IEPA Log No.: **C-0052-12**
CoE appl. #: **LRC-2012-132**

Public Notice Beginning Date: **August 15, 2012**
Public Notice Ending Date: **September 14, 2012**

Section 401 of the Federal Water Pollution Control Act
Amendments of 1972

Section 401 Water Quality Certification to Discharge into Waters of the State

Public Notice/Fact Sheet Issued By:

Illinois Environmental Protection Agency
Bureau of Water
Permit Section
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276
217/782-3362

Name and Address of Discharger: City of St. Charles – 200 Devereaux Way, St. Charles, IL 60174

Discharge Location: Near St. Charles in Sections 14 and 15 of Township 40N, Range 8E of the 3rd P.M. in Kane County.

Name of Receiving Water: Norton Creek

Project Description: Stabilize and reshape Norton Creek.

The Illinois Environmental Protection Agency (IEPA) has received an application for a Section 401 water quality certification to discharge into the waters of the state associated with a Section 404 permit application received by the U.S. Army Corps of Engineers. The Public Notice period will begin and end on the dates indicated in the heading of this Public Notice. The last day comments will be received will be on the Public Notice period ending date unless a commenter demonstrating the need for additional time requests an extension to this comment period and the request is granted by the IEPA. Interested persons are invited to submit written comments on the project to the IEPA at the above address. Commenters shall provide their names and addresses along with comments on the certification application. Commenters may include a request for public hearing. The certification and notice number(s) must appear on each comment page.

The attached Fact Sheet provides a description of the project and the antidegradation assessment.

The application, Public Notice/Fact Sheet, comments received, and other documents are available for inspection and may be copied at the IEPA at the address shown above between 9:30 a.m. and 3:30 p.m. Monday through Friday when scheduled by the interested person.

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 call James Blessman at 217/782-3362.

JTB:C-0052-12_401 PN and FS_22Feb12.docx

Fact Sheet for Antidegradation Assessment
For City of St. Charles
IEPA Log No. C-0052-12
COE Log No. LRC-2012-132
Contact: Mark T. Books at 217/785-6937
Public Notice Start Date: August 15, 2012

The City of St. Charles ("Applicant") has applied for Section 401 water quality certification for impacts caused by their proposed 750 feet stabilization project within the Fox Glen Creek ("Creek"). The stabilization project will require regrading and filling of the Creek to reduce the velocity and erosive force of stormwater runoff. The channel of the Creek will be lined with riprap to protect the sandy soils from being eroded. A plunge pool with stone larger than the stone in the channel will be created at the Fox Glen Drive Bridge to dissipate the erosive energy during storm events. A Flow Control Weir will be placed downstream of the bridge. At the south end of the project approximately 100 feet of the west bank has failed and requires structural stabilization. Stabilization of this west bank will be provided by using Gabion Baskets filled with riprap. Approximately 1,050 tons of riprap will be used in this entire project. The disturbed slopes will be seeded with native vegetation appropriate to the hydrologic conditions. The proposed project will impact 0.58 acres of the Creek and temporary impact to 0.03 acres of isolated wetland due the staging and construction activities necessary to stabilize the Creek. The entire project area is approximately 4 acres in size with an approximate area of disturbance being only 3 acres. Normal low flows will be maintained during construction by placing applicable and appropriate water rerouting methods, at the option of the contractor, to divert flow away from the work zone. The proposed work will specifically occur in Section 14 & 15, Township 40 North, Range 8 East.

Identification and Characterization of the Affected Water Body.

Fox Glen Creek and the wetland have a zero 7Q10 flow and are General Use Waters. Fox Glen Creek has not been evaluated by the Illinois EPA Surface Water Monitoring Unit in the draft 2010 Illinois Water Quality Report. The Creek and the wetland are not an enhanced waterbody pursuant to the dissolved oxygen water quality standard. Using the 2008 Illinois Department of Natural Resources Publication *Integrating Multiple Taxa in a Biological Stream Rating System*, the Creek and the wetland are not listed as a biologically significant stream nor have they received an integrity rating within the project area. The FQI rating for the Creek is 15.8 and for the wetland it is 5.1. The Creek watershed has a drainage area of approximately 0.67 square miles at the project site. Biological characterization of the stream has not been required because the project will not permanently alter the existing stream habitat conditions.

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 suspended solids ("SS") during the construction of the project. Aquatic life uses in the creek that will be disturbed during construction are anticipated to recover and support approximately the same community structure as is now found in the existing channel.

Fate and Effect of Parameters Proposed for Increased Loading.

The increase in SS will be local and temporary. Erosion control measures will be utilized to minimize any increase in SS and prevent further impact to the stream. Applicant has stated that

they will follow an Erosion and Sediment Control Plan that includes the use of erosion barrier, velocity dissipation devices, a Pollution Prevention Plan and Best Management Practices. The Applicant will also install coir logs in the Creek downstream of the project area to minimize any sediment release from the project site during construction.

Purpose and Social & Economic Benefits of the Proposed Activity.

Applicant has stated the following concerning purpose for this project:

> "A control structure was constructed in the main channel of the creek with the intent to control flow and create flood storage and overflow to an abandoned gravel pit to the south. In 1995 a significant rainfall event washed out the control structure and the main channel of the creek was diverted south to the gravel pit…Based on recent observation, erosion has continued to occur along the creek with a slope failure just upstream of the pedestrian bridge…The City of St. Charles has indicated that the creek bottom has eroded approximately 10 feet in elevation over the last five years. The soils are particularly sandy and subject to significant erosion…The channel down cutting has caused the banks to become unstable resulting in slope stability failures. The purpose of this project is to provide long term stabilization of the creek banks and protection of adjacent residential properties through the use of hydraulic grade control structure, channel lining, and long-term maintenance."

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

The construction of the proposed project will follow condition set forth by the Agency and USACE. The Applicant stated the following concerning the do nothing option.

> "If no actions were taken, the channel would continue eroding based on velocities calculated in existing conditions hydraulic model…Furthermore, the banks of the incised channel will continue to slough into the channel until bank stability is achieved. This will result in significant tree loss and the sediment load to the downstream watershed…The erosion has become more severe in the last 5 years and is threatening the stability of the Fox Glen Drive culvert roadway crossing the creek."

The Applicant identified the erosion along the channel into three different but related areas which are;

- Scour at the north end of the project at Fox Glen Drive,
- The scour at the sound end of the proposed project, and
- Channel erosion and incision between the two ends.

The Applicant considered doing only one or two of the different sections identified above but determined that without doing the whole proposed project it would jeopardize the success of this project. The Applicant has stated that they also created and evaluated 22 different hydraulic models to determine which option minimizes velocities and optimize the velocity of each of the different control measure types and location.

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

In a report generated through IDNR's EcoCAT system dated February 8, 2012, the Illinois Natural Heritage Database contains no records of State-listed threatened or endangered species in the vicinity of the project location; therefore, consultation is terminated.

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 antidegradation review summary was written. We tentatively find that the proposed activity will result in the attainment of water quality standards; that all existing uses of the receiving waters will be maintained; 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 will benefit the community at large by protecting a stabilizing the Creek from future erosion damage. Comments received during the 401 Water Quality Certification public notice period will be evaluated before a final decision is made by the Agency.