

IEPA Log No.: **C-0053-11**  
CoE appl. #: **2010-294**

Public Notice Beginning Date: **August 24, 2011**  
Public Notice Ending Date: **September 17, 2011**

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:** Metropolitan Water Reclamation District 100 E. Erie St. Chicago, IL.60611

**Discharge Location:** Sec. 11, T42N, R11E, 3<sup>rd</sup> P.M., Cook County within Chicago

**Name of Receiving Water:** Buffalo Creek

**Project Description:** Development of the Heritage Park Flood Control Facility

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 Keith Runge at 217/782-3362.

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Fact Sheet for Antidegradation Assessment

RE: Metropolitan Water Reclamation District of Greater Chicago

Heritage Park Flood Control Facility Project

County: Cook

IEPA Log #C-0053-11

COE Log #LRC-2010-00294

Contact: Mark T. Books at 217/558-2012

August 24, 2011

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Metropolitan Water Reclamation District of Greater Chicago (“Applicant”) has applied for a Section 401 water quality certification for impacts associated with constructing of the required floodplain storage for the U.S. Army Corps of Engineers (“USACE”) Levee 37 project on the Des Plaines River. The Applicant has entered into an agreement with the Wheeling Park District and the Village of Wheeling for the development of the Heritage Park Flood Control Facility, which includes the expansion of an existing detention reservoir (Heritage Lake), excavation of new floodwater storage areas east and west of Buffalo Creek, and the installation of the necessary appurtenances for operation of new floodwater facilities. The project site is located in the Village of Wheeling, bordered on the north by Dundee Road, on the east by Wolf Road, on the south by Jeffrey Road and on the west by the Wisconsin Central Railroad tracks. Specifically the site is located in Sections 11, Township 42 North, Range 11 East. Heritage Park is an existing Wheeling Park District facility consisting of mowed grass, ball fields, Lake Heritage stormwater detention facility, and an Aquatic Center and Community Recreation Center. The site includes five emergent wetlands and Buffalo Creek which flows from north to south in the eastern portion of the property. The project proposes a total of 2.92 acres of impact to waters of the U.S. The Applicant is proposing to relocate approximately 1,645 feet (1.42 acres) of Buffalo Creek and the project will require filling of approximately 1.50 acres of emergent wetland habitat.

#### **Identification and Characterization of the Affected Water Body.**

Buffalo Creek and the wetlands are General Use Waters with zero 7Q10 flow. Buffalo Creek Waterbody Segment IL-GST is listed in the Illinois Integrated Water Quality report and Section 303(d) List-Draft 2010 as being impaired for Aquatic Life and Primary Contact Recreation. The potential causes of impairment for Aquatic Life being Chloride and TSS. The potential cause of impairment for Primary Contact Recreation identified as being Fecal Coliform Bacteria. The wetlands have not been evaluated by the Illinois EPA Surface Water Monitoring Unit. Buffalo Creek and the wetlands are not an enhanced water bodies 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 wetlands were not listed as a biologically significant stream nor have they received an integrity rating. The drainage area for Buffalo Creek at this location is approximately 23 square miles. Biological characterization of the stream has not been required because the project will not permanently alter the existing stream habitat conditions. The project will eliminate the current habitat from the impacted wetland areas.

The IDNR WIRT system does not list any threatened or endangered aquatic species residing in the project area.

**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”) in surrounding wetlands and Buffalo Creek during the construction. The Applicant will use BMPs, a Stormwater Pollution Prevention Plan, and a Soil Erosion and Sediment Control Plan (approved by North Cook County Soil & Water Conservation District) to minimize any increase in SS during construction and reduce impact. The Applicant will also comply with the “*Illinois Procedures and Standards for Urban Soil Erosion and Sedimentation Control*” and the latest version of the “*Illinois Urban Manual*”. The USFWS requested that the Applicant consider additional BMP’s onsite for newly constructed facilities particularly in areas with additional impervious cover. The Applicant has stated the following concerning USFWS request:

“BMPs have been incorporated into the Heritage Park design. These include the requested bioswale along the south parking lot, biostabilization to prevent erosion along Buffalo Creek, and an abundance of native plantings along the pathways surrounding Lake Heritage and adjacent to the creek.”

Aquatic life uses in the portion of the creek that will be disturbed during construction may be negatively impacted, but in time, they will recover and support approximately the same community structure as is now found in the existing channel. Bypass pumping of the creek’s flow will be required at a minimum of 20 cfs.

Applicant has stated the following concerning the creek:

“The existing Buffalo Creek is a manmade nearly straight incised channel. The creek banks are highly eroded and are typically near a 1:1 slope and in some instance there are vertical slopes three to four feet high. The substrate is typically small pebbles and gravel due to the relatively high flow velocity. There are no existing meanders in the channel and only minor riffles... Buffalo creek will be enhanced to provide riparian habitat and native species plantings. The bank of the creek will be flattened to reduce bank instability and erosion and a floodplain will be created. Two riffle structures are also planned. Best Management Practices (BMPs) have been designed and are included in the project. The practices include a 7.84 acre buffer area of native short grass prairie and riparian plantings along Buffalo Creek. The width of the creek buffer varies depending on location, but is generally 75 to 200 feet...The creek side slopes will be cut back to 4H: 1V slope or flatter and vegetated in order to reduce future erosion. An overbank floodplain area has also been designed and planted with native vegetation through a 1,680 linear feet of relocated Buffalo Creek. Native rock substrate removed from Buffalo Creek will be used to fill the newly-aligned Buffalo Creek”.

In summary, the Applicant is proposing to relocate approximately 1,645 linear feet of Buffalo Creek with 1,680 linear feet of new channel, approximately a 1:1 ratio. The project includes 7.84 acres of buffer area which will be planted with native short grass prairie and riparian plantings along Buffalo Creek. In addition to compensate for the 2.92 acres of wetland lost the Applicant will also purchase 4.38 acres from one of the eight mitigation banks located within the Des Plaines River Watershed. The final decision on

which bank the Applicant will use will be based on the lowest cost per acre solicited from the different mitigation banks. This will result in a mitigation ratio of 1.5:1 ( $2.92 \times 1.5 = 4.38$  acres).

The Applicant used the *Illinois Stream Mitigation Guidance* to determine mitigation needs for this proposed project (7,720.8 mitigation credits required), and to determine credits generated as a result of the proposed mitigation efforts (11,760 mitigation credits generated on site). This on site mitigation credit work does not include the 4.38 acres of wetland acres that the Applicant will also be purchasing.

**Fate and Effect of Parameters Proposed for Increased Loading.**

The increase in SS will be confined to the immediate vicinity of construction activities. Erosion control measures will be utilized to minimize any increase in SS during construction.

**Purpose and Social & Economic Benefits of the Proposed Activity.**

The Applicant has stated the following:

“The Levee 37 project was originally formulated by USACE in 1989 following significant regional flooding in 1987 and 1988. The project underwent extensive planning and design resulting in construction being essentially complete in 2010 except for a 600-foot long segment of floodwall that IDNR required to be left open until compensatory storage was provided”

The Applicant further states that the basic purpose for this project is to provide compensatory storage for the USACOE/IDNR Levee 37 project on the Des Plaines River.

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

The Applicant has stated the following concerning alternatives for this project;

“During the final planning and design, USACE and INDR undertook significant efforts attempting to provide the necessary compensatory storage for the project, In 2004, USACE and IDNR formed a Local Planning Committee comprised of representatives from USACE, IDNR, Lake County Stormwater Management Commission, and MWRDGC to study the entire range of alternatives sites for the compensatory storage. The potential sites needed to be relatively large, open sites near Buffalo Creek. From an initial list of over 30 potential sites, the study eliminated all but two from consideration – Heritage Park and a site know as Horcher Farm, also located in Wheeling, Illinois. The Horcher Farm site was eliminated from consideration due to the relatively small area available, unwillingness of property owners to sell the land, real estate costs and potential for future development”.

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

In a report generated through IDNR’s Eco Cat system dated August 3, 2010, the Illinois Natural Heritage Database contains no record 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 allowing the completion of a flood control project. Comments received during the 401 Water Quality Certification public notice period will be evaluated before a final decision is made by the Agency.