

#### Indiana Department of Environmental Management Office of Water Quality Wetlands Section

Publication Date: March 15, 2024

> Closing Date: April 5, 2024

## **PUBLIC NOTICE**

**IDEM ID Number:** 2024-102-41-JLB-A

**Corps of Engineers ID Number:** LRL-2023-00944-sjk

#### To all interested parties:

This letter shall serve as a formal notice of the receipt of an application for **Section 401 Water Quality Certification** by the Indiana Department of Environmental Management (IDEM). The purpose of the notice is to inform the public of active applications submitted for water quality certification under Section 401 of the Clean Water Act (33 U.S.C. § 1341) and to solicit comments and information on any impacts to water quality related to the proposed project. IDEM will evaluate whether the project complies with Indiana's water quality standards as set forth at 327 IAC 2.

1. Applicant:	Jerry S Ecosy 9130 I Denve	Sweeten stems Connections Institute North 600 East er, IN 46926	2.	Agent:	Jerry Sweeten Ecosystems Connections Institute 9130 North 600 East Denver, IN 46926
3. Project location:		Johnson County Latitude 39.355968, Longitude -85.976524 The project is located 40-meters upstream of State Road 252 in Edinburgh, Indiana.			
4. Affected waterbody:		Big Blue River and Unnamed Tributary (UNT) to Big Blue River			
5. Project Description:		Remove the Thompson Mill Dam from the Big Blue River. The foundation of the dam failed in October 2023. The dam is owned by the Town of Edinburgh, which has given permission for ECI to access and remove the dam. Additional information may be found online at https://www.in.gov/idem/5474.htm			
Comment period:		Any person or entity who wishes to submit comments or information relevant to the aforementioned project may do so by the closing date noted above. Only comments or information related to water quality or potential impacts of the project on water quality can be considered by IDEM in the water quality certification review process.			
Public Hearing:		Any person may submit a written request that a public hearing be held to consider issues related to water quality in connection with the project detailed in this notice. The request for a hearing should be submitted within the comment period to be considered timely. The request should also state the reason for the public hearing as specifically as possible to assist IDEM in determining whether a public hearing is warranted.			
Questions?		Additional information may be obtained from Jake Brinkman, Project Manager, by phone at 317-306-8995 or by e-mail at jbrinkma@idem.in.gov. Please address all correspondence to the project manager and reference the IDEM project identification number listed on this notice. Indicate if you wish to receive a copy of IDEM's final decision. Written comments and inquiries may be forwarded to -			
		Indiana Department of E 100 North Senate Avenu MC65-42 WQS IGCN 1 Indianapolis, Indiana 462	invi 1e 255 204	ronmental M 5 -2251 FAX:	Janagement 317/232-8406

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#### Maps and photos



Figure 1. The Lower Big Blue River watershed, located in east central Indiana, has a watershed of 280 square miles. There are two 10-digit hydrologic unit code (HUC) sub-watersheds that make up the Lower Big Blue River. These include Little Blue River (0512020408) and Big Blue River (0512020409). The Lower Big Blue River Watershed originates near southern Henry County and flows southwest, where it joins Sugar Creek to form the Driftwood River about 1.5 miles downstream from Edinburgh. Approximately 342 stream miles will be reconnected with full removal of the Thompson Mill Dam.

#### Surface Profile:

The Surface profile was derived from the data collected during the 2017 statewide LiDAR initiative. LiDAR utilized during these surveys are unable to penetrate water and will only provide a water surface elevation. This surface elevation data combined with a stream centerline; we were able to plot where the extent the pool was during the 2017 survey. It is important to note that the dam breached in October 2023 and the current pool depth and length is currently much lower.

Figure 2. Water surface elevation longitudinal profile and map reference for Thompson Mill dam. The



elevation data was collected in 2017 during the statewide LiDAR initiative. During the survey the dam was still fully functional. The dam breached in October 2023 and much of the existing pool was drained. The top of the original pool 1,600 meters (5,248 feet) upstream of the dam.

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Figure 3. Water surface elevation longitudinal profile for Thompson Mill dam. The elevation data was collected in 2017 during the statewide LiDAR initiative. During the survey the dam was still fully functional. The dam breached in October 2023 and much of the existing pool was drained. The top of the original pool is 1,600 meters (5,248 feet) upstream of the dam.



Figure 6. Cross Sectional collected 75 feet downstream of Thompson Mill dam. Downstream orientation with river left being on left side of the plot. In channel and water surface data was collected on 8 January 2024. Above channel data collected as part of the statewide LiDAR initiative in 2017. Orange line represents the top elevation of the Thompson Mill Dam.



Figure 7. Cross Sectional collected 65 feet upstream of Thompson Mill dam. Downstream orientation with river left being on left side of the plot. In channel and water surface data was collected on 8 January 2024. Above channel data collected as part of the statewide LiDAR initiative in 2017. Orange line represents the top elevation of the Thompson Mill Dam.

#### Removal Plan:

The Thompson Mill dam is about 350 feet long, 10 feet tall, and 3 feet wide. The dam is made from limestone blocks approximately 5 feet by 3 feet by 3 feet. Removal of the dam will require a pathway approximately 950 feet long in an Edinburgh utility right of way from highway 252 to the dam. The right of way is under a set of decommissioned power lines from highway 252 to the dam. Most of this pathway will require no additional resources to build a pathway (white sections of pathway). One ephemeral draining crossing will be required to access the dam (orange pathway). This crossing is 3 feet deep and 90 feet long perpendicular to the stream. A culvert will be utilized to allow water movement in the ditch. Riprap will be utilized to create a pathway over the culvert to access the dam with a maximum of 160 cubic yards utilized. Riprap will also be needed upstream of the dam to provide a pathway for the equipment to remove the dam. A maximum of 175 cubic yards of riprap will be needed upstream of the dam. Sections of the dam on the right descending bank and on the left descending bank may remain and be preserved in accordance with SHPO MOA or to support the wingwalls. Otherwise, all sections of the dam will be removed and staged in Edinburgh for future used by the town of Edinburgh. All riprap and broken blocks and timbers from the foundation will be removed from the project site upon completion of the project. No staged water release is necessary due to the current breach in the dam.



Figure 10. Equipment path needed to access Thompson Mill dam. This pathway is already clear large woody vegetation as it is under a decommissioned power line. White sections of the pathway will require no additional material for access. Orange sections will require a culvert and riprap to provide crossing over a small drainageway. Yellow sections of pathway will be used as a footing for the removal equipment, A maximum of 350 cubic yards of riprap will be utilized. All material will be removed when the project is complete.



Figure 14. Drone picture from upstream of the dam looking downstream. Photo taken 8 January 2024. Thompson Mill dam, Edinburgh Indiana. Note the lower water level because as a result of the breach in the dam.

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Location of foundation failure of the Thompson Mill Dam.



Figure 15. Thompson Mill Dam looking upstream. Note breach in the middle part of the dam.





Figure 16. Breach in the Thompson Mill Dam and sediment plume. Note exposed logs on the right side of the image.





Figure 17. Extent of riparian forests along the Big Blue River upstream and downstream of the Thompson Mill Dam. The foundation of the dam failed in October 2023, and the pool has been drained. The presence of this dam has no effect on the elevation of the 100-year flood elevations. Removal of the dam will have no effect on the riparian forests or the frequency of flooding.