Illinois Environmental Protection Agency
Bureau of Water, Permit Section
(IEPA)

1021 North Grand Avenue East, Post Office Box 19276, Springfield, Illinois 62794-9276, 217/782-3362

The IEPA has issued a Public Notice of a request for a Clean Water Act Section 401 water quality certification that would allow the issuance of a federal permit for the discharge of pollutants to waters of the State.

Public Notice Beginning Date:	**Public Notice Ending Date:**
Tuesday, May 27, 2025	Monday, June 16, 2025

Agency Log No.: C-0270-24

Federal Permit Information: Federal permit/license no. P-2446-052 is under the jurisdiction of Federal Energy Regulatory Commission

Name and Address of Discharger: STS Hydro LLC, Mr. David Fox, Senior Director of Regulatory Affairs - 7315 Wisconsin Avenue, Suite 1100 W, Bethesda, MA 20814

Discharge Location: In Section 33 of Township 22-North and Range 9-East of the East 4th & East 3rd Principal Meridian in Lee County. Additional project location information includes the following: On the Rock River near the City of Dixon in Lee and Ogle Counties, Illinois, Dixon, IL 61021

Name of Receiving Water: Rock River

Project Name/Description: Dixon Hydroelectric Project - proposed to continue operating the project as a run-of-river facility and does not propose any new construction, but does propose modifications to the current project boundary

Construction Schedule: Beginning Jan 2025 and ending May 2025

The Public Notice period will begin and end on the dates indicated in the heading of this Public Notice. Interested persons are invited to submit written comments on the project to the IEPA at the above address. Commenters must provide their name and address along with comments on the certification request. The IEPA Log number must appear on each comment page. Commenters may include a request for public hearing. Only hearing requests and comments that pertain to Clean Water Act Section 401 authority will be considered. This authority provides consideration of whether the permit or license would be consistent with Sections 301, 302, 303, 306, or 307 of the CWA, as well as "any other appropriate requirement of State [or tribal] law". Requests for additional comment period must provide a demonstration of need. The final day of comment acceptance will be on the Public Notice Ending date shown above, unless the IEPA grants an extended notice period. The attached Fact Sheet provides a detailed description of the project and the findings of the IEPA's antidegradation assessment.

If written comments or requests indicate a significant degree of public interest in the certification application, the IEPA may, at its discretion, hold a public hearing. Public notice will be given 30 days before any public hearing. If a Section 401 water quality certification is issued, response to relevant comments will be provided at the time of the certification. For further information, please see the contact information below.

Name: Oyetunde Tinuoye Email: Oyetunde.Tinuoye@illinois.gov Phone: 217/782-3362

Post Document. No. C-0270-24-05272025-PublicNoticeAndFactSheet.pdf

STS Hydropower, LLC, is applying to the Federal Energy Regulatory Commission (FERC) for a license to continue to operate the Dixon Hydroelectric Project (FERC Project No. 2446) as the current license issued June 26, 1994, expired on August 31, 2024. The Project operates as a run-of-river to non-consumptively use water from the Rock River for hydroelectric generation.

The existing project works include a dam, powerhouse, reservoir, tailrace, transmission equipment, and appurtenant equipment, and associated facilities. The main structures of the dam consist of a forebay, powerhouse, and overflow dam. A minimum one-inch veil of flow no less than 50 cubic feet per second (cfs) is released over the dam (or flashboards, when installed). The Project has five units with an authorized capacity of 3,000 kW. STS Hydropower is not proposing any changes to the Dixon Project operations as part of this application. No construction or discharge is proposed.

Identification and Characterization of the Affected Water Body

The Dixon Hydroelectric Project discharges to the Rock River (Segment IL_P-21), which is designated as a General Use Water. According to the 2024 Integrated Water Quality Report and Section 303(d) List, this segment is impaired for fish consumption due to the presence of aldrin, dieldrin, endrin, heptachlor, mercury, mirex, PCBs, and toxaphene. The Segment IL_P-21 of the Rock River is not listed as a biologically significant stream in the 2008 Illinois Department of Natural Resources Publication *Integrating Multiple Taxa in a Biological Stream Rating System*, but the Illinois Department of Natural Resources assigned it an integrity rating of "C" in 2008. The segment is not subject to enhanced dissolved oxygen standards, and there are no completed or ongoing Total Maximum Daily Load (TMDL) studies applicable to this reach. The 7Q10 flow for this segment is 1,214 cfs.

The project boundary of the Dixon Hydroelectric Project encompasses a variety of wetland types that contribute to the ecological setting of the Rock River. Within the current boundary, a total of 1,070.75 acres of wetlands are identified, including lacustrine (lake), riverine, freshwater forested/shrub, freshwater pond, and freshwater emergent wetlands. Under the proposed revised boundary, the wetland area is reduced to 377.93 acres. This reduction primarily results from the exclusion of river reaches that are no longer inundated at the reservoir elevation of 647.08 feet NGVD. Despite these changes in wetland area, there are no proposed operational changes to minimum flow or reservoir elevation; therefore, the continued operation of the Dixon Project is not anticipated to impact wetlands within or adjacent to the project boundary.

Identification of Proposed Pollutant Load Increases or Potential Impacts on Uses

No new discharges or increased pollutant loading are proposed. The project will continue to operate in run-of-river mode, maintaining flow-through equilibrium. Minimum flow releases help maintain aquatic habitat downstream. The proposed modification to the project boundary—intended to encompass all

lands and waters necessary for the safe and effective operation of the Dixon Project—will not involve any new construction or operational changes that would result in new or increased loading to waters of the United States within the revised boundary.

To assess potential effects on water quality, the applicant provided site-specific monitoring data from 2021, including continuous and profile measurements of dissolved oxygen (DO), pH, and temperature at multiple locations. Results indicated:

- DO ranged from 6.22 to 11.86 mg/L at all depths and stations, well above the minimum standard
- No violations of DO or temperature standards observed
- pH exceeded 9.0 in some samples due to natural conditions (algae activity in impoundment), not project operations

Fate and Effect of Parameters Proposed for Increased Loading

No parameters are proposed for increased loading. DO and temperature conditions remain within applicable standards. The elevated pH was attributed to natural processes and is not a result of facility operation. Monitoring confirms no impact on designated uses.

Purpose and Social & Economic Benefits of the Proposed Activity

The purpose of the activity is to continue renewable energy generation under a renewed FERC license. The project supports local power infrastructure and regional energy goals while maintaining the aquatic environment of the Rock River.

Assessment of Alternatives for Less Increase in Loading or Minimal Environmental Degradation

No alternatives analysis was required because the project does not involve a discharge or an increase in pollutant loading. Run-of-river operation is inherently protective of downstream uses and maintains compliance with applicable standards.

Summary Comments of the Illinois Department of Natural Resources, Regional Planning Commissions, Zoning Boards or Other Entities

An EcoCAT endangered species consultation was submitted on July 8, 2019 (Project #2000238) to the Illinois Department of Natural Resources (IDNR) for the Dixon Hydroelectric Project Relicensing. The natural resource review identified several protected resources in the vicinity, including INAI sites such as the Grand Detour Botanical Area, Lowell Park, and Nachusa Grasslands, as well as nature preserves and state-listed species including Black Sandshell (*Ligumia recta*), Gravel Chub (*Erimystax x-punctatus*), and Kittentails (*Besseya bullii*). This was an informational submission and does not constitute consultation under 17 Ill. Adm. Code Part 1075. Additional coordination with IDNR may be required if the project scope changes.

A Section 7 consultation with the U.S. Fish and Wildlife Service (USFWS) was initiated on December 29, 2021 (Consultation Code: 03E18000-2022-SLI-0543; Event Code: 03E18000-2022-E-01413). The official species list provided by the USFWS includes the Indiana bat (*Myotis sodalis*), Northern long-eared bat (*Myotis septentrionalis*), Hine's emerald dragonfly (*Somatochlora hineana*), Monarch butterfly (*Danaus plexippus*) [candidate], Eastern prairie fringed orchid (*Platanthera leucophaea*), and Prairie bush-clover (*Lespedeza leptostachya*). No critical habitat is present within the project area under USFWS jurisdiction. Based on available information, no adverse effects are expected, and no further coordination under Section 7 is required.

No comments were received from regional planning commissions, zoning boards, or other governmental entities.

Agency Conclusion

This preliminary assessment was conducted in accordance with the Illinois Pollution Control Board's antidegradation regulation at 35 Ill. Adm. Code 302.105 and is based on the best information available at the time of review. The Agency tentatively finds that the proposed activity will not result in a new or increased pollutant loading, will not degrade water quality, and will maintain compliance with all applicable water quality standards. Comments received during the public notice period will be reviewed and considered prior to the Agency's final decision on the certification request.