

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

2520 West Iles, 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: Tuesday, May 19, 2026

Public Notice Ending Date: Monday, June 8, 2026

Agency Log No.: C-0061-26

Federal Permit Information: Federal permit/license no. LRC-2019-95 is under the jurisdiction of Chicago District, Regulatory Branch U.S. Army Corps of Engineers

Name and Address of Discharger: Village of North Barrington, John A. Lobaito - 111 Old Barrington Road, North Barrington, IL 60010

Discharge Location: In Section 24 of Township 43-North and Range 9-East of the East 3rd Principal Meridian in Lake County. Additional project location information includes the following: the intersection on IL Route 59 and IL Route 22, Village of North Barrington, IL 60010

Name of Receiving Water: Flint Creek Tributary

Project Name/Description: Grassmere Haverton Improvement Project - proposed drainage improvements to relieve flooding in Haverton on the Pond and Grassmere Farms subdivisions located near the intersection on IL Route 59 and IL Route 22 within the Village of North Barrington

Construction Schedule: Beginning May 2026 and ending Oct 2026

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: Webert Deslien Email: webert.deslien@illinois.gov Phone: 217/782-3362

Post Document. No. C-0061-26-05192026-PublicNoticeAndFactSheet.pdf

401 Water Quality Certification Fact Sheet for Grassmere Haverton Improvements

IEPA Log No. C-0061-26

Contact: Angie Sutton 217-782-9864

The Village of North Barrington has applied for a 401 Water Quality Certification for impacts associated with proposed drainage improvements to reducing flooding in Haverton on the Pond, Grassmere Farms, and Oaksbury Pond subdivisions in Township 43 North, Range 9 East, Section 24 in Lake County, Illinois. The project area is near IL Route 59 at IL Route 22 and Duck Pond Lane in North Barrington. The project has been divided into two separate contracts: Grassmere Haverton and Oaksbury Pond Improvements. This proposed project includes only the Grassmere Haverton Improvements (GHI) Project. Frequent flooding of the roadways has been a concern as road closures have resulted from such flooding, additionally, accidents have occurred. The original culvert system is not sufficient to direct stormwater under IL 59 and as a result flooding of IL 59 and Haverton Way frequently occurs, causing public safety concerns. Improvements to the wetlands and waterbodies that have developed as a result of the retained water will include restoration of the culverts to provide stormwater conveyance, and maintenance of hydrology in the existing and proposed wetlands and waterbodies.

The project will impact 2 wetlands and 2 waterbodies. Permanent waterbody impacts as a result of filling and excavation will total 0.04 acres (Ac) with permanent hydrologic impacts totaling 6.99 Ac. Permanent wetland impacts as a result of filling and excavation will total 0.45 Ac, permanent hydrologic impacts will total 21.25 Ac, and impacts from loss will total 2.64 Ac. There are no proposed impacts to the upland community. Mitigation for the 3.13 Ac of impacts from filling and loss will be provided at appropriate ratios through onsite enhancement and restoration.

Information used in this review was obtained from the application documents dated June 27, 2024, June 28, 2024, July 1, 2024, February 18, 2026, and March 11, 2026.

Identification and Characterization of the Affected Water Body.

Huff and Huff, Inc. conducted wetland and surface water delineations on September 7, 8, and 12, 2023. This updated previous delineations for the project completed November 8, 2018. The study area is generally located east and west of IL 59 (Hough Road), north and south of IL 22, and north of West Scott Road. Existing land use in and adjacent to the project limits includes residential and undeveloped land associated with the Haverton Conservation Area. Five wetlands (Sites 1-5) and Three surface waters (Sites W1-W3) were identified within the study area, however only Sites 1, 2, W1, and W2 are proposed to be impacted by the project.

Site W1 is an open water pond located south of IL 22 and west of IL 59 within the Haverton Conservation Area. It receives surface water from adjacent uplands, wetlands and impervious surfaces. Site W1 is approximately 1000 feet wide with a depth of 6 to 12 inches and considered a Relatively Permanent Water

(RPW). Bank vegetation consists of hybrid cattail, silver maple (*Acer saccharinum*), eastern cottonwood (*Populus deltoides*), and common buckthorn (*Rhamnus cathartica*).

Site W2 is comprised of surface water ponds and an unnamed, ephemeral tributary to Flint Creek located south of IL 22 and east of IL 59. It receives surface water from adjacent uplands, wetlands, and impervious surfaces. The substrate of Site W2 includes silt and muck. Riffles and pools were not observed within the tributary portions of Site W2 within the project limits. Bank vegetation consists of common reed, reed canary grass, Canada goldenrod (*Solidago canadensis*), tall goldenrod (*Solidago gigantea*), American elm (*Ulmus americana*), common buckthorn, rice cutgrass (*Leersia Oryzoides*), alder species (*Alnus*), mowed turf, and hybrid cattail.

Site W2, an unnamed tributary to Flint Creek (UT to IL_DTZS-01) 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 Flint Creek, tributary to Waterbody Segment, IL_DTZS-01, is not listed on the 2024 Illinois Integrated Water Quality Report and Section 303(d) List as it has not been assessed. This segment of the unnamed tributary to Flint Creek is not subject to enhanced dissolved oxygen standards.

Site 1 is a marsh/hemi-marsh located west of IL 59 and south of IL 22 within the Haverton Conservation Area. It receives surface water from adjacent uplands, impervious surfaces, and periodic overbank flooding from the adjacent surface waters (Site W1). All three wetland criteria are present and is therefore considered a wetland. Portions of Site 1 were disturbed by dumping and recent construction activities. Dominant vegetation consists of Box elder (*Acer negundo*), gray dogwood (*Cornus racemosa*), common reed (*Phragmites australis*), reed canary grass (*Phalaris arundinacea*), tall swamp marigold (*Bidens aristosa*), cursed buttercup (*Ranunculus sceleratus*), riverbank grape (*Vitis riparia*), and Virginia creeper (*Parthenocissus quinquefolia*).

Site 2 is a marsh/hemi-marsh and wet meadow located east of IL 59, south of IL 22, and north of Scott Road. It receives surface water from the adjacent surface waters (Site W2). All three wetland criteria are present and is therefore considered a wetland. Portions of Site 2 are routinely mowed. Dominant vegetation consists of Callery pear (*Pyrus calleryana*), eastern red cedar (*Juniperus virginiana*), hybrid cattail (*Typha × glauca*), reed canary grass, and sandbar willow (*Salix exigua*).

Site #	FQI/Native Mean C	Flow Regime	High Quality Aquatic Resource? (Y/N)	NWI Classification	Size Within Project Area (Ac)	Impact Size (Ac)
1	14.7/2.3	-	N	PEM1C, PUBHx	18.42	18.42
2	25.1/3.4	-	Y	PEM1C	6.10	5.92
W1	-	Perennial	N	PEM1C, PUBHx/Perennial Lake/Pond	12.39	6.26
W2	-	Perennial, Ephemeral	Y	PEM1C, PEM1Cd, PEM1F, PUBHx, / Wetland	1.56	0.77

Permanent waterbody impacts as a result of filling and excavation will total 0.04 acres (Ac) with permanent hydrologic impacts totaling 6.99 Ac. Permanent wetland impacts as a result of filling and excavation will total 0.45 Ac, permanent hydrologic impacts will total 21.25 Ac, and impacts from loss will total 2.64 Ac. There are no proposed impacts to the upland community. Mitigation for the 3.13 Ac of impacts from filling and loss will be provided at appropriate ratios through onsite enhancement and restoration.

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

The pollutant load increases that would occur from this project include some possible temporary increases in total suspended solids. These increases are a normal and unavoidable result of excavation and filling that may occur in the project area. No increases in loading for ammonia, BOD, pH, inorganic compounds, or organic compounds are expected as a result of the proposed project. Additionally, there will be no new drainage areas or land use changes within the tributary. No more than 170 cubic yards (CY) of riprap for erosion control downstream of proposed culverts are expected to be placed.

Fate and Effect of Parameters Proposed for Increased Loading.

The increase in total suspended solids from excavation and rip rap placement is anticipated to be minimal and would be local and temporary. Design aspects of the project propose natural and nature-based features (NNBFs) that will improve water quality by restoration and enhancements to wetlands and buffers that are adjacent to the water bodies. Water quality benefits from the proposed wetland restoration and enhancements include erosion control, sediment removal, water filtration, and pollutant load reduction. Water quality benefits from the proposed naturalized open channel include reduction of erosion potential, pollutant filtration and nutrient load reduction, and aeration.

Proposed work will include restoration and enhancement of wetland areas, and enhancement of buffer areas. The appropriate mitigation for each site is outlined in the table below:

Site ID	Impact Type	Impact Size (Ac)	Mitigation Required? (Y/N)	Mitigation Ratio	Total Mitigation Credits Required	Impacts Avoided (Ac)
1	Loss	1.92	Y	1.5:1	2.88	0
	Hydrologic	16.5	N	N/A	0	
2	Fill/Excavation	0.45	Y	1.5:1	0.67	0.18
	Loss	0.72	Y	1.5:1	1.08	
	Hydrologic	4.75	N	N/A	0	
W1	Hydrologic	6.26	N	N/A	0	6.13
W2	Fill/Excavation	0.04	Y	1:1	0.04	0.79
	Hydrologic	0.73	N	N/A	0	
Total:					4.67	7.10

Onsite restoration for fill/excavation and hydrologic impacts in the waterbodies and wetlands will occur onsite to provide mitigation for the impacts from culvert replacement, riprap replacement, vegetated swale installation, riffle structure placement, control weir installation, and hydrologic drawdown. Impacts to 7.10 Ac of wetlands and surface waters have been avoided. Site 1 will undergo 16.5 Ac of wetland enhancement and 1.92 Ac of buffer area enhancement. Site 2 will undergo 0.45 Ac of wetland restoration, 4.34 Ac of wetland enhancement, and 0.59 Ac of buffer area enhancement. Sites W1 and W2 will undergo 6.26 and 0.23 Ac of wetland restoration, respectively.

For the 30.75 Ac of mitigation provided by the restoration and enhancement activities, 12.74 mitigation credits are awarded. These will be applied to the required 4.67 Ac of required mitigation providing an additional 8.07 mitigation credits.

Purpose and Social & Economic Benefits of the Proposed Activity.

The purpose of the project is to address safety deficiencies resulting from flooding for users of IL Route 59 and Haverton Way. Accordingly, the project need is to minimize flooding on IL Route 59 and Haverton Way. The project target was a measurable decrease in the number of roadway flooding incidents for both IL Route 59 and Haverton Way to a 50-year critical duration rainfall event. This is the typical design standard established for roadways under IDOT jurisdiction.

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

The applicant evaluated different alternatives considering factors such as impacts, water quality benefits, ecological benefits, fill, tree removal amounts, road closures, stormwater storage created, and cost. Water quality impacts, threatened and endangered (T&E) habitat impacts, and constructability were also considered. Alternatives assessed include four build alternatives and a no action alternative as follows:

No Action Alternative: This alternative would not address safety deficiencies on IL Route 59 or Haverton Way. No flood reduction measures and no ecological or water quality benefits would be provided and in turn, the Purpose and Need of the project would not be met. Therefore, the No-Action Alternative is not a practicable alternative and is not preferred.

Alternative 1 – Restore Original Stormwater Management Design + Open Channel and Culvert: This alternative would improve safety and reduce road closures in the project area. Stormwater storage volume created would restore the area to original post-development stormwater management design, satisfying management of the 50-year storm event for project success. No trees would be removed, there would be no floodplain fill, and it would have high constructability. Minimal ecological and water quality benefits would be provided. Alternative 1 would impact 45.08 Ac of existing wetlands and water bodies, including 2.16 Ac of direct impacts and 42.92 Ac of indirect impacts. The open channel would be for conveyance only, with no naturalized channel. The impacts on wetlands, waterbodies, and T&E habitat would be high, the water quality and ecological benefits reduction, and the high cost of \$3.5M led to the determination that Alternative 1 is not the preferred alternative.

Alternative 2 – Raise IL Route 59 + Raise Haverton Way: This alternative would improve safety and reduce road closures by raising IL Route 59 and Haverton Way above the flood elevation of the 50-year storm event. Alternative 2 would result in low impacts on existing wetlands and water bodies and no removal of existing trees. However, 2.66 Ac of fill would be required in the floodplain, and no stormwater storage would be provided. The work would need to include a pile supported land bridge due to unsuitable soil conditions, as well as securing additional rights of way to construct a four-lane cross section due to the existing traffic. Though the roadway grades would potentially reduce flooding, water quality would likely continue to degrade due to sediment accumulation and nutrient, TSS, and heavy metals accumulation. Habitat degradation would occur from unmanaged invasive species, and flooding, erosion, and compromised pavement structure would require increased maintenance. The low constructability, impacts to water and habitat quality, and high cost of \$25M resulted in the determination of Alternative 2 to not be practicable, and therefore, not the preferred alternative.

Alternative 3 (Preferred Alternative) – Control Structure within IDOT ROW + Open Channel with Control Structures + Raise Haverton Way: This alternative would improve safety and reduce road closures on IL Route 59 and Haverton Way by restoring the culvert function under IL Route 59 while minimizing water level drawdown in on-site and adjacent wetland and water bodies. West of IL 59 water levels would be lowered by 6.84 inches, and maintained by a concrete weir located 85 feet north of the existing culvert. The new culvert would be a box culvert 8 feet by 2 feet. East of IL 59, the lowered water levels would be maintained by construction of a vegetated weir. A meandering open channel, vegetated weir, and

restrictor pipe would be constructed to convey water, improve water quality, control stormwater release, and provide habitat prior to discharging to downstream water bodies and wetlands. Haverton Way would be reconstructed, and grades would be raised above the flood elevation of the 50- year storm event. Wetland and water body impacts would be minimized with on-site wetland mitigation provided. No removal of trees or floodplain fill is proposed, and total of 6.37 Ac-ft of stormwater storage would be provided. This alternative would have low water quality and habitat impacts, and a high constructability level with a projected cost of \$2.8M. For these reasons, Alternative 3 was determined to be the preferred alternative.

Alternative 4 – Terraced Wetlands with Control Berms + Control Structure within IDOT ROW + Open

Channel with Control Structures + Raise Haverton Way: This alternative would improve safety and reduce flooding on IL Route 59 and Haverton Way by restoring the function of the culvert under IL Route 59, reconstructing Haverton Way to raise the roadway grade, constructing a vegetated berm within the wetland west of IL Route 59 to maintain water levels in wetlands, and constructing an open channel east of IL Route 59 to convey flows and enhance wetlands and water quality. This alternative would create 3.91 Ac-ft of stormwater storage volume, proposes no tree removal, and would have a low impact on water quality and T&E habitat. Onsite mitigation would be provided with restoration areas and creation of an open, naturalized channel. Water quality and ecological benefits would facilitate the onsite mitigation for total wetland and water body impacts of 15.25 Ac which includes 9.77 Ac of excavation/fill and loss. Due to the excavation/fill and loss impacts, potential offsite mitigation requirements, floodplain fill, cost of \$4M, and the medium level of constructability, Alternative 4 was not considered practicable and determined not to be the preferred alternative.

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

An EcoCAT consultation (Project # 2417361) was initiated on July 1, 2024. The natural resource review provided by EcoCAT identified protected resources that may be in the vicinity of the proposed action. The Department evaluated this information and concluded that adverse effects are unlikely. Therefore, consultation under 17 Ill. Adm. Code Part 1075 was terminated.

A Section 7 consultation was completed by the USFWS on February 23, 2024 (Project Code 2024-0053602), and identified threatened, endangered, and candidate species that may occur within the boundary of the proposed project and/or may be affected by the proposed project. According to USFWS , there is a total of 8 threatened, endangered, or candidate species on this species list. Species on this list should be considered in an effects analysis for this project and could include species that exist in another geographic area.

An IPaC Resource list generated for the project area shows the following species are potentially affected by activities in this location:

- Northern Long-eared bat (*Myotis septentrionalis*) – Endangered
- Rufa Red Knot (*Calidris canutus rufa*) - Threatened
- Whooping Crane (*Grus americana*) – Experimental population, Non-essential
- Karner Blue Butterfly (*Lycaeides melissa samuelis*) - Endangered
- Monarch Butterfly (*Danaus plexippus*) – Candidate
- Rusty Patched Bumble Bee (*Bombus affinis*) - Endangered
- Eastern Prairie Fringed Orchid (*Platanthrea leucophaea*) – Threatened
- Pitcher’s Thistle (*Cirsium pitcheri*) - Threatened

There are no critical habitats within the project area; however, there is a requirement to determine if the project may have effects on all of the above-listed 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; and that this activity would benefit the area by addressing safety by minimizing regional flooding in the area and as a result, avoiding road closures and maintaining traffic flow . Comments received during the 401 Water Quality Certification public notice period will be evaluated before a final decision is made by the Agency.