

**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:

Friday, February 21, 2025

Public Notice Ending Date:

Thursday, March 13, 2025

Agency Log No.: C-0135-24

Federal Permit Information: Federal permit/license no. LRC-2023-665 is under the jurisdiction of Chicago District, Regulatory Branch U.S. Army Corps of Engineers

Name and Address of Discharger: Skokie Consolidated Drainage District, Bryan R Winter; Fuqua Winter LTD - 9 N County Street, Suite 200, Waukegan, IL 60085

Discharge Location: In Section 16 of Township 43-North and Range 12-East of the East 3rd Principal Meridian in Lake County. Additional project location information includes the following: East of Trail Way Road, Highland Park, IL 60035

Name of Receiving Water: Skokie River

Project Name/Description: Skokie River Channel Streambank Stabilization - proposed 2,660 feet of stone toe stabilization, installation of 1,100 feet of gabion baskets on the west bank, 475 feet of gabion baskets on the east bank, and four riffle structures in order to stabilize the bank and protect Danny Cunniff Park and other properties from severe erosion

Construction Schedule: Immediate (Planned project duration is approximately 486 days)

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-0135-24-02212025-PublicNoticeAndFactSheet.pdf

401 Water Quality Certification Fact Sheet for Skokie River Streambank Stabilization

IEPA Log No. C-0135-24

Contact: Angie Sutton 217-782-9864

The Skokie Consolidated Drainage District (“Applicant”) has applied for a 401 Water Quality Certification for impacts associated with streambank stabilization to the east and west banks of the Skokie River, in Highland Park. The project will involve various improvements to 2660 linear feet (LF) of the Skokie River east of Trail Way Road. These proposed improvements will stabilize the streambank erosion, to protect the Danny Cunniff Park and other nearby properties from severe erosion and to protect infrastructure that discharges to the Skokie River. The proposed project site is located in Township 43 North, Range 12 East, Section 9, in Lake County, Illinois. The project includes stabilization along the west bank consisting of 1100 LF of gabion baskets and 990 LF of stone toe protection, and along the east bank consisting of 475 LF of gabion baskets and 1670 LF of stone toe protection. Additionally, improvement features will include in-stream riffle construction.

Tree removal will occur where required to install the stabilization features with tree replacement and native vegetation plantings where possible. The project will involve 903.46 cubic yards (CY) of fill to 0.56 acres (Ac) of Waters of the U.S. (WOUS) with minimal adverse environmental effects. It is expected that mitigation will be provided by the improvements to water quality and aquatic habitat as a result of the proposed project. This project will not permanently impact any wetlands.

Information used in this review was obtained from the application documents dated December 21, 2023, July 17, 2023, May 20, 2024, and September 19, 2024.

Identification and Characterization of the Affected Water Body.

The Skokie River has 0.3 cfs of flow during critical 7Q10 low-flow conditions. The Skokie River is classified as General Use Water. The Skokie 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*, nor is it given an integrity rating in that document. The Skokie River, Waterbody Segment IL_HCCD-01, is listed on the 2024 Illinois Integrated Water Quality Report and Section 303(d) List as impaired for aquatic life use with potential causes given as chloride, dissolved oxygen, total phosphorus, and total suspended solids (TSS), and primary contact use with a potential cause given as fecal coliform. This segment of the Skokie River is not subject to enhanced dissolved oxygen standards.

Skokie River is a perennial stream with a slightly meandering channel that runs through Highland Park between Danny Cunniff Park to the west and Old Elm Golf Course to the east. The stream has minimal sinuosity through the project area with two turns in the alignment but channelized between the bends. The vegetation along the channel is primarily wooded along the banks with mowed turf grass beyond the wooded areas. The existing vegetation has done little to stabilize the banks. The stream is located throughout the center of the project area and continues off-site to the north and south.

A wetland and stream delineation was conducted by V3 Companies (V3) on October 19, 2023, for the approximately 6 Ac survey area within the Skokie River watershed. One Water of the US (WOUS) (Area 1A and Area 1B), the Skokie River were identified in the project area. In total, 1.87 Ac of WOUS consisting of 2985 LF of the Skokie River lie within the project area.

Dominant vegetation consists of common buckthorn (*Rhamnus cathartica*), Virginia wild rye (*Elymus virginicus*), calico aster (*Symphotrichum lateriflorum*), white avens (*Geum canadense*), reed canary grass (*Phalaris arundinacea*), Jerusalem artichoke (*Helianthus tuberosus*), giant chickweed (*Myosoton aquaticum*), riverbank grape (*Vitis riparia*), and box elder (*Acer negundo*).

Area	Area Onsite (Ac)	Length Onsite (LF)	Mean C/FQI	Quality	USACE Jurisdiction?
1A	1.35	2075	2.43/16.51	Non-HQAR	Yes
1B	0.52	910			
Total	1.87	2985			

Two additional areas were studied during the delineation of the project area. However, these areas (Area 2 and Area 3) were determined to both be an Isolated Water of Lake County (IWLC) with Area 3 specifically appearing to be a wetland created incidental to construction grading on the golf course development site.

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

The pollutant load increases that would occur from this project include some possible increases in total suspended solids. These increases, a normal and unavoidable result of placement of fill in Tinley Creek may occur as a result of streambank improvement activities. Discharge will consist of clean construction materials. Sediment impacts to downstream water resources during construction are expected to be temporary. Due to the existing sources of impairment present in the Skokie River, the proposed action of streambank stabilization will not result in new pollutant discharge and will improve existing impairments that have been identified by Lake County for the Skokie River, such as bank destabilization.

Overall, the project will reduce bank degradation and future sediment load in the river, ultimately leading to improved water quality and reduced pollutant loading.

Total fill proposed for stabilization activities in 0.56 Ac is 903.46 CY of clean fill material. Gabion baskets will require 306.53 CY of fill in 1575 LF of the project area, stone toe stabilization work will require 403.33 CY of fill in 2660 LF of the project area, and in-stream riffle construction and streambank stabilization will each require 96.8 CY of fill in 0.06 Ac of the project area.

Fate and Effect of Parameters Proposed for Increased Loading.

The increase in total suspended solids would be local and temporary. The work area will employ various best management practices (BMPs) and erosion control measures. Some of those methods include the use of erosion control blankets, seeding, silt fences, and construction and tree protection fences. Erosion and sediment control plans to be used during construction are included in the engineering plans. No impacts to wetlands or additional Waters of the United States will occur as a result of the project. The project would be an overall improvement to the quality of the Skokie River as it aims to reduce erosion, improve water quality, and restore the area with native vegetation.

The proposed stabilization measures have been designed to address the specific needs of each stretch of the creek based on a detailed analysis of the severity and height of the erosion, the proximity to adjoining properties, and flow velocities in the creek. In order to complete the proposed bank stabilization work, the contractor will isolate areas of the channel, dewater, and work from the bottom of the channel to install the proposed bank stabilization improvements. The dewatering plan includes working during low-flow conditions, using bypass pumps, installing cofferdams upstream and downstream of the construction area, dewatering and providing sediment treatment, and installing fabric screens upstream and downstream of the construction area.

Overall, the proposed project will have a positive effect on the Skokie River as the streambanks will be stabilized. No mitigation is proposed for this project as the project itself is compensation for any impacts proposed and impacts to the waterway will not be permanent.

Purpose and Social & Economic Benefits of the Proposed Activity.

The purpose of the project is to protect the Danny Cunniff Park and other nearby properties from severe erosion and to protect infrastructure that discharges to the Skokie River. The proposed improvements will improve safety of the community by repairing the severe bank erosion. The walkway at the top of the bank would be stabilized, in turn benefitting the community at large. Additionally, the project will reduce the amount of sediment entering into the Skokie River which will benefit the water quality and aquatic habitat within the river.

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

The proposed improvements have been designed to stabilize the existing eroded banks along the river. The project will result in significant decreases of degradation of the banks and of the sediment load in the river. Because this project is proposed along the banks of the existing channel, there is no alternate configuration or location that could be used to avoid impacts to WOUS though different design options were analyzed. There are no practicable alternatives available that will result in a reduced pollutant load to the Skokie River. The proposed project is the preferred alternative.

The following alternative shoreline protection measures were considered during the design process:

- Natural Toe Protection was considered for areas with less than 30-inches of bank erosion where velocities are expected to be less than 4 feet /second. This protection offers a natural protection with logs tied into the bottom of the channel and minor grading above to tie into the existing bank. The anticipated design life of the natural toe protection is roughly 25-35 years. This method minimizes property and tree loss. The cost is similar to Stone Toe Protection but has a shorter design life.
- Stone Toe Protection was considered for areas with less than 30-inches of bank erosion where velocities are expected to be greater than 4 ft/s. This protection provides an armored protection of the toe against higher velocities in the channel. The top of the stone will be tied into the existing bank and planted with native vegetation above the toe. This method minimizes property and tree loss. The cost is similar to Natural Toe Protection but allows higher velocities and has a longer design life.

- Bank Reshaping was considered for areas with greater than 30-inches of bank erosion. This would be paired with a Stone Toe to protect the toe. The limitation of this option is the amount of space that is required to grade back the slopes. For example, with 8-feet of bank erosion, to pull back the slopes at 3:1 (H:V), 24 feet of area is required. This option was used where feasible and would not encroach into the adjacent properties. On the east side the channel, the golf course's main concerns are privacy/screening and keeping the natural berm separating the course from the channel. The design of the gabions on the east side was to keep the improvements within the 50-ft easement to the district and to maintain the desired screening for the golf course. Tree loss was also considered when evaluating the use of this measure because the increased graded area also increases the number of trees that will need to be lost to implement it. This method does not minimize property or tree loss but is more economical than Soil Lifts.
- Gabion Walls were considered for areas with greater than 30-inches of bank erosion, higher channel velocities, and to minimize property and tree loss. The location of the bank erosion played a major role in determining if and where gabions were used. For the eastern portion of the project, the bank erosion is very high 6-9 feet and the existing multi-use path is located very close to the top of the bank. Of all the options considered for protection against erosion of over 30-inches, the gabions have the smallest footprint. Both Bank Reshaping and Geogrid Soil Lifts require additional work back into the slope to stabilize the face, while gabions only require approximately 6-feet of width to place the gabion baskets and stone. This measure helps preserve more of the property and trees and saves the multi-use path for the adjacent property owner than the other alternative measures. Additionally, Gabion Walls are the only method which can effectively handle the higher channel velocities in the corridor and have a design life of over 50-years. Based on the actual extent of bank erosion requiring gabions, three different levels of gabion design have been utilized: single, double or triple layer of gabions (i.e., one, two or three levels of gabions). This method minimizes property and tree loss. It is also more expensive; however it provides a longer design life and a smaller footprint.
- Geogrid Soil Lifts (with Natural Toe Protection) were considered in areas with greater than 30-inches of bank erosion. The limitations of this option however relate to the channel velocity and construction footprint. Generally, soil lifts work for bank stabilization where channel velocities are less than 3.5 to 4.0 ft/s, especially during the first few years of vegetation establishment. The Skokie River system is very "flashy" and will have a spike in elevation and flow shortly after most rain events. Based on hydraulic modeling of the river, the average channel velocity is 6.6 ft/s for a 10-year event and 10.0 ft/s for a 100-year event. In addition to the velocities, the soil lift systems require a significant amount of space to implement. Each soil lift is wrapped in geotechnical fabric and extends into the slope in order to provide the structural strength required to hold the bank. The footprint will extend further into the bank depending on the height the stabilization but is approximately two to three times the height of the stabilization. Like the Bank Reshaping, the footprint required to construct a soil lift system would account for the need to reconstruct the multi-use path and require additional tree loss through the corridor. In addition, for these tie backs would extend outside the 50-foot easement in many locations. While the golf course has been a cooperative partner in this project, their main desire for the project is to maintain the existing buffer between the private golf course and the creek corridor. If geogrid soil lifts were installed instead of gabions along their property at approximate stations 237+50 to 240+00, they would have lost additional land and would not have maintained the natural top of berm that they desired to keep during this project. Based on these constraints, this measure was not implemented in the final design. This method does not minimize property or tree loss and is less economical than Bank Reshaping. It also requires a larger footprint than gabion.

A No Action Alternative does not meet the basic purpose of the project and is not a feasible alternative. This alternative is also contrary to the public interest, as it does not provide any public interest benefits.

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 17, 2023 (Project #2400822) to the Illinois Department of Natural Resources. The consultation indicated that the natural resource review 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. The consultation under 17 Ill. Adm. Code Part 1075 was terminated.

A Section 7 consultation was conducted on July 17, 2023, in order to determine whether any federal or state listed species or habitat are likely to be adversely impacted by the project. It was determined that no critical habitat existed in the project area and that the following federally listed species may occur within the boundary of the proposed project: Northern Long-eared Bat (*Myotis septentrionalis*), Piping Plover (*Charadrius melodus*), Whooping Crane (*Grus americana*) Experimental Population, Red Knot (*Calidris canutus rufa*), Monarch butterfly-candidate (*Danaus plexippus*), Karner Blue Butterfly (*Lycaeides melissa samuelis*), Rusty Patched Bumble Bee (*Bombus affinis*), Eastern prairie fringed orchid (*Platanthera leucophaea*), and Pitcher's Thistle (*Cirsium pitcher*). The project area consists of a riparian environment with non-high-quality vegetation that would not support the listed species and as a result, the consultant has determined there are no listed species in the project area because of this. Additionally, it has been determined that the project will have “No Effect” on the northern long-eared bat per the “No Effect” letter dated July 27, 2023, issued by the USFWS.

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 community by protecting the Danny Cunniff Park and other nearby properties from severe erosion and to protect infrastructure that discharges to and runs along the Skokie River. Additionally, the project will reduce the amount of sediment entering the Skokie River and assist to reduce the amount of sediment that flows downstream. Comments received during the 401 Water Quality Certification public notice period will be evaluated before a final decision is made by the Agency.