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:**
Wednesday, September 14, 2022	Wednesday, September 28, 2022

Agency Log No.: C-0161-22

Federal Permit Information: Federal permit/license no. MVS-2021-345 is under the jurisdiction of St. Louis District, Regulatory Branch U.S. Army Corps of Engineers

Name and Address of Discharger: Vita Residential, John Fayhee - 850 Coalshaft Bridge Road, Sullivan, IL 61951

Discharge Location: In Section 32 of Township 13-North and Range 5-East of the East 3rd Principal Meridian in Moultrie County. Additional project location information includes the following: West of intersection of Coalshaft Road/Route 11 and County Road 850 N, Sullivan, IL 61951

Name of Receiving Water: Unnamed tributary to Lake Shelbyville

Project Description: After-the-fact impacts for the construction of a 7.5 acre lake, berm, and spillway. Tree clearing, grading, and dredging of an intermittent unnamed tributary to Lake Shelbyville have been completed and the berm and spillway will be completed after permits have been obtained.

Construction Schedule: Unknown at this time

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: Francisco Herrera Email: Francisco.Herrera@Illinois.gov Phone: 217/782-3362

Post Document. No. C-0161-22-09142022-PublicNoticeAndFactSheet.pdf

401 Water Quality Certification Fact Sheet for Fayhee Lake Mitigation Project
IEPA Log No. C-0161-22
Moultrie County
Contact: Angie Sutton 217-782-9864

John Fayhee ("Applicant") has applied for a 401 Water Quality Certification for impacts associated with development of an approximately 7.5 Acre (Ac.) lake and spillway in Section 32, Township 13 North, Range 5 East, Moultrie County, Illinois. The project site is approximately 9 Ac and lies west of the intersection of Coalshaft Bridge Road/Route 11 and County Road 850N in Sullivan Township. The proposed activity lies approximately 0.65 miles east of Lake Shelbyville. The project involves grading and dredging of 1150 linear feet (LF)/ 0.08 Ac of an impounded intermittent tributary to Lake Shelbyville. Impacts to the tributary referred to as Tributary A as well as tree clearing, have been completed and are after the fact (ATF) impacts. Once the permit is obtained, the dam/berm and spillway will be completed. As part of the ATF permit application process, the permittee will provide onsite mitigation along a 714 LF ephemeral tributary, referred to as Tributary B.

Impacts that have occurred to Tributary A consist of excavation of the lake basin, and the approximately 8 Ac of tree clearing. Once tree clearing was completed, BMPs were installed. Approximately 150,000 Cubic Yards (CY) of topsoil was removed from the basin area and stockpiled to be used later as material to revegetate disturbed areas and for construction of the earthen dam and spillway. An agricultural drain tile at the northern end of the site was also relocated just north of the lake. Tributary B was partially cleared of trees and invasive understory species. A mitigation plan is proposed that includes requirement of 4229.3 stream mitigation credits. The compensatory mitigation for the impacts will be satisfied by planting riparian corridor trees, installing willow stakes, and installing microhabitat structures within the 714 LF Tributary B. The proposed mitigation plan is currently pending approval.

The proposed dam and spillway will consist of an approximately 280-foot-long clay berm which will span Tributary A north of the confluence with Tributary B. A 20-foot-wide concrete and riprap spillway will be installed within the berm.

Information used in this review was obtained from the application documents dated June 30, 2022, July 21, 2022, and August 18, 2022.

Identification and Characterization of the Affected Water Body.

The wetland delineation performed on March 31, 2022, identified an intermittent tributary (Tributary A) and an ephemeral tributary (Tributary B) within the project limits. There were no wetlands observed during the delineation. Both streams were determined to be jurisdictional waters. Site conditions at the time of the delineation were typical of recent construction activity. Trees, underbrush, and ground vegetation had been cleared from the entire project area except for a few mature shagbark hickories *(Carya ovata)* and common hackberry *(Celtis occidentals)* along the eastern property boundary. Hay bale sediment and erosion controls were installed near the confluence of Tributary A and B.

Tributary A is an intermittent stream that is an unnamed tributary to Lake Shelbyville and originates at the northern boundary on site where a drain tile daylights at the surface. The tributary drains south and then southeast through a pipeline right-of-way, and into a wooded tract off site, and eventually into lake Shelbyville to the west. The stream substrate was composed of clay and silt. Due to previous impacts to the stream, stream data collected indicates current conditions. Conditions of Tributary A, just west of the property boundary, were also observed to aid in determining "pre-impact conditions". Although there had been recent rainfall in the area, there were no macroinvertebrates observed while flipping rocks in the channel. It should be noted that the stream flow type would be considered ephemeral/intermittent range and likely does not support fish species but may support some macroinvertebrates in the early spring.

There were also no indications of riffles, deep pools or step-pool habitats observed. Within the unimpacted portion of the tributary, several meanders were observed on aerial photography. There were little to no rocks available to assess for macroinvertebrates, and the recent 1-inch rain likely washed organic matter habitat downstream. The observed substrate did not display characteristics typically considered suitable for significant benthic macroinvertebrate habitat. There was no active bank erosion within the downstream unimpacted reach which also appeared to be well vegetated and stable. Dominant riparian tree species included red maple *(Acer rubrum)*, hackberry, slippery elm *(Ulmus rubra)*, and red oak *(Quercus rubra)*. Bush honeysuckle was interspersed throughout the understory.

The unnamed tributary to Lake Shelbyville has 0 cfs of flow during critical 7Q10 low-flow conditions and is classified as General Use Water. The unnamed tributary to Lake Shelbyville 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* nor is it given an integrity rating in that document. The unnamed tributary to Lake Shelbyville, tributary to Waterbody Segment IL_ROC, is not listed on the 2020/2022 Illinois Integrated Water Quality Report and Section 303(d) List it has not been assessed. The unnamed tributary to Lake Shelbyville is not subject to enhanced dissolved oxygen standards.

The USGS Illinois StreamStats basin characteristics program gives a watershed size of 0.15 square miles for the unnamed tributary to Lake Shelbyville (Tributary A). According to the Illinois State Water Survey, in the area of the unnamed tributary to Lake Shelbyville, discharge is likely to be 7Q1.1 zero flow streams. In this region of Illinois, 7Q1.1 zero flow streams are streams with a watershed area of 3 square miles or less. These streams will exhibit no flow for at least a continuous seven-day period nine out of ten years. Aquatic life communities in these headwater streams are tolerant of the effects of drying. Depending on the rainfall received before biological surveys, either a very limited aquatic life community, or no community at all would be found. Given this flow regime, no additional biological characterization is required.

Tributary B is a 714 LF ephemeral stream that is also an unnamed tributary to Lake Shelbyville. It originates on site at the southeastern boundary and drains north and west through a narrow valley and into Tributary A. The stream substrate was composed of clay and silt. At the time of the site visit the tributary was flowing due to recent rain in the area. Trees remaining around Tributary B included black walnut *(Juglans nigra)* and bur oak *(Qurecus macrocarpa)*. This stream is proposed to be utilized for implementation of compensatory mitigation on-site.

Identification of Proposed Pollutant Load Increases or Potential Impacts on Uses.

The pollutant load increases that would occur from this project included some possible increases in total suspended solids. These increases, a normal and unavoidable result of excavating the unnamed tributary to Lake Shelbyville (Tributary A) have likely settled out as excavation has already occurred in 1150 LF of the stream. Local impacts are expected to recover quickly once the project is completed. Some temporary increases in suspended solids would be expected with construction of the berm. Permanent fill will occur with construction of the spillway. Clean soil from the excavated channel will be used to construct the berm, and rip rap and concrete will be used for spillway construction. The total amount of fill has not yet been determined; however, 150,000 CY of material has already been removed from the project area and is being stockpiled for use onsite.

Fate and Effect of Parameters Proposed for Increased Loading.

Project impacts have already been performed. As part of the after-the-fact (ATF) permit application process, onsite mitigation will be provided.

Impacts to Tributary A are proposed to be mitigated by onsite compensatory mitigation in Tributary B. The 1150 LF of impacts will require approximately 4229.3 stream mitigation credits according to the Illinois Stream Mitigation Method (ISMM) worksheet. To offset impacts, the riparian corridor along approximately 687 LF of Tributary B will be enhanced with native tree and shrub plantings contributing approximately 2,335.8 mitigation credits. Tributary B is an ephemeral stream that exists within a recently cleared narrow valley. A few mature oak and black walnut trees are interspersed along the slopes. During tree clearing efforts, invasive bush honeysuckle was removed from both slopes of the channel. The riparian corridor will be established where woody vegetation is thin or absent and will provide habitat and mast (hard and soft mast) food sources, reduce soil erosion, increase bank stabilization, and potentially improve downstream water quality.

Following completion of planting, the enhanced riparian corridor buffer will total approximately 2.5 acres along 687 LF of Tributary B. Willow staking will also occur within an approximate 2.5-foot-wide buffer on each side Tributary B. Based on the ISMM worksheet, the willow staking will generate a total of 1,825.6 mitigation credits.

Lastly, an in-stream component of the mitigation plan will include approximately 80 LF and 4 log-vane step-pool structures. There are currently no riffle or pool sequences within the tributary. The step-pool structures will retain shallow pools of water within the channel and potentially provide habitat to aquatic species dependent on ephemeral pools for a portion of their lifespan. An example detail/plan and specifications for the structures is provided in Figure 2. Based on the ISMM worksheet, the microhabitat area will generate a total of 212.0 mitigation credits.

Compensatory mitigation for the tributary impacts will be satisfied by planting a riparian corridor buffer with trees and shrubs and installing microhabitat structures within an ephemeral tributary on site. This mitigation plan satisfies and exceeds the required stream credits needed to offset impacts caused by the lake development: 2,335.8 credits will be generated by planting trees and shrubs along the tributary and 2032.6 credits will be generated by installing willow stakes and 4 log vane step-pool structures, for a total of 4,368.4 credits.

Additionally, a Stormwater Pollution Prevention Plan (SWPPP) has been installed, as well as additional erosion control practices such as temporary straw bale check dams. These BMPs were also employed once tree clearing was completed in the winter of 2021 and will be monitored during construction. Off-site sedimentation will be cleaned up and temporary BMPs will remain in place until the site is stabilized with vegetation. Disturbed and unvegetated areas will be seeded and mulched per the site plans dated June 14, 2022.

Purpose and Social & Economic Benefits of the Proposed Activity.

This project has excavated and will impound Tributary A in order to develop a lake on the applicant's property for personal recreational use.

Assessments of Alternatives for Less Increase in Loading or Minimal Environmental Degradation.

Because the lake has been graded, the alternatives considered are based on after-the-fact options.

Alternative 1: Restoration. This option would involve restoring Tributary A to pre-impact conditions. Approximately 8 acres of trees were cleared around Tributary A and a portion of Tributary B. Restoration would involve planting approximately 872 trees and shrubs within the riparian corridors of the tributaries (109 trees per acre). The streambanks, grade and slopes of Tributary A would be restored to

the approximate pre-impact elevations and contours. However, the property owner would like to continue constructing the lake for his private use. Therefore, this alternative was abandoned, and the impacts to WOTUS will be permitted after-the-fact. Compensatory mitigation will be provided on site within Tributary B.

Alternative 2: Preferred Alternative. This option involves constructing the approximately 7.5 Ac lake with normal pool elevation of 644 feet (ft). An approximately 280-foot-long clay berm, at 3:1 slopes, is planned to span Tributary A north of the confluence with Tributary B. A 20-foot-wide concrete and riprap spillway will be installed within the berm at an elevation of 644 feet. Tributary A has been excavated and it will be impounded to create a lake and will result in a total of approximately 1,150 LF or 0.08-Ac of jurisdictional tributary impacts. The property owner would like to continue constructing the lake for his private use. Therefore, this is the applicant's preferred alternative, and the impacts to WOTUS will be permitted as part of an after-the-fact Section 404permit. Compensatory mitigation will be provided on site within Tributary B, an ephemeral stream that drains directly into Tributary A.

As this project is a private lake to be constructed by the landowner, on private land, it would not contribute to the benefit of the general public. Therefore, the economic benefit of the project was not able to be determined at this time.

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

An EcoCAT endangered species consultation was submitted to the Illinois Department of Natural Resources on July 21, 2022 (Project # 2301296). An automatic consultation termination was generated and stated the following:

The Illinois Natural Heritage Database contains no record of State-listed threatened or endangered species, Illinois Natural Area Inventory sites, dedicated Illinois Nature Preserves, or registered Land and Water Reserves in the vicinity of the project location.

It was determined that there are no critical habitats or refuge lands or fish hatcheries within the area under USFWS jurisdiction. A Section 7 Consultation by the U.S. Fish and Wildlife Service dated July 21, 2022, indicated that the following species have potential to exist onsite:

- Indiana Bat *(Myotis sodalis)*
- Northern Long-eared Bat *(Myotis septentrionalis)*
- Piping Plover *(Charadrius melodus)*
- Monarch Butterfly *(Danaus plexippus)*

Prior to impacts that have already occurred at the project site, there was suitable summer roost tree habitat for the two threatened and endangered bat species. Tree clearing was conducted in 2021. The monarch butterfly prefers milkweed species for their preferred habitat. Milkweed tends to prefer locations with full sun exposure; however, prior to clearing of vegetation, the area was predominantly a forested riparian corridor. It is unlikely that mildewed existed there prior to clearing and therefore impacts to monarch butterfly species are not anticipated. Concerning the Piping plover, preferred habitat would be areas with shorelines such as the ones found at Lake Shelbyville. The project area was considered predominantly forested without shorelines and would likely not impact piping plover habitat. However, development of the lake will create shoreline that may be utilized by piping plover. The lake may become a beneficial habitat for this species.

Agency Conclusion.

This preliminary assessment was conducted pursuant to the Illinois Pollution Control Board regulation for Antidegradation found at 35 Ill. Adm. Code 302.105 (antidegradation standard) and was based on the information available to the Agency at the time this assessment was written. We tentatively find that the proposed activity would result in the attainment of water quality standards; that all technically and economically reasonable measures to avoid or minimize the extent of the proposed increase in pollutant loading have been incorporated into the proposed activity. Comments received during the 401 Water Quality Certification public notice period will be evaluated before a final decision is made by the Agency.