

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: The Illinois Alluvial Regional Water Company's Preliminary Engineering Report for Central Illinois Regional Water Supply dated July 2016 with Amendment 1 dated August 2018, Amendment 2 dated January 2024, and Amendment 3 dated September 2024, prepared by MECO-Heneghan Engineers, LLC.

Part I –Applicant and Project Information

Loan Applicant: Illinois Alluvial Regional Water Company

Project Numbers: L177181, L177253 and L177254

Project Name: Regionalization Project

Counties: Macoupin and Jersey

Current Population: 35,000

Future Population (20 years): 34,000

The Illinois Alluvial Regional Water Company (IARWC) was created to regionalize various water systems in the area to a single not-for-profit public water supply. IARWC currently includes seven members, the City of Bunker Hill, City of Carlinville, Central Macoupin County Rural Water District, Village of Dorchester, Village of Fieldon, Fosterburg Water District and Jersey County Rural Water Company. Currently each of the seven communities obtain their drinking water from surface water sources such as lakes, or they are purchasing water from a for-profit company or a system that is re-selling purchased water. IARWC will own and operate the regionalization infrastructure that will supply treated groundwater to each of the members. Each member will continue to own, operate, and manage their local water distribution system infrastructure and purchase bulk water from IARWC.

Project Description: The Illinois Alluvial Regional Water Company is proposing to construct a single public water supply system to regionalize various systems in the area. IARWC is proposing to construct an 8 million gallon a day (MGD) lime softening ground water treatment plant with 5 wells, backup generators at the wells and treatment plant, approximately 48.8 miles of raw and finished watermain, master meters for each community member, 2 million gallons (MG) of distribution storage, and all appurtenances.

The proposed project consists of three stages:

Stage 1 was split into Stage 1a and Stage 1b. Stage 1a will be funded by Illinois Rural Development. This project will include two wells, raw watermain, an 8 MGD lime softening water treatment plant with 3 claricones, SCADA system, chemical feed and laboratory and 5.25 miles of finished watermain between the water treatment plant and the railroad tracks on St. Mary's Road to serve Fieldon and part of Jersey County Rural Water Company.

Stage 1b (L177181) construct finished water transmission main between the St. Mary's Road and the railroad tracks on Crystal Lake Road to add services to Fieldon and Jersey County Rural Water Company. This stage is comprised of contracts A through G and will include the following:

- 3 wells with pumps and well houses
- 1 clearwell for the treatment plant
- 2 MG elevated water storage tank
- Approximately 10.5 miles of finished water transmission main (80,500 LF of 30-inch ductile iron pipe, 160 LF of 30-inch directional bore pipe, 600 LF of 42-inch highway bore pipe)
- 5 gate valves
- 12 fire hydrants
- 2 master meters

Stage 2 (L177253) construct finished water transmission main from the railroad tracks on Crystal Lake Road near Highway 67 to Highway 159 to add services to Fosterburg Water District, Bunker Hill, Dorchester and Central Macoupin County Rural Water District. This stage is comprised of contracts H through J and will include the following:

- Approximately 20 miles of finished water transmission main (60,600 LF of 30-inch ductile iron pipe, 540 LF of 42-inch highway bore pipe, 200 LF of 54-inch railroad bore pipe)
- 3 gate valves
- 8 fire hydrants
- 4 master meters

Stage 3 (L177254) construct finished water transmission main from Highway 159 to Rinaker Road to add services for Carlinville. This stage is comprised of contracts K and L and will include the following:

- Approximately 14 miles of finished water transmission main (63,400 LF of 24-inch ductile iron pipe, 53,300 LF 18-inch ductile iron pipe, 2,300 LF 18-inch directional bore pipe, 420 LF of 36-inch highway bore pipe, 360 LF 30-inch highway bore pipe, 120 LF of 42-inch railroad bore pipe)
- 10 gate valves
- 14 fire hydrants
- 1 master meter

Project Location: See attached map for project locations. Well site will be located in Fieldon, near Glades Access Road (County Road 1200N), east of State Highway 100; water treatment plant will also be located in Fieldon, near Mowen Lane north of State Highway 16. The transmission main will run near State Highway 16, from the treatment plant going east through Fieldon, Jerseyville, Shipman, and Royal Lakes. Once through Royal Lakes, the main will turn north towards Rinaker Road located south-west of Carlinville.

Project Justification: The Illinois Alluvial Regional Water Company will provide a central regional water source that is not under the influence of surface water. Their not-for-profit organization will supply affordable and reliable water to its members. IARWC currently doesn't have the infrastructure to convey treated water to its members water delivery points and will have to install finished water transmission mains to be able to distribute the water. IARWC is proposing a lime softening treatment plant to reduce high nitrates, coliform and water hardness. Each of the members proposing to connect to the Illinois Alluvial Regional Water Company has experienced a variety of issues with their current water source such as: elevated disinfection by-products like

total trihalomethanes (TTHM's) and haloacetic acids (HAA5's); low water levels; high levels of sediments; poor water quality; low chlorine residuals; and some are currently purchasing water from for-profit companies.

Projected Construction Time Frame:

Stage 1b: Construction is projected to begin in January 2026 and be completed by January 2028.

Stage 2: Construction is projected to begin in January 2027 and be completed by July 2028.

Stage 3: Construction is projected to begin in January 2027 and be completed by July 2028.

Total Project Cost Estimate: \$211,750,000

(Stage 1a is estimated to be \$79,000,000 and will be funded by Illinois Rural Development. The remaining stages will be funded by the Illinois Environmental Protection Agency: Stage 1b: \$55,500,000, Stage 2: \$56,000,000, Stage 3: \$21,250,000)

Part II – Environmental Review and Impacts

Project construction impacts: Temporary adverse environmental impacts such as construction-associated noise, blowing dust, air emissions, traffic disruption, and soil erosion will likely occur during construction.

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

The loan applicant submitted project information to the IDNR-SHPO to ensure compliance with the National Historic Preservation Act. An IDNR letter dated September 25, 2024, stated the project as proposed will have no adverse effects on the archaeological sites 11JY50, 11MP236 or 11MP237, which are listed on or eligible for listing on the National Register of Historic Places. This project is in compliance with Section 106 of the National Historic Preservation Act of 1966.

Tribal Historic Preservation Office (THPO): The loan applicant submitted project information to the THPO with registered interest in Macoupin and Jersey Counties, to ensure compliance with Section 106 of the National Historic Preservation Act. Review by tribal organizations is still ongoing for all three stages of the project. Any required mitigative measures will be incorporated into project design.

Illinois Department of Natural Resources (IDNR): The loan applicant submitted project information to the IDNR EcoCAT to determine compliance with the Illinois Endangered Species Act, Illinois Natural Areas Preservation Act and the Illinois Wetlands Act. IDNR letters dated July 27, 2023, and August 7, 2023, states adverse effects are unlikely for these locations (IDNR Project Numbers: 2401169, 2401174, 2401221, 2401240, 2401245, and 2401247) and terminated their consultation under 17 Ill. Adm. Code Part 1075 and 1090.

IDNR letters dated July 20 and 27, 2023, indicated protected resources may be in the vicinity of some project locations. The Department recommended the following actions be taken to avoid adversely impacting listed species in the vicinity of the projects.

- Ornate Box Turtle (*Terrapene ornata*) for IDNR Project Number 2401215:

The Department recommends work on the project occurs during the turtle's inactive season from approximately November 1st to March 1st. If work must occur during the active season, the site should be thoroughly scouted for ornate box turtles before any work begins. All on-site personnel should be educated about this species and be instructed to contact the Department immediately if they are encountered in the project area. Fliers with photos of adult and juvenile ornate box turtle, and life history information, should be distributed to personnel. The flier should also contain contact information for the Department, Natural Heritage Division. State-listed species may not be handled without the appropriate permits pursuant to the Illinois Endangered Species Protection Act. Where applicable, exclusionary fencing should be installed around the work area, trenched into the ground, and inspected daily for ornate box turtles. Excavations should be inspected daily for trapped wildlife and safely covered overnight. Soil or other potential turtle nesting medium stockpiles should also have exclusionary fencing installed around the perimeter to discourage turtle nesting and potential harm.

- Indiana Bat (*Myotis sodalis*) for IDNR Project Numbers 2401133, 2401141 and 2401148: The Department recommends any tree removal occurs between November 15th and March 31st when bats are likely hibernating off site. If these dates cannot be accommodated, a field visit should be performed by a qualified individual (biologist, forester, or others who have been trained accordingly) to determine if suitable trees are present to provide habitat. If suitable habitat trees are found within the project area, they should be clearly flagged and/or marked and shall not be cut between April 1st – November 14th when the bats are most likely to be present. Suitable habitat trees are defined as trees less than 5 inches diameter breast height, with exfoliating bark and other features potentially utilized by roosting bats. All non-suitable trees may be cut at any time.

- Timber Rattlesnake (*Crotalus horridus*) for IDNR Project Number 2401133: The Department recommends all work be started and completed between the dates of November 1st and March 31st. The timber rattlesnake would be hibernating during this period and is not likely to be adversely impacted from construction activity. If these dates cannot be accommodated, then the Department recommends the following measures be taken: The site should be thoroughly surveyed by a qualified biologist for timber rattlesnakes before work begins. All onsite personnel should be educated about this species and instructed to contact the Department immediately if a timber rattlesnake is encountered in the project area. Fliers with photos of adult and juvenile timber rattlesnakes, as well as snake life history information, should be distributed to onsite personnel. Fliers should contain contact information for the Department. State-listed species may not be handled without the appropriate permits pursuant to the Illinois Endangered Species Protection Act. Exclusionary fencing should be installed around the work area (where appropriate), trenched into the ground, and inspected daily for timber rattlesnake presence. Excavations should be inspected daily for trapped wildlife and safely covered overnight.

Illinois Alluvial Regional Water Company must note these recommendations within their plans and specifications, so project Contractors can identify the protected resources and take proper action according to the IDNR review letters.

United States Army Corps of Engineers (USACE): The loan applicant submitted project information and has had conversations with the USACE to determine compliance regarding projects involving construction within any river, stream, wetland, floodway, waterway, or any

body of water. The USACE St. Louis District's letter dated April 24, 2024, stated Stage 1 of this project will require a Nationwide Permit No. 58, and special conditions for the Indiana Bat (*Myotis sodalist*) and the threatened Northern Long-eared Bat (*Myotis septentrionalis*) found in the forest areas and stream corridors. The USACE stated the removal of any trees shall be avoided to the maximum extent practical to complete the project. To not adversely affect these listed species, you must not cut or clear trees three inches or greater in diameter at breast height during the bats' active season, April 1 – September 30. USACE involvement is still unknown for Stage 2 and 3 of this project. The Illinois Alluvial Regional Water Company will comply with the terms and conditions of the permits required by USACE and incorporate the permits and special conditions into the specifications of the project's construction contract documents.

Illinois Department of Natural Resources-Office of Water Resources (IDNR-OWR): The loan applicant submitted project information and has had conversations with the IDNR-OWR to determine compliance regarding projects involving construction within any flood plain or floodway, or along a jurisdictional river, lake or stream. An IDNR-OWR letter dated March 26, 2024, enclosed a Permit No. DS2024030 for the Stage 1 well field. This letter also stated the Stage 1 transmission mains will require Statewide Permit's No. 6 and 8. IDNR-OWR involvement is still unknown for Stage 2 and 3 of this project. Some locations of this project will require a Regional Permit No 3, or Statewide Permit No 8, while other areas of the project are yet unknown if a permit is required. The Illinois Alluvial Regional Water Company will comply with the terms and conditions of the permits required by IDNR-OWR and incorporate the permits and special conditions into the specifications of the project's construction contract documents.

Part III – Project Affordability for Residents and Utility Customers

The applicant is proposing to finance the project costs with loans from the IEPA Public Water Supply Loan Program (PWSLP). IARWC intends to apply for three separate SRF loans with a total value of \$132,750,000 to support construction of the improvements that are within this project plan. IARWC also intends to utilize funding in the amount of a \$24,000,000 grant and a low interest loan in the amount of \$42,000,000 from USDA Rural Development in addition to these state revolving funds loans. A \$132,750,000 loan with an estimated interest rate of 1.87% for a thirty (30) year period, would result in an annual repayment of approximately \$5,785,020.

The current loan program interest rate is 1.87%. 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 qualifications are found in Section 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 qualifications 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 1st and the community specific information is also subject to change.

Source of Loan Repayment: User fees.

Projected Average Monthly Cost of Service: IARWC is planning on charging each of the seven communities \$10.98 per 1,000 gallons of bulk water used.

How is the monthly residential rate/cost of service calculated? Each of the community members will continue charging their customers additional user rates, this cost only reflects the bulk water sales rate IARWC will be charging for their water supplied to each community.

IARWC will be charging each member a set price per 1,000 gallons of water used at the master meter. Currently the delivery rate is anticipated to be \$10.98 per 1,000 gallons.

Based on the current daily average amount of water used, each community member will pay IARWC the following:

- Bunker Hill \$29,343.35 per month
- Carlinville \$95,270.39 per month
- CMCRWD \$19,313.12 per month
- Dorchester \$4,252.29 per month
- Fieldon \$3,322.33 per month
- JCRWD \$132,150.67 per month

Community Member	Current Daily Average Water Use (GPD)
Bunker Hill	222,703
Carlinville	723,060
CMCRWD	146,578
Dorchester	32,273
Fieldon	25,215
FWD	605,779
JCRWC	1,002,965
<i>Totals</i>	<i>2,758,573</i>

If IARWC receives a loan in the amount of \$132,750,000, the debt service per customer will equal \$37.82 per month.

Number of Customers or Service Connections: The Illinois Alluvial Regional Water Company will serve bulk water to each of the 7 communities. Each community member will continue to own and operate their own public water supply to meet the needs of their individual community.

Community Member	Customers Served
Bunker Hill	931
Carlinville	2,900
CMCRWD	738
Dorchester	206
Fieldon	110
FWD	2,763
JCRWC	5,100
<i>Totals</i>	<i>12,748</i>

Median Household Income (MHI): \$68,885 (weighted average of Macoupin and Jersey counties)

Financial Evaluation of the proposed project: To evaluate the costs of the proposed project for the communities, 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 user charge for the IARWC's users is \$453.84 is 0.65% of the MHI. 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:

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