



# ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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JB PRITZKER, GOVERNOR

JAMES JENNINGS, ACTING DIRECTOR

## Project Summary and Preliminary Environmental Impacts Determination

Date: JAN 30 2025

Loan Applicant: Village of Lake Zurich      EPA Loan Project Numbers: L177175 & L177299

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 State'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. After receiving this letter, the loan 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.

Your participation in this process is appreciated.

Sincerely,

Nidhan Singh, M.B.A.  
State Revolving Fund Manager  
Infrastructure Financial Assistance Section  
Bureau of Water

NS:BS: lake zurich 7175, 7299 peid.docx

Attachment

2125 S. First Street, Champaign, IL 61820 (217) 278-5800  
115 S. LaSalle Street, Suite 2203, Chicago, IL 60603  
1101 Eastport Plaza Dr., Suite 100, Collinsville, IL 62234 (618) 346-5120  
5911 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. Information in this report was obtained, in part, from the following sources: Lake Zurich Distribution System Improvements Project Plan submitted March 2024, by CDM Smith, on behalf of the Village of Lake Zurich; Project Plan Amendment submitted September 2024, by CDM Smith; and other project information compiled by IEPA.

### Part I – Project Information

**Project Name:** Lake Zurich Distribution System Improvements

**Loan Applicant:** Village of Lake Zurich (Village)

**County:** Lake

**Project Numbers:** L177175 & L177299

**Current Population:** 19,759

**Future Population (20 year):** 24,000

**Project Descriptions:** The Village is proposing a multiphase project where Phase 1 (L177175) will include the construction of a new 1-million-gal reservoir, a pump station with three pumps, a new chlorine booster and appurtenances. Phase 2 (L177299) will include the installation of approximately 8,500 linear feet of 20-in distribution main.

**Background Information:** The Village's distribution system consists of approximately 115 miles of distribution main, primarily made of asbestos-cement, cast-iron, ductile-iron, and PVC. Pipe size ranges in diameter from 4-in to 16-in. Water is currently sourced from an underground aquifer via 5 primary wells. Treatment consists of ion exchange systems that remove naturally occurring radium, barium, and reduces hardness content, water is also treated with chlorine. The Village stores water in two elevated tanks totaling 2.25MG. The Village also provides water to customers in the Villages of Deer Park and Kildeer.

The Village is seeking to join the Central Lake County Joint Action Water Agency (CLCJAWA) in an effort to transition away from their current water source. Currently the raw water being supplied by the wells contains radium at levels exceeding the Maximum Contaminant Levels (MCL) established by the U.S. EPA. The Village entered into a Compliance Commitment Agreement with IEPA to meet the MCL and established the ion exchange process to do so, but the disposal of byproducts from this process has recently been regulated by Lake County which will require additional treatment or alternative disposal options. This project switches the source of the Village's drinking water and will eliminate regulatory concerns. The improvements proposed in these projects are required to switch from the Village's existing supply to CLCJAWA's.

**Project Location:** See attached map for project locations.

Project # / Phase	Start Construction	End Construction	Cost Estimate
L177175 / Phase 1	3/2026	7/2028	\$37,000,000
L177299 / Phase 2	3/2027	9/2028	\$8,000,000

## **Part II – Environmental Review and Impacts**

**Illinois Department of Natural Resources (IDNR) State Historic Preservation Office (SHPO):** 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 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.

**IDNR EcoCAT:** The project was also submitted to the IDNR to determine compliance with the IL Endangered Species Act, IL Natural Areas Preservation Act, and Wetlands Act. IDNR's review identified protected resources that may be in the vicinity of the proposed project as well as wetlands within 250 feet of the project location. Upon further review, IDNR concluded that adverse impacts to protected resources were determined unlikely. Initially consultation for Part 1075 and Part 1090 were closed, with the condition that once the proposed facility locations for the pump stations were determined they would be resubmitted for review. The chosen site was submitted for review and there was no record of protected resources but there were wetlands identified within 250 feet of the project location. Upon further review, IDNR concluded that adverse impacts are unlikely, therefor consultation for Part 1075 and Part 1090 were closed.

**U.S. Army Corps of Engineers (ACE):** The project was submitted for review to USACE, upon initial review they stated the project may be authorized by Nationwide Permit #58, but their notification was considered incomplete at the time of submittal and additional information would be required to complete it. Per comments received during meetings with USACE, it was stated that a determination cannot be granted without additional project details and design that will not be available until the project is further along. The Village agrees to submit the project information to USACE once design has progressed and incorporate any terms & conditions into the project plans & specification USACE may issue.

**IDNR Office of Water Resources (OWR):** IDNR OWR reviewed the initial information submitted for project review and provided a letter indicating that all proposed work is located outside the mapped regulatory floodway. Therefore, an IDNR OWR permit is not required.

**Illinois Department of Agriculture (IDOA):** IDOA reviewed the initial information submitted for the project and determined that the project complies with the Illinois Farmland Preservation Act.

**Tribal Consultation:** The project information was provided to all interested, federally recognized Indian Tribes for consultation. Only the Forest County Potawatomi Tribe responded, offering a finding of No Historic Properties and requested to remain as a consulting party on the project.

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

The applicant is proposing to finance each of the two (2) project phases with loans from the IEPA Public Water Supply Loan Program (PWSLP). Loans totaling \$45,000,000 with an estimated interest rate of 1.87% for a twenty (20) year period, would have an annual repayment of approximately \$2,698,648. 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.

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 is eligible to receive a 30-year loan term.

**Source of Loan Repayment:** User Fees & Nonresident Sales Tax

#### **Current Average Monthly Residential Cost of Service:**

Lake Zurich - \$118.98 per month, Kildeer & Deer Park - \$189.66

#### **Projected Average Monthly Residential Cost of Service:**

Lake Zurich - \$208.98 per month, Kildeer & Deer Park - \$279.66

**Average Monthly Residential Water Use:** 6,000 gallons

#### **Number of Customers or Service Connections:**

Lake Zurich: 6,700, Kildeer: 69 (includes 1 retail connection), Deer Park: 2 (municipal building)

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

The Village measures usage in gallons and bills monthly. Current monthly charges include a rate of \$19.83 per 1,000 gal used for customers within the Village, and a separate rate of \$26.98 per 1,000 gal used for customers outside the Village. An average user of 6,000 gallons would have a bill that equates to:

Lake Zurich:  $\$19.83 \times (6,000 \text{ gal}/1,000 \text{ gal}) = \$118.98$

Kildeer/Deer Park:  $\$26.98 \times (6,000 \text{ gal}/1,000 \text{ gal}) = \$161.88$

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

The Village will be implementing an annual rate increase of \$3 per year until Fiscal Year 2028. Monthly charges will include a rate of \$34.83 per 1,000 gal used for customers within the Village, and a separate rate of \$41.98 per 1,000 gal used outside the Village. An average user of 6,000 gallons would have a bill that equates to:

Lake Zurich:  $\$34.83 \times (6,000 \text{ gal}/1,000 \text{ gal}) = \$208.98$

Kildeer/Deer Park:  $\$41.98 \times (6,000 \text{ gal}/1,000 \text{ gal}) = \$251.88$

#### **Median Household Income (MHI):**

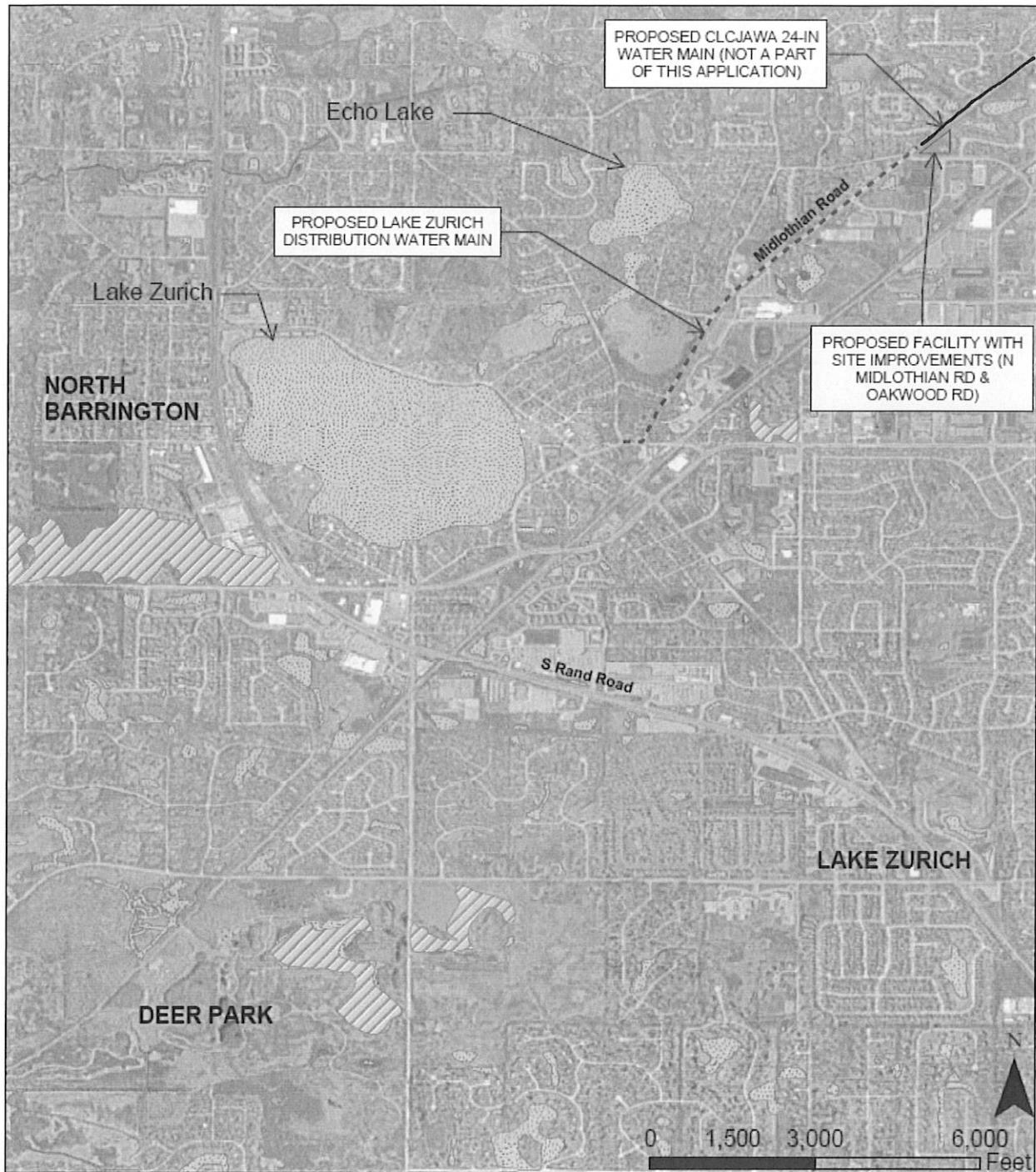
Lake Zurich: \$135,211, Kildeer: \$250,000, Deer Park: \$172,586

**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 \$2,507.76 (\$208.98/month) is 1.85% of the MHI for Lake Zurich, \$3,022.56 (\$251.88/month) is 1.21% of the MHI for Kildeer, and \$3,022.56 (\$251.88/month) is 1.75% of the MHI for Deer Park. 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  
2520 West Iles  
P.O. Box 19276  
Springfield, IL 62794-9276  
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### Legend

- Proposed New Water Transmission Main to Lake Zurich
- - - Proposed Watermain via Open Cut
- ADID Wetlands
- Rivers, Streams and Ponds

Proposed Lake Zurich  
Distribution System  
Improvements