

Kankakee Hydroelectric Project (P-8632)

FERC Relicensing

Recreation Resources

Study Plan

(Final – August 2023)

The City of Kankakee, Illinois (City), is the Licensee of the Kankakee Hydroelectric Project (Project, FERC no. P-8632), located along the Kankakee River in Kankakee County, Illinois. The Project was issued an original, 40-year license by the Commission on May 27, 1988. The current license expires on April 30, 2028. The Licensee has initiated a relicensing process to obtain a new license with an application due to FERC by March 20, 2026.

The Project generating facilities are situated at the Illinois Department of Natural Resources' (IDNR) Kankakee Dam on the south shoreline. IDNR owns the dam and leases it to the Licensee for hydropower purposes. The licensed Project hydropower facilities include a concrete powerhouse with three turbine generating units, generator leads, a step-up transformer, and a 2.4-mile-long transmission line extending from the powerplant to the Kankakee River Metropolitan Agency Wastewater Treatment Plant (KRMA WWTP) downstream of the Project Dam. Five segments of the transmission line (1.5-miles total, including the bridge crossing in a conduit) are located underground in existing rights-of-way, while the remaining four segments (0.9-mile total) are suspended aboveground on standard, 40-45-foot-tall, wooden poles. The transmission line right-of-way varies from 3 to 20 feet in width. There are no federal lands within the FERC Project boundary.

The Project is licensed as run-of-river mode (in accordance with existing License Article 401) with releases made in coordination with IDNR. The Licensee operates the inflatable rubber dam that sits atop the Kankakee Dam. This rubber dam, which is 24 inches high when fully inflated, allows the Licensee to vary the surface of the reservoir. The rubber dam is fully inflated during normal Project operation and a 500 cubic feet per second (cfs), or inflow, whichever is greater, flow maintained over the Kankakee Dam (in accordance with existing License Article 402) to protect fishery resources in the Kankakee River. Maintenance of flow over the dam also enhances the aesthetics of the dam, as seen from the river downstream and from adjacent portions of downtown Kankakee.

The Project's turbine-generator units are currently non-operational. The Licensee is in the process of making repairs to these units and intends to have them operational in 2024 and/or 2025. In addition, the Licensee proposes to continue (as previously) providing

Project electricity to the KRMA WWTP, and to provide a new connection the City's Stone Street Wastewater Lift Station (which feeds the KRMA WWTP) to offset electrical use and associated pumping costs at this City facility. To make this connection a new 12.5 kV overhead transmission line (on 40 to 45-foot-tall wood poles) is proposed that would tap into the existing Project Primary Transmission Line and run along the residential Stone Street for approximately 600 feet, before terminating at a transformer in the existing Stone Street Wastewater Lift Station. This new transmission line would be added to the existing FERC Project boundary.

More information about the Project and existing resource information is available in the Licensee's Pre-application Document (PAD), which was filed with FERC and distributed to agencies, tribes and other stakeholders on January 27, 2023. The PAD is available on the Licensees' public relicensing website (<https://citykankakeeil.gov/departments/esu-dpw/notice-of-intent.php>) and from FERC's eLibrary (<https://elibrary.ferc.gov/idmws/search/fercgensearch.asp>) by searching under FERC Project No. P-8632.

In considering a new license for the Project, FERC is the lead agency for compliance with applicable federal laws, regulations, and policies pertaining to recreation resources.

As described in 18 CFR 4.51(f)(5) and in FERC's 2004 Hydroelectric Project Licensing Handbook, an application for new license must include the following information:

- Existing and potential recreational uses in the project area, including downstream use, whether or not facilities have been developed to support such uses, capacity, ownership, and management;
- Existing and potential future recreation use data, not merely unsubstantiated estimates;
- Evaluation of recreation needs identified in current State Comprehensive Outdoor Recreation Plans, other applicable plans on file with the Commission, or other relevant local, state, or regional conservation and recreation plans; and a determination of whether the need can be accommodated by existing facilities or by additional recreational facilities at the project;
- Adequacy and condition of existing recreation facilities;
- Existing shoreline buffer zones within the project boundary;
- Maps showing the location and nature of existing and proposed recreation facilities, public access areas, undeveloped informal use locations, and areas set aside for future recreational development;
- Identification of existing and proposed handicapped-accessible recreational facilities;
- Construction schedule for new or expanded recreation facilities and identification of the entity responsible for construction, operation, and maintenance;
- Impacts of any proposed project modifications and project operations on downstream or reservoir-based recreation;
- Identification of safety features to protect the public engaged in recreation;
- Discussion of whether the project is located within or adjacent to National Wild and Scenic River systems and/or state protected river segments; and,

- Discussion of how proposed or recommended recreational facilities would address any current or future demands of project facilities.

For the purposes of this Study, “recreation resources” refers to any of the items listed above.

Section 1. Project Nexus.

As described above, the Licensee is in the process of making repairs to the Project turbine-units and intends to have them operational in 2024 and/or 2025. In addition, the Licensee proposes to continue (as previously) providing Project electricity to the KRMA WWTP, and to provide a new connection the City’s Stone Street Wastewater Lift Station (which feeds the KRMA WWTP) to offset electrical use and associated pumping costs at this City facility. No proposed changes are proposed to the Licensee’s existing run-of-river operation or to the minimum release flow of 500 cfs (or inflow, whichever is less) from the project reservoir over the dam, which protects fisheries and enhances aesthetics.

Continued Project operations and maintenance (O&M) have the potential to directly and/or indirectly affect recreation resources. Information derived from this study will assist the Licensee in planning for future recreational needs at the Kankakee Hydroelectric Project.

Section 2. Study Goals and Objective.

The goals of the Study are to perform a detailed inventory and condition assessment of Project-related recreation facilities and amenities, and to evaluate regional recreation use patterns. An evaluation of recreation use at the Project fishing and viewing area is also proposed, although the turbine-generator units are currently non-operational and recreation use is likely atypical. The Licensee proposes to study recreation use at the Project fishing and viewing area again after the units are operational and use is more typical by including recreational user counts in the Recreation Management Plan to be prepared as part of Project relicensing.

The objective of this Study is to gather the information necessary to meet the Study goal by filling gaps in existing recreation data. This information will be used to inform a Project Recreation Management Plan and to determine if recreation facilities and management actions are meeting current and future needs.

Section 3. Existing Information and Need for Additional Information.

Based on a review of publicly available information the following recreation resources are found in the Project vicinity:

Kankakee Hydroelectric Project Tailrace Fishing and Viewing Area

The Kankakee Project includes one developed recreational facility located within the Project Boundary. The facility is maintained and operated by the Licensee and open to the public (Figure 1). No user fees are collected.

The recreation area is located immediately downstream of the Project's powerhouse along the left (south) shoreline. A lighted asphalt parking area (with accessible stall) and lighted concrete foot paths (accessible) and stairway lead to a lighted, concrete tailrace fishing platform with wooden railings and seats. Tailrace fishing is accessible at various tailwater surface elevations.

No recent recreational use information is available for this area, as FERC granted the Licensee exemption from recreational use monitoring and reporting (Form 80) requirements in 1997.

Because the existing turbine-generator units are currently non-operational, tailrace recreational fishing success and user numbers may be reduced, relative to periods when the units are in operation. The Licensee proposes to monitor use of the Project tailrace fishing and viewing area during the summer and fall of 2023, and again following repair of the turbine-generators to obtain more representative use data. Proposed 2023 use monitoring and reporting methods are described below. Recreation use monitoring and reporting methods following unit repair and operation will be similar to that proposed in 2023 and included in a Recreation Management Plan prepared as part of FERC relicensing.

Non-Project Tailrace Fishing and Viewing Platform

A non-Project, public fishing and viewing platform is located within the Project Boundary. This platform is maintained and operated by the Licensee and open to the public. No user fees are collected. The platform is located immediately downstream of Kankakee Dam along the right (north) shoreline. It was built atop the foundation of the former McGrew Flour Mill, which was demolished in 1950. The concrete and decorative patterned concrete platform is surrounded by decorative metal railings, some of which allow wheelchair users to fish. Decorative lighting and a gate that allows public access to the river's edge via a metal staircase are also provided. No vehicle parking is provided at this location, although ample street parking is available nearby.

Cobb Park

Located approximately one mile upstream of Kankakee Dam on the north bank of the river, this non-Project Kankakee Valley Park District (KVPD 2020) site provides the following:

- Rentable Pavilion
- Open Space / Field
- Playground
- Restrooms

- Tennis Courts
- Walking/Exercise Trails

Cobb Park is situated within the Riverview Historic District, which has been included on the National Register of Historic Places.

Jeffers Park

Located approximately 200 feet downstream of Kankakee Dam on the south bank of the river, this non-Project Kankakee Valley Park District (KVPD 2020) site provides the following:

- Rentable Building
- Basketball Courts
- Boat Access
- Open Space / Field
- Playground
- Walking/Exercise Trails

Governor Small Memorial and Park

This non-Project State Historic Site and Park is located approximately one-half mile downstream of Kankakee Dam and south of the river, near the intersection of West Water Street and South 8th Avenue. This non-Project Kankakee Valley Park District (KVPD 2020) site provides the following:

- Governor Lennington Small Historical Marker
- Rentable Building
- Civic Auditorium
- Open Space / Field
- Walking/Exercise Trails
- Kankakee County Historical Society

Legion Park

This non-Project park is located about 1,500 feet downstream of Kankakee Dam on the right (east) bank of the river between West River Street and West Hickory Street. The Project transmission line runs through this KVPD park in an underground conduit. A rentable pavilion open space/field, and playground are found at this location (KVPD 2020).

Bird Park

This non-Project park, located approximately 3,500 feet downstream of Kankakee Dam on the left (west) bank of the river between the Station Street and the railroad bridge north

of Court Street, is owned and operated by KVPD. Facilities at this park (KVPD 2020) include:

- Rentable Building
- Rentable Pavilion
- Band Shell
- Boat Access
- Open Space / Ballfields
- Playground
- Restrooms
- River Front
- Walking/Exercise Trails

Alpiner Park

Across the river (east bank) from Bird Park, south of Court Street, is Alpiner Park. The Project transmission line runs through this non-Project park in an underground conduit. Facilities at this park (KVPD 2020), which is owned and operated by KVPD include:

- Baseball Fields
- Playground
- Press Box
- Restrooms
- River Front

Fisherman Park

Across the river (east bank) from the Bird Park ballfields, north of Court Street and south of West Bridge Street, is Fisherman Park. This non-Project park, owned and operated by KVPD, includes open space/field and riverfront access (KVPD 2020)

LaVasseur Park

Located along the right (east) bank of the river North of Gregg St and south of North 5th Street is KVPD's LaVasseur Park. This non-Project park includes baseball fields, open space, walking/exercise trails (KVPD 2020). The Project transmission line runs through this non-Project park in an underground conduit.

Helgeson Park

Located on the right (east) bank of the river between LaVasseur Park and the KRMA WWTP is Helgeson Park, which is owned and operated by the Village of Bradley. This non-project park includes open space, picnic areas, walking paths, and a playground. The Project transmission line runs through this non-Project park in an underground conduit.

Kankakee River Water Trail

In 2016, the National Park Service (NPS) announced the addition of the Kankakee River to the National Water Trails System. The National Water Trails System is a distinctive national network of exemplary water trails that are cooperatively supported and sustained. The Kankakee River is one of 21 designated National Water Trail Systems in the United States. The river from Momence to the confluence of the Illinois River allows boating and paddling through urban and suburban areas, with a long run through Kankakee State Park before meeting the Illinois River near Channahon. Currently, through trips are not advised between Aroma Park (just south of the confluence of the Iroquois and Kankakee Rivers) and Bird Park in Kankakee due to the hydroelectric dam and the Canadian National Railroad Bridge in downtown Kankakee. Portage around the dam is difficult and requires a mile walk from the boat ramp upstream of the dam to the next launch spot. (City of Kankakee 2018)

Riverfront Trailways of Kankakee County

The Riverfront Trailways of Kankakee County was a vision that began in 1999 with the formulation of the Kankakee County Greenways and Trails Plan, a regional trail and open space corridor that would provide environmental, recreational, and aesthetic enhancements to the County. Phase 1 of the Riverfront Trailways, funded through federal grants, local financial partners, and private donors, became a reality when it opened to the public in 2009. Local financial partners included the City of Kankakee, Kankakee Community College, Kankakee County, Kankakee River Valley Forest Preserve, Kankakee Valley Park District, the Village of Bourbonnais, and the Village of Bradley, with easements provided by Aqua Illinois and Shapiro Developmental Center. Today, the regional trail connects Illinois Route 57 in southwest Kankakee, through Bradley, and into Bourbonnais. The fourth phase will connect Perry Farm Park in Bourbonnais north to Kankakee State Park. (City of Kankakee 2018)

Needs Identified During Pre-PAD Consultation

Findings from the 2020 Illinois Outdoor Recreation Survey (SCORP, IDNR 2021) indicated that more than two-thirds of Illinoisans stated there should be more public access to lakes, rivers, and streams and more than 80 percent stated that wildlife habitats should be protected and restored, and over 90 percent stated outdoor recreation is important to their quality of life. Moreover, findings from recreation provider and resident surveys pointed to the following priority areas:

- Promote Health Benefits of Nature-Based Activities
- Encourage Communities to Plan for Active Transportation
- Develop Park and Nature-Based Outdoor Recreation Programs that Foster Social Interaction

The City's (Licensee) Kankakee Riverwalk Master Plan (City of Kankakee 2018) proposed a series of pathways, developments, and in-river whitewater paddling course

(controlled access and nonmotorized boat passage in the vicinity of the Project dam) to reinvigorate downtown and raise awareness of its existing public outdoor spaces. Implementation of the Riverwalk Master Plan is ongoing and may or may not include creation of the whitewater paddling course. Development of the whitewater paddling course, if undertaken, would be done in such a way so as not to jeopardize operation of the Kankakee Hydroelectric Project.

No portions of the Kankakee Project area or vicinity have been included for study or designated as National Trails, Wilderness, or for inclusion in any federal or state recreational, wild, or scenic rivers system.

Section 4. 2023 Study Methods and Analysis

The 2023 Study will include the following activities: 1) recreation facility inventory and condition (including accessibility) assessment; 2) recreation user counts; 3) recreation stakeholder and agency interviews; 4) analysis of collected information; and 5) reporting. These steps, and others required for proper implementation of the study, are described below.

4.1. Study Area.

The proposed Study Area consists of the area within the FERC-approved Project boundary, including the Kankakee powerhouse, Project recreation area, and appurtenant facilities on the south shoreline, and lands within the transmission line corridor. The Study Area is shown in Figure 1.

4.2. Project Recreation Facility Inventory and Condition Assessment.

As noted in Section 3 above, the Greenup Project includes a recreational fishing and viewing area (Figure 1) within the Project boundary.

The Licensee will inventory the existing facilities at the FERC-approved Kankakee Project recreation area. This inventory will include:

- General condition of the facilities;
- Compliance of the facilities with appropriate Universal Accessibility standards (US Forest Service (USFS), 2012);
- Hours/seasons of operations;
- Condition and location of lighting;
- Documentation of recreation and public safety related signage; and
- Photographic documentation of recreation facilities.

4.3. Project Tailrace Fishing and Viewing Area Recreation User Counts

The Licensee will install a camera to monitor recreation use at its Project tailrace fishing and viewing area during August, September, October, and November 2023. The numbers of people using the fishing and viewing area during this period (when the area is officially open, 6 am – 10 pm) will be logged and extrapolated to determine Peak-Season (May 27 - September 15), Non-Peak Season (September 16 – May 26), Peak Season Holiday (Memorial Day, July 4, and Labor Day weekends), Weekday, Weekend, Peak Season (Non-Holiday) Weekend, and Annual Total use.

Peak Season (Non-Holiday) Weekend use will be compared to the capacity of the existing Project tailrace fishing and viewing area facility to determine if additional amenities are warranted at this time. This information will be used to inform a Demand-Need Study prepared as part of the Draft License Application effort to determine if additional amenities are warranted over the subsequent 30-year (or longer) license period.

4.4. Recreation Stakeholder and Agency Interviews.

The Licensee will reach out to recreation stakeholders and agencies to request participation in telephone interviews regarding recreation in the area and at the Project. The Licensee will conduct scheduled interviews with individuals (e.g., IDNR staff, Kankakee County Planning Department staff, private recreational providers, and frequent users of the Project recreation facility) to gather additional information about existing recreational amenities, demand, current use patterns (seasonal, monthly, weekend/weekday), safety issues, overcrowding, traffic, and other potential issues to characterize existing recreational use in and around the Project.

4.5. Analysis of Collected information.

Results of the facility inventory and condition assessment, recreation user counts, and stakeholder and agency interviews will be evaluated for common patterns and themes, and then summarized.

4.6. Reporting.

Recreation facility inventory and condition assessments, recreation user counts, stakeholder and agency interviews, and other analyses will be summarized and incorporated into the Draft License Application and Final License Application.

4.7. Quality Assurance and Quality Control.

Information gathered during this Study will be reviewed and field checked for accuracy and completeness. Data gathering will be overseen by qualified recreation planners to confirm that techniques, documentation, and other efforts meet current professional

standards. Senior recreation planners will provide oversight and reviews for recreation resources document preparation.

Section 5.0. Schedule

The Licensee anticipates initiating and completing the recreation facility inventory and condition assessment; recreation user counts; and stakeholder and agency interviews in 2023. Analysis and draft report preparation will be initiated and completed in 2023. The report will be finalized in early 2024.

Section 6.0. Consistency of Methodology with Generally Accepted Scientific Practices.

As noted in Section 4, the study methodology is consistent with generally accepted practices in the scientific community and employed during other hydropower relicensings in the Midwest.

Section 7.0. References Cited.

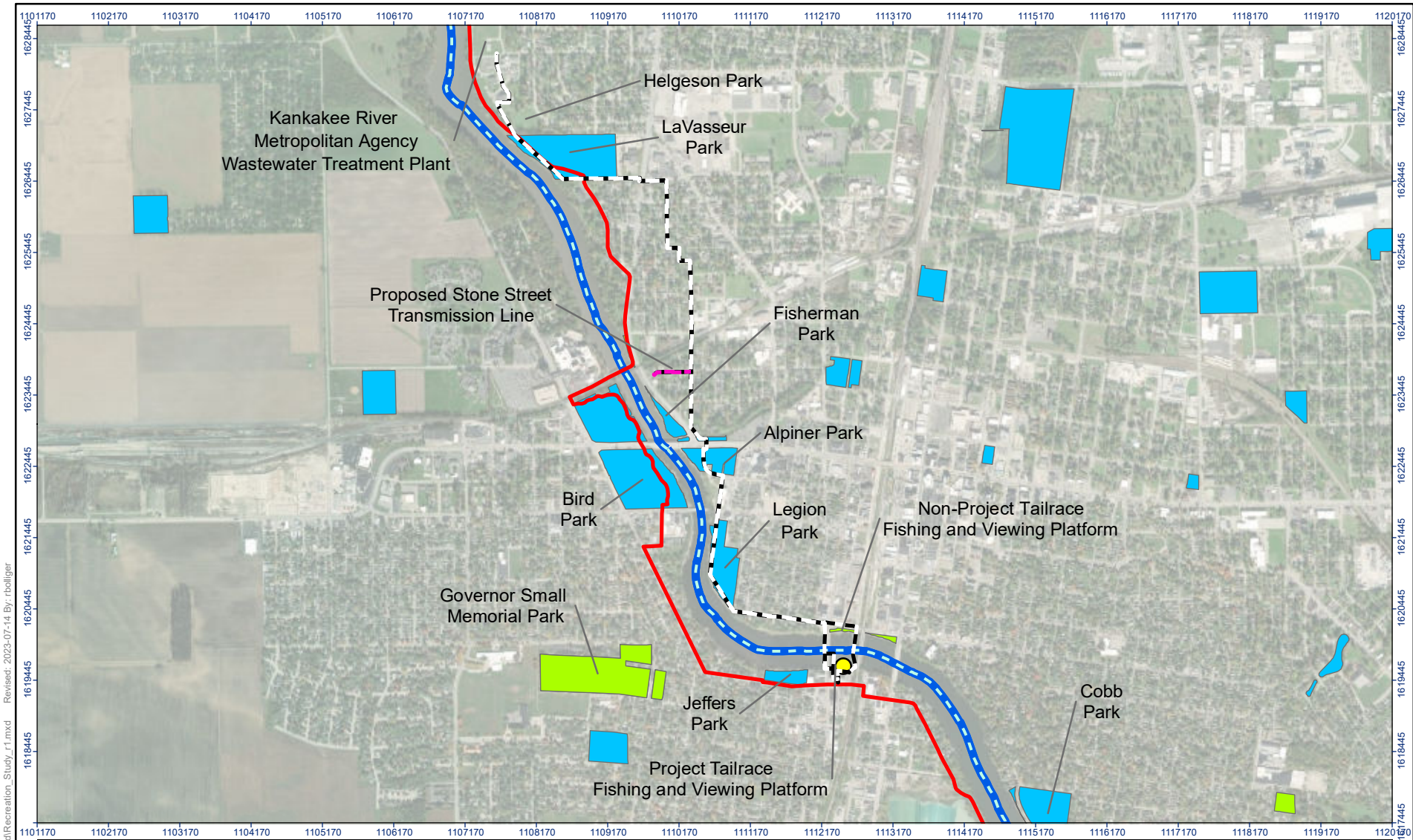
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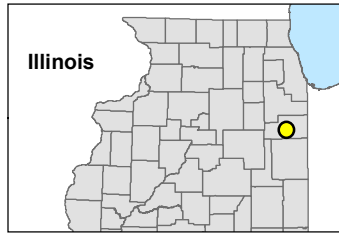
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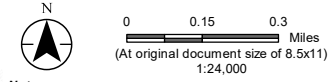
FIGURE 1



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- Legend**
- Kankakee Hydroelectric Project
 - State and County Preserve
 - Municipal Park
 - Riverfront Trailway of Kankakee Co.
 - Kankakee River Water Trail
 - Existing Project Boundary
 - Proposed Project Boundary
- Recreational Study Area**



- Notes**
1. Coordinate System: NAD 1983 StatePlane Illinois East FIPS 1201 Feet
 2. Data Sources: Illinois Geospatial Data Clearinghouse, TIGER 2021, Illinois Nature Preserve Commission
 3. Background: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and

Project Location Prepared by RFB on 2023-07-13
 Kankakee Co., IL TR by SB on 2023-07-13

Client/Project
 City of Kankakee
 Kankakee Hydroelectric Project
 FERC Relicensing

Figure No.

Title
Recreational Study Area

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