



Indiana Department of Environmental Management Office of Water Quality Wetlands Section

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Closing Date:

June 26, 2024

IDEM ID Number:

2024-223-73-JLB-A

Corps of Engineers ID Number:

LRL-2023-00945-sjk

PUBLIC NOTICE

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:** Angela McLaughlin
Property Owner
9256 South Geneva Road
Flat Rock, IN 47234
- 2. Agent:** Jerry Sweeten
Ecosystems Connections Institute
9130 North 600 East
Denver, IN 46926
- 3. Project location:** Shelby County
Upstream Dam – Latitude: 39.391999, Longitude: -85.720770
80 meters upstream of East Vandalia Bridge in Geneva
Downstream Dam – Latitude: 39.389940, Longitude: -85.722274
177 meters downstream of East Vandalia Bridge in Geneva
- 4. Affected waterbody:** Flatrock River
- 5. Project Description:** As part of the project the applicant proposes to temporarily impact 30 linear feet of the Flatrock River, a perennial stream. The purpose of the work is dam removal for ecological restoration, stream connectivity and public safety. For additional information please visit the following webpage: <http://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 about the Indiana Department of Environmental Management waterway permitting associated with this project may be obtained from Jake Brinkman, Indiana Department of Environmental Management Project Manager, at 317-306-8995. 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 Environmental Management
100 North Senate Avenue
MC65-42 WQS IGCN 1255
Indianapolis, Indiana 46204-2251
FAX: 317/232-8406

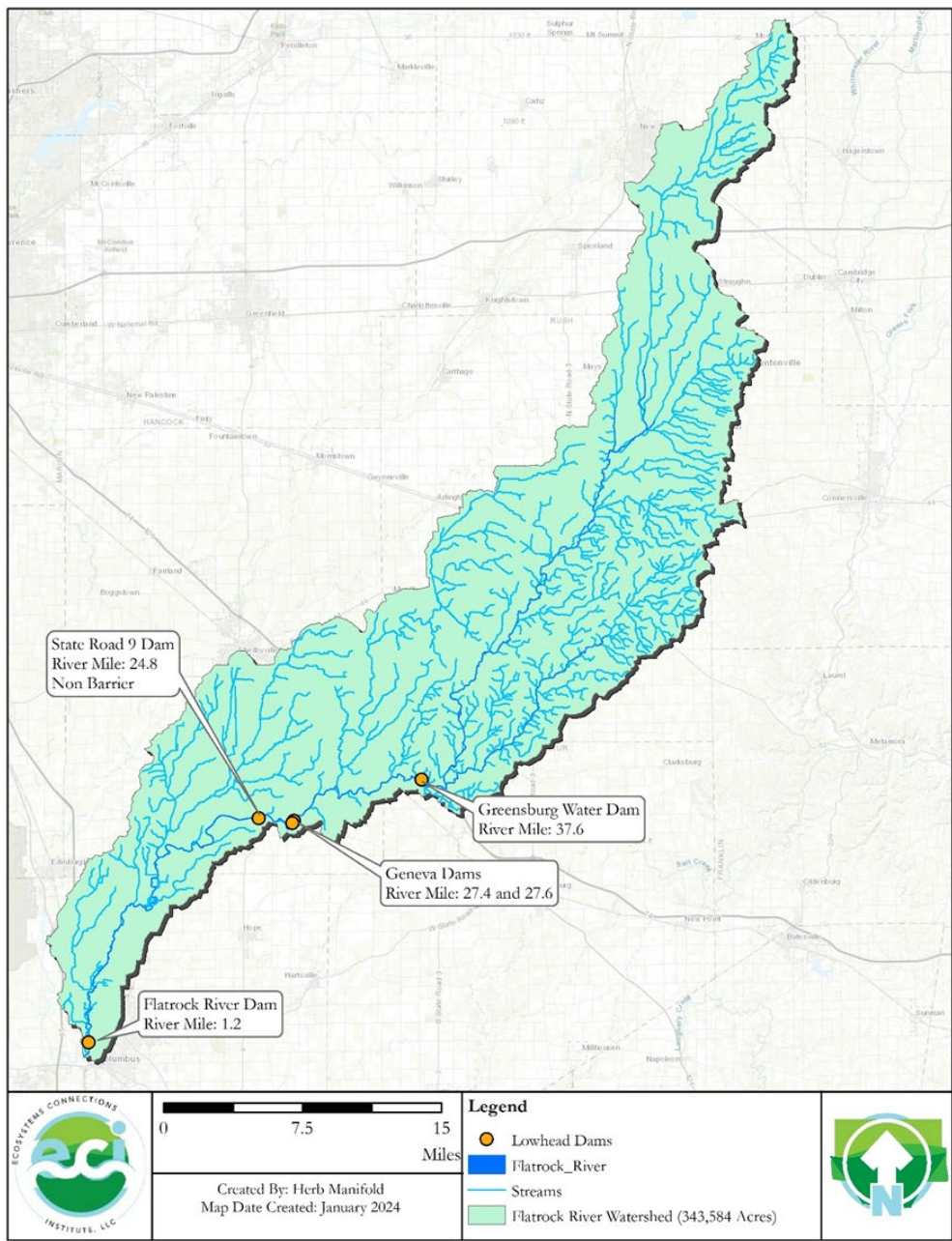


Figure 1. Watershed above the low head dams in the Flatrock River at Geneva, Indiana. The watershed is 536 mi² and 80% cultivated agriculture. The Geneva low head dams are located at RM 27.4 and RM 27.6. There will be 142 stream miles reconnected. There will be future opportunities to remove two other dams in this portion of the Flatrock River.





Figure 2. Upstream low-head dam in the Flatrock River at Geneva, Indiana. The dam is approximately 170-feet long and 6-feet tall and 5-feet wide with a pool length of 1.5 miles. This dam is made of cut limestone slabs that will be individually removed. The plunge pool below this dam is dangerous and is a fish passage barrier. There has been a recent death at this dam.



Figure 3. Downstream low-head dam in the Flatrock River at Geneva, Indiana. The dam is approximately 140 feet long and 5-feet tall and 3-feet wide with a pool length of approximately 0.75 miles long. While this is a relatively small dam, the plunge pool is dangerous and a fish passage barrier. There have been no recorded deaths, but injuries have occurred at this dam.



Figure 14. Equipment path needed to access Flatrock River (Geneva) dam. This pathway is already clear large woody vegetation as it is a mowed lawn. White sections of the pathway will require no additional material for access. Yellow sections of pathway will be used as a footing for the removal equipment, A maximum of 70 cubic yards of riprap will be utilized. All material will be removed when the project is complete.



Figure 4. Site of each of three transects for collection of sediment samples. Sediment samples were collected at 25%, 50%, and 75% of the stream width at each of the three transects. Transect one is 100-meters below the most downstream dam, transect 2 is 10-meters above the most upstream dam and transect three is 1.5 km upstream of the most upstream dam.

Cross Sections:

Cross sectional data was collected for 6 cross sections near Flatrock River (Geneva) dam. Cross sections include 50 feet downstream and 25 feet upstream from the lower dam. Cross Sections for the upper dam 50 feet downstream, 25 feet upstream, and 8,000 feet upstream from the dam. Data expressed in the cross sections are a combination of three sources. Areas above the original 2017 pool elevation were extracted from the 2017 LiDAR dataset. Hemisphere S631 survey grade GPS was utilized to collect data that was below the 2017 pool elevation and in wadable reaches. GPS data was collected on 8 January 2024. Cross sections are plotted in a downstream orientation with river left being on the left the plot.



Figure 8. Location of cross sections collected at Flatrock River (Geneva) dams. In channel data was collected on 8 January 2024. Above channel data was collected as part of the statewide LiDAR initiative, in 2017.

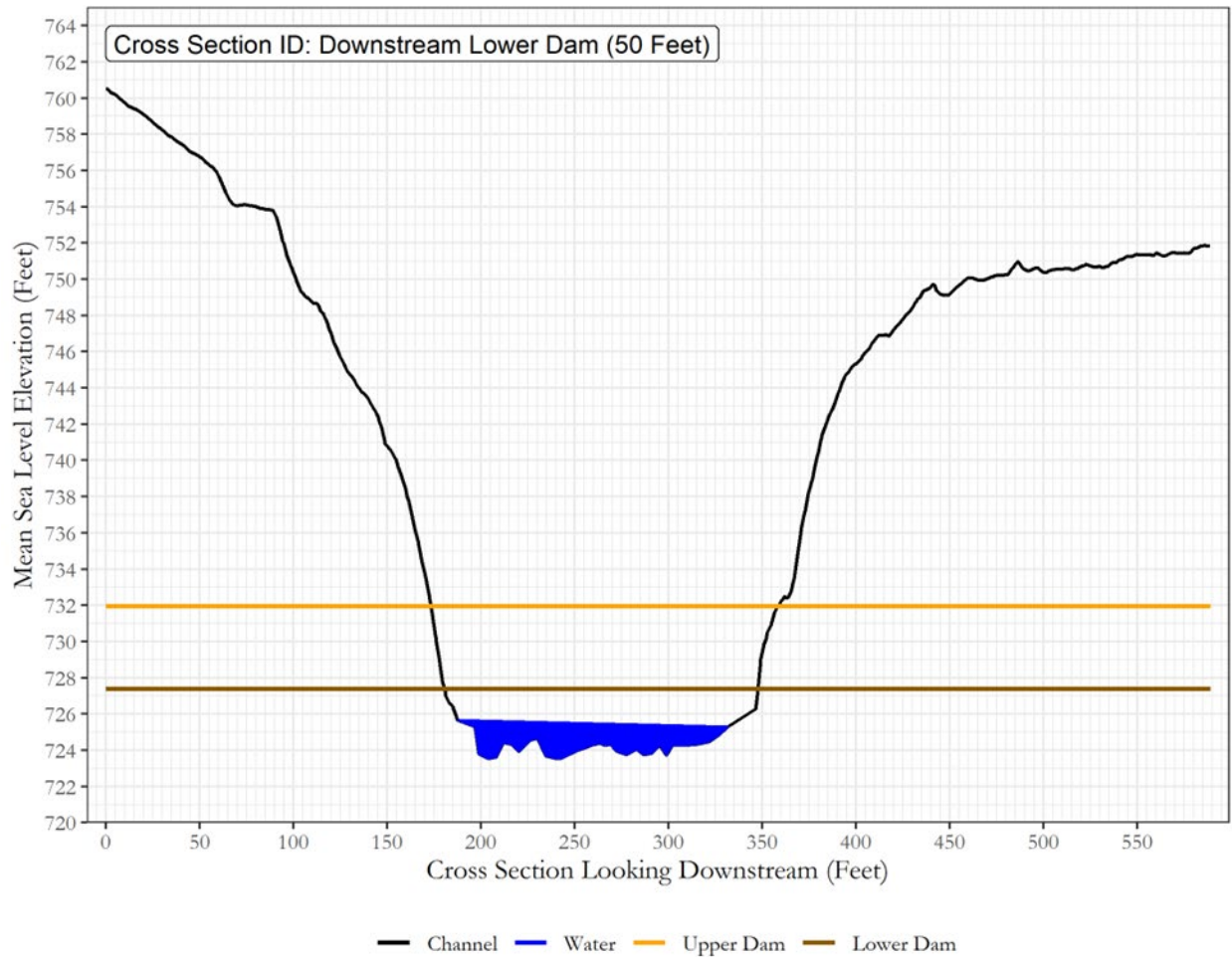


Figure 9. Cross Sectional profile collected 50-feet downstream of Lower Flatrock dam. Downstream orientation with river-left being on left side of the plot. In channel and water surface data was collected on 8 January 2024. Above channel data collected as part of the statewide LiDAR initiative in 2017. Brown Line represents the top elevation of the lower dam. Orange line represents the top elevation of the upper dam.



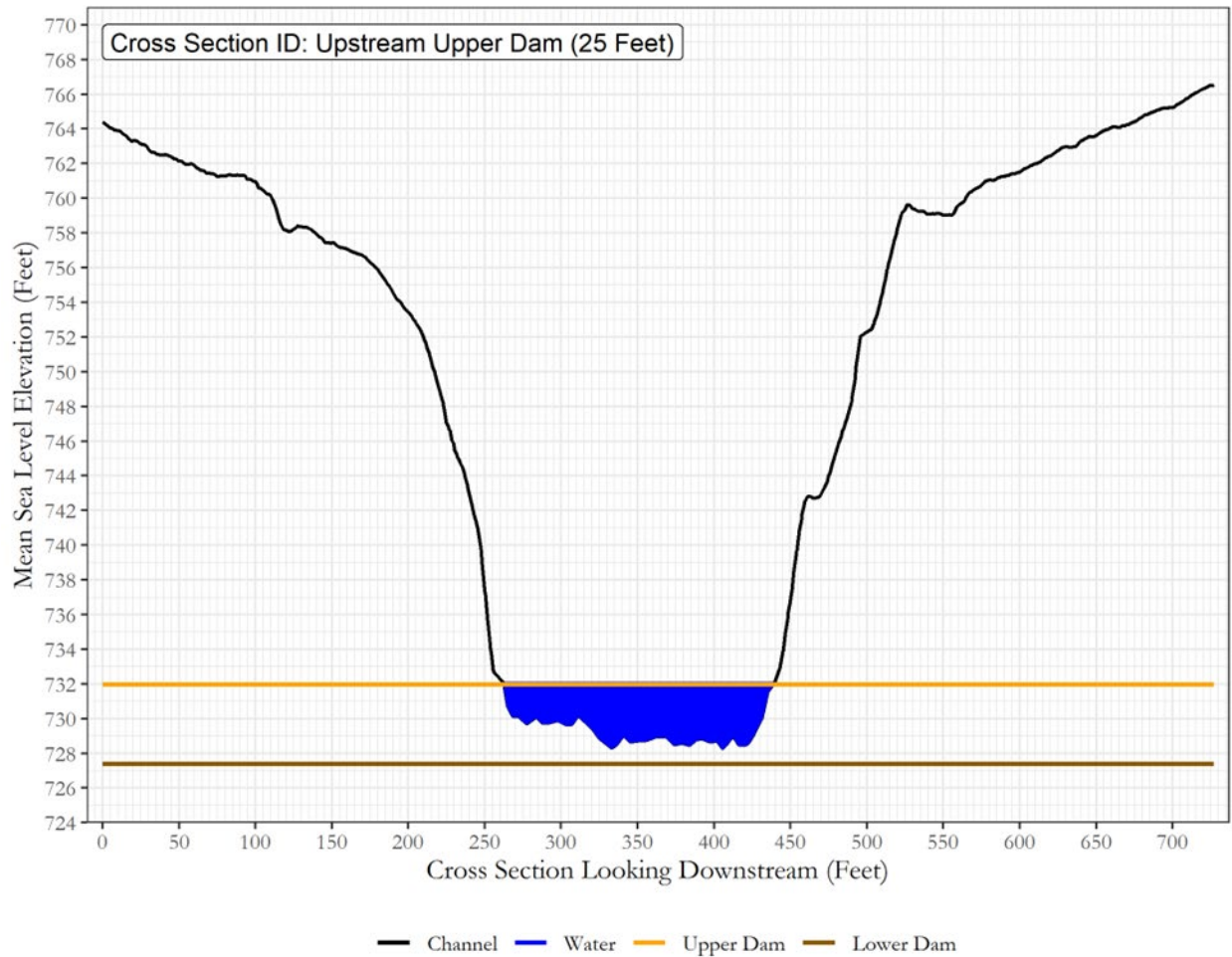


Figure 12. Cross Sectional profile collected 25 feet upstream of Upper Flatrock dam. Downstream orientation with river-left being on left side of the plot. In channel and water surface data was collected on 8 January 2024. Above channel data collected as part of the statewide LiDAR initiative in 2017. Brown Line represents the top elevation of the lower dam. Orange line represents the top elevation of the upper dam.





Figure 17. Drone picture from the lower dam looking upstream. Photo taken 8 January 2024. Flatrock River (Geneva). The upstream dam is 860-feet upstream of the downstream dam.





Figure 19. Drone picture from upper dam looking upstream. The pool extends upstream for approximately 1.5 miles. Photo taken 8 January 2024. Flatrock River (Geneva)