pipe will be installed with horizontal directional drilling. Existing lead services will be abandoned in place. Where meter replacement is necessary, it will be completed at the same time as the service line replacement. The construction contractor must obtain a private property access agreement and will schedule appointments to conduct the work. The Village is proposing to conduct this work in four phases over a four-year period

Project Location: Construction will occur mostly on the west side of the Village. See attached maps for the project areas and phases. There are approximately 700 services located within the proposed areas, however not all have lead services lines. Based on spot checks performed within the project area, the Village estimates that approximately 375 lead service lines are present and will be replaced. The construction contractor will determine the existing service material type and best method for replacement construction and restoration.

Project Justification: Corrosion of lead service lines may result in lead entering the water system and over time can pose a health risk to the consumer. The proposed removal and replacement of lead service lines will reduce the current health risk for water users. The existing

water meters are at the end of their useful life and do not accurately measure water consumption. Replacing the water meters with new ones will provide more accurate usage information and reduce labor time.

Estimated Construction Start Date: July 2020 (Phase 1) Each phase is proposed to start in July and end within 10 months or less in the following calendar year.

Estimated Construction Completion Date: May 2024 (Phase 4)

Project Cost Estimate: \$3,301,000 (total for all four phases)

Part II – Environmental Issues Associated With the Project

Project construction impacts: The construction impacts associated with the project will be typical of water main construction. The construction will cause some minor erosion and wind-blown dust from excavated materials. There will also be the normal noises associated with this type of construction. Additionally, during construction there will be temporary disruption of normal traffic patterns due to the movement of construction vehicles and the delivery of materials to the construction sites. Issues with noise, dust and storm water controls can be minimized by specifications and conditions within the construction contract documents.

Illinois Department of Natural Resources: The loan applicant submitted project information to the Illinois Department of Natural Resources (IDNR) EcoCAT website to determine compliance with the Illinois Endangered Species Act, Illinois Natural Areas Preservation Act and the Illinois Wetlands Act. The review results indicated that protected resources may be in the vicinity of the locations submitted and the project will be evaluated further. An October 22, 2019 letter by IDNR states that based on additional evaluation, adverse effects are unlikely and terminated their consultation for 17 Ill. Adm. Code Parts 1075 and 1090. This indicates that there are no anticipated impacts to threatened and endangered species, wetlands or other natural areas from the proposed project. The planning report indicates the project will not disturb any wetlands, riparian areas or open water areas and that sedimentation and erosion controls will be implemented in the project.

Illinois Historic Preservation Division of IDNR: An IDNR letter dated November 22, 2019 indicates that there are no anticipated impacts to historic, architectural, and archaeological resources from the proposed project and that it complies with Section 106 of the National Historic Preservation Act of 1966.

Part III – Project Implementation and Affordability for Residents and Utility Customers

The estimated costs for each phase of the project are:

Phase 1:

Lead Service Line Replacement	\$775,000
Water Meter Replacement	\$51,000
Contingency (10%)	\$82,600
Design Engineering	\$55,000
Construction Engineering	\$89,000
Total Phase 1	\$1,052,600

Phase 2:	
Lead Service Line Replacement	\$769,000
Water Meter Replacement	\$21,000
Contingency (10%)	\$79,000
Design Engineering	\$40,000
<u>Construction Engineering</u>	<u>\$89,000</u>
Total Phase 2	\$998,000

Phase 3:	
Lead Service Line Replacement	\$769,000
Water Meter Replacement	\$35,000
Contingency (10%)	\$80,400
Design Engineering	\$40,000
<u>Construction Engineering</u>	<u>\$89,000</u>
Total Phase 3	\$1,013,400

Phase 4:	
Lead Service Line Replacement	\$175,000
Water Meter Replacement	\$4,000
Contingency (10%)	\$18,000
Design Engineering	\$15,000
<u>Construction Engineering</u>	<u>\$25,000</u>
Total Phase 4	\$237,000

Total of all Phases: \$3,301,000

The applicant is proposing to finance the project costs with a loan from the Public Water Supply Loan Program (PWSLP). A \$3,301,000 loan with an estimated interest rate of 2.00% for a twenty (20) year period, would have an annual repayment of approximately \$200,391. If the annual loan repayment amount is divided between the Village's 1,729 service customers, each customer would pay \$115.90 per year, which equals \$9.66 per month.

The current loan program interest rate is 2.00%. The interest rate adjusts annually on July 1st. All loans are subject to the interest rate in effect at the time a loan agreement is issued. The loan program rules 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 of Beecher is not eligible for regular PWS principal forgiveness but is eligible for lead service line replacement principal forgiveness and the 0.2 % Environmental Discount interest rate reduction of the base rate. The Agency adjusts qualifying criteria annually on July 1st and the community specific information is also subject to change.

For fiscal year 2020, Beecher would be eligible for up to \$1,000,000 Lead Service Line Replacement (LSLR) principal forgiveness for loan projects started during the fiscal year. If it is assumed that the LSLR principal forgiveness remains the same for each phase of the project and the Village of Beecher does receive the above referenced IEPA loan program incentive reductions, the possible cost savings to the estimated loan repayments can be calculated as follows: the maximum amount of principal forgiveness over the four year period would subtract \$2,978,700 from the total \$3,301,000 estimated project cost, which would leave \$322,300 of remaining project costs to be repaid. A \$322,300 loan with an estimated interest rate of 1.80% for a twenty (20) year period, would have an annual repayment of approximately \$19,201. If this annual loan repayment amount is divided between the Village's 1,729 water service customers, each customer would pay \$11.11 per year, which equals \$0.93 per month. This example for principal forgiveness savings is based on combining all four phases of the project. As noted above, Beecher plans to complete the project in four phases with a separate IEPA loan agreement for each phase and the principal forgiveness criteria can change each fiscal year.

Source of Loan Repayment: The City indicates that the existing water service rates will provide adequate revenue to operate the systems and repay the loan amount if LSLR principal forgiveness is obtained. If principal forgiveness is not obtained, the Village intends to increase the water user charges by \$1.25 per 1,000 gallons.

Current Average Residential Cost of Service: Billing is done bi-monthly (every 2 months). An average residential customer of the Beecher system reportedly uses 9,670 gallons of water per bi-monthly billing period and currently would pay \$59.42 per two-month billing period for water service.

How is the monthly residential rate/cost of service calculated? Beecher's residential water user charge system is based on a minimum bi-monthly service charge of \$51.40, which includes the first 8,000 gallons, plus \$4.80 per each additional 1,000 gallons of water used, plus for usage above 30,000 gallons, the per 1,000-gallon rate increases to \$5.80. For an average residential customer, who uses 9,670 gallons, this calculates to: $\$51.40 + (1.67 \times \$4.80) = \$59.42$ per bi-monthly billing period.

Projected Average Residential Cost of Service: There will be no change to the water service user charge if LSLR principal forgiveness is obtained. If no principal forgiveness is obtained, the 1,000-gallon rate will increase by \$1.25. For an average residential customer, who uses 9,670 gallons, this calculates to: $\$61.40 + (1.67 \times \$6.05) = \$71.51$ per bi-monthly billing period.

Number of Customers or Service Connections: There are 1,729 total water service customers, which includes 1,650 residential, 76 commercial and 3 industrial customers.

Median Household Income (MHI): \$67,150

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 projected annual water cost of \$429.06 is 0.64 percent of the MHI for the Village of Beecher. 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:

Chris Nifong, Project Manager (217) 782-2027
Bureau of Water, IFAS
Illinois Environmental Protection Agency
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276

Village of Beecher, Illinois

Lead Service Line & Water Meter Replacement Various Locations Aerial Photograph – Google Earth 2019

Project Area In Red



Project Area

Not To Scale



Mailing List – Environmental Review

Project: Beecher

L17: 5759, 5791, 5792, 5793

Check entities to receive Preliminary Environmental Impacts Determination/Notice of Categorical Exclusion. Agencies may be omitted if they have already provided an unconditional written sign-off on the planning.

_____ Illinois Historic Preservation Agency (SHPO)

_____ Illinois Department of Natural Resources
Office of Realty & Environmental Planning (for rare/endangered species, natural areas, and Interagency Wetlands Policy Act)

_____ Illinois Department of Natural Resources
Office of Water Resources (for lakes, rivers and stream crossings, floodway/floodplain construction)

_____ Illinois Department of Agriculture

U.S. Army Corps of Engineers – Check Appropriate Regional Office

_____ Rock Island District

_____ St. Louis District

_____ Chicago District

Designated 208 Areawide Planning Agency – Check Appropriate Agency

_____ CMAP

_____ GERPDC

_____ SWIPC

Green Infrastructure Coordinator: Chris Covert

IEPA Field Office (Elgin)

Loan Applicant

The Honorable Greg Szymanski
Mayor, Village of Beecher
625 Dixie Highway
Beecher, IL 60401

(Continued on Back)

Local Newspaper of Record

Beecher Herald

120 W. North Street

Peotone, IL 60568

Consulting Engineer

Robinson Engineering

Attn: Jonathan Flowers

10045 W. Lincoln Hwy

Frankfort, IL 60423

Other Interested Parties

bcc -
 Heidi - paper
 copy needed
 Thanks

Project Manager: Chris NiFong

Date: 3-6-20

Copies of the Preliminary Environmental Impacts Determination/Notice of Categorical Exclusion have been mailed to the above entities.

Signed: _____

Date: _____