



# Illinois Environmental Protection Agency

Bureau of Water • 1021 N. Grand Avenue E. • P.O. Box 19276 • Springfield • Illinois • 62794-9276

## Division of Water Pollution Control ANNUAL FACILITY INSPECTION REPORT

### for NPDES Permit for Storm Water Discharges from Separate Storm Sewer Systems (MS4)

*This fillable form may be completed online, a copy saved locally, printed and signed before it is submitted to the Compliance Assurance Section at the above address. Complete each section of this report.*

Report Period: From March, 2020 To March, 2021

Permit No. ILR40 0173

#### MS4 OPERATOR INFORMATION: (As it appears on the current permit)

Name: City of Chicago Mailing Address 1: Jardine Water Purification Plant

Mailing Address 2: 1000 East Ohio Street County: Cook

City: Chicago State: IL Zip: 60611 Telephone: 312-744-7001

Contact Person: Brendan Schreiber Email Address: Brendan.Schreiber@cityofchicago.org  
(Person responsible for Annual Report)

#### Name(s) of governmental entity(ies) in which MS4 is located: (As it appears on the current permit)

City of Chicago

#### THE FOLLOWING ITEMS MUST BE ADDRESSED.

A. Changes to best management practices (check appropriate BMP change(s) and attach information regarding change(s) to BMP and measurable goals.)

- |  |                                     |   |                                     |
|--|-------------------------------------|---|-------------------------------------|
| 1. Public Education and Outreach             | <input checked="" type="checkbox"/> | 4. Construction Site Runoff Control       | <input type="checkbox"/>            |
| 2. Public Participation/Involvement          | <input checked="" type="checkbox"/> | 5. Post-Construction Runoff Control       | <input type="checkbox"/>            |
| 3. Illicit Discharge Detection & Elimination | <input type="checkbox"/>            | 6. Pollution Prevention/Good Housekeeping | <input checked="" type="checkbox"/> |

B. Attach the status of compliance with permit conditions, an assessment of the appropriateness of your identified best management practices and progress towards achieving the statutory goal of reducing the discharge of pollutants to the MEP, and your identified measurable goals for each of the minimum control measures.

C. Attach results of information collected and analyzed, including monitoring data, if any during the reporting period.

D. Attach a summary of the storm water activities you plan to undertake during the next reporting cycle ( including an implementation schedule.)

E. Attach notice that you are relying on another government entity to satisfy some of your permit obligations (if applicable).

F. Attach a list of construction projects that your entity has paid for during the reporting period.

**Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))**

Andrea R.H. Cheng  
Owner Signature:

Andrea R.H. Cheng, Ph.D., P.E.

Printed Name:

5/21/21  
Date:

Acting Commissioner

Title:

EMAIL COMPLETED FORM TO: [epa.ms4annualinsp@illinois.gov](mailto:epa.ms4annualinsp@illinois.gov)

or Mail to: ILLINOIS ENVIRONMENTAL PROTECTION AGENCY  
WATER POLLUTION CONTROL  
COMPLIANCE ASSURANCE SECTION #19  
1021 NORTH GRAND AVENUE EAST  
POST OFFICE BOX 19276  
SPRINGFIELD, ILLINOIS 62794-9276

**CITY OF CHICAGO  
ANNUAL FACILITY INSPECTION REPORT**

**GENERAL PERMIT FOR DISCHARGES FROM  
SMALL MUNICIPAL SEPARATE STORM SEWER  
SYSTEMS**

**Year 18  
March 2020 – March 2021**

Submitted to:  
Illinois Environmental Protection Agency

By:  
City of Chicago

May 2021

## A. Changes to Best Management Practices

The City of Chicago (City) continues its efforts to effectively manage stormwater runoff and protect the quality of area waters. This includes citywide implementation and modification of stormwater and pollution control Best Management Practices (BMPs) to reduce the negative impacts of stormwater runoff; illicit discharge investigations and enforcement to ensure only stormwater is conveyed; and public education and participation efforts intended to increase the awareness of stormwater and water quality management issues.

Due to social distancing restrictions and changes in operations due to the COVID-19 pandemic, the Department of Buildings (DOB) and Department of Water Management (DWM) did not host or attend any in-person presentations or meetings during the last permit year. DWM focused on other forms of communication, including social media posts and coordination with Aldermen regarding stormwater management and recommendations to reduce neighborhood flooding. To limit in person meetings, the Department of Streets and Sanitation (DSS) also scaled back its sweeper training to only the individuals used as backup and replacement drivers.

## B. Status of Compliance with Permit Conditions

See Table 1 on Page 4 for progress on each of the established City BMPs for the six minimum controls.

Additionally, the City is continuing to examine the existing stormwater management program in regards to the approved Total Maximum Daily Loads (TMDLs) for Lake Michigan Nearshore, Lake Michigan Beaches, Higgins Creek, and the North Branch Chicago River to see if additional efforts are needed. In Year 18, the City began thorough inspections along North Branch Chicago River to verify the stormwater drainage extents relative to the combined sewer system; drafted a sampling plan for Higgins Creek in order to evaluate whether the City's existing BMPs are adequately meeting the waste load allocation required by these TMDL reports; and continued reviewing the stormwater drainage areas to Lake Michigan and within the Lake Michigan Beach Protection Areas.

## C. Information and Data Collection Results

In Year 18, DWM conducted visual observations of outfalls and their adjacent waterbodies for the remaining 29 storm outfall locations in the mobile inspection app, while documenting color, odor, clarity, solids, foam, oil sheen, and other indicators of stormwater pollution in the waterbody. DWM continued to use its mobile application to efficiently log and track inspection metrics as well as facilitate investigations for any location identified from inspections as having a water quality issue.

Further evaluation of stormwater quality and impacts were not completed in Year 18 due to budget constraints.

## D. Summary of Year 18 Stormwater Activities

See Table 1, referenced in Section B, for a listing of the stormwater activities planned for Year 18 per each established City BMP.

#### E. Notice of Reliance upon Other Governmental Entities

The City of Chicago does not currently rely on other government entities for the City's MS4 program.

#### F. Construction Projects During Year 18

See Tables 2 and 3 on Pages 14-16 for a documentation of the construction projects located in MS4 areas for Year 18.

**Table 1  
Sections B and D  
BMP Progress and Goals**

**Public Education and Outreach**

<b>BMP No.</b>	<b>BMP Category</b>	<b>Brief Description of BMP</b>	<b>Year 18 Measurable Goal Progress</b>	<b>Year 19 Measurable Goals</b>
A.2	Speaking Engagement	Develop, organize, and run technical seminars for engineers, architects, and the public on Stormwater Ordinance requirements.	No presentations to the public due to the COVID-19 pandemic.	Develop and present at least 1 seminar.
A.3	Public Service Announcement	Disseminate information to Aldermen to educate residents on stormwater management. Promote water conservation efforts through transit advertising and conservation kits.	Provided Aldermen with a statement to share with constituents, via a newsletter or other format, regarding stormwater management and recommendations to decrease neighborhood flooding in February 2021. Created 40 posts on DWM's social media accounts about water conservation, flood prevention, pollution prevention, and green infrastructure.	Distribute educational information to Aldermen for dissemination. Continue posting stormwater management and flood prevention tips to social media throughout the year.
A.5	Classroom Education Material	Provide stormwater management education materials to schools. As part of the Space to Grow program that was initiated in 2014, provide financial support for schools where green infrastructure has been or will be installed to help provide educational resources for the students.	Supported Barry Elementary, Boone Elementary, Melody STEM, Sherwood Elementary, and Harold Washington Elementary that had green infrastructure installed as part of Space to Grow and continued to work with the existing schools.	Plan to support additional schools that will have green infrastructure installed as part of Space to Grow and continue to work with the existing schools.
A.6	Other Public Education	Provide educational resources online about stormwater management.	Updated website to include the Year 17 Annual Report.	Continually update website with any new or revised information including the Year 18 Annual Report.

**Public Involvement and Participation**

<b>BMP No.</b>	<b>BMP Category</b>	<b>Brief Description of BMP</b>	<b>Year 18 Measurable Goal Progress</b>	<b>Year 19 Measurable Goals</b>
B.3	Stakeholder Meeting	Attend public events to inform the public about the stormwater management program.	Provided Aldermen with a statement to share with constituents, via a newsletter or other format, regarding stormwater management and recommendations to decrease neighborhood flooding in February 2021. DWM staff also attended the Illinois Association for Floodplain and Stormwater Management 2020 Annual Conference, including educational sessions on stormwater management topics.	Attend public meetings and educate the public about stormwater management.
B.6	Program Involvement	Provide stormwater management education materials, tools, and support as part of community workshops. As part of the Space to Grow program that was initiated in 2014, provide financial support for schools where green infrastructure has been or will be installed to help provide educational information and resource support for community workshops that promote rain barrels and rain gardens.	Supported Barry Elementary, Boone Elementary, Melody STEM, Sherwood Elementary, and Harold Washington Elementary that had green infrastructure installed as part of Space to Grow and continued to work with the existing schools.	Plan to support additional schools that will have green infrastructure installed as part of Space to Grow and continue to work with the existing schools.
B.7	Other Public Involvement	Work with residents to promote stormwater management BMP's on a community-wide level through neighborhood programs.	Coordinated reports of basement flooding issues from concerned residents via the Citywide 311 system.	Coordinate reports of basement flooding issues from concerned residents via the Citywide 311 system. Focus on promoting stormwater management BMPs with identified communities.

**Illicit Discharge Detection and Elimination**

<b>BMP No.</b>	<b>BMP Category</b>	<b>Brief Description of BMP</b>	<b>Year 18 Measurable Goal Progress</b>	<b>Year 19 Measurable Goals</b>
C.1	Sewer Map Preparation	Accurately represent the MS4 sewer system in geographic information system mapping (GIS).	Maintained GIS outfall feature class, and updated outfalls per recently supplied record information. Total number of storm sewer outfalls is now 163. Performed desktop analysis of the GIS mapping of outfalls and connecting sewers with the Atlas Pages. Continued coordination with the Chicago Department of Aviation (CDA) to remove abandoned MS4 outfall locations on O’Hare property in master database.	Maintain GIS outfall feature class and add new outfalls when additional information becomes available. Update GIS to reflect the estimated locations, connectivity, and attributes of the MS4 outfalls and their corresponding upstream pipes. Continue coordination with CDA to complete update of MS4 outfall locations on O’Hare property in master database.
C.2	Regulatory Control Program	Investigate and enforce regulations that prohibit illegal dumping and illicit discharges.	Issued citations for illegal dumping or illicit discharges, and brought 2 cases to hearings.	Issue citations for illegal dumping and illicit discharges.
C.6	Program Evaluation and Assessment	Institute an inspection frequency to evaluate the condition of all MS4 outfalls.	Inspected remaining 29 of the 163 currently mapped MS4s. All MS4 outfalls were inspected during this permit cycle.	Perform next round of inspections for 20% of outfalls.
C.7	Visual Dry Weather Screening	Institute an inspection frequency to ensure there are no dry weather flows.	Inspected remaining 29 of the 163 currently mapped MS4s. All MS4 outfalls were inspected during this permit cycle.	Perform next round of inspections for 20% of outfalls.
C.9	Public Notification	Identify catch basins upstream of MS4 outfalls as stormwater only.	Installed “No Dumping” lids for storm sewer catch basins that are rehabilitated or installed in capital projects.	Continue to install “No Dumping” lids for storm sewer catch basins that are rehabilitated or installed in capital projects.
C.10	Other Illicit Discharge Controls	Develop an MS4 outfall inspection database and create a centralized location for MS4 information from all departments.	Continued to utilize MS4 outfall inspection database using inspection data collected this year.	Continue to add additional inspection information to centralized outfall database.

## Construction Site Runoff Control

BMP No.	BMP Category	Brief Description of BMP	Year 18 Measurable Goal Progress	Year 19 Measurable Goals
D.1	Regulatory Control Program	Ensure all regulated construction projects (over 15,000 square feet of land area or 7,500 square feet of paved area) are in compliance with the Stormwater Ordinance. Issue permits for projects that are in compliance with Municipal Code Chapter 11-18.	Reviewed 150 regulated development projects for Stormwater Ordinance Compliance.	Review plans and when applicable, issue permits for regulated construction projects.
D.1	Regulatory Control Program	Ensure all projects at O'Hare obtain coverage under General Permit ILR10.	Website is continuously updated posting each Notice of Intent (NOI), Stormwater Pollution Prevention Plan (SWPPP), and Notice of Coverage (NOC). ( <a href="http://www.flychicago.com/community/environment/NPDES/pages/default.aspx">http://www.flychicago.com/community/environment/NPDES/pages/default.aspx</a> )	Obtain ILR10 coverage for projects on O'Hare property. Continuously update MS4 Compliance website with relevant information.
D.2	Erosion and Sediment Control BMPs	Ensure correct erosion and sediment control BMP's are being regulated through review of stormwater management documents.	Continued revising draft Regulations and Manual. Documents are planned to be finalized next year.	Finalize new update of the Stormwater Regulations and Manual.
D.2	Erosion and Sediment Control BMPs	Ensure reviewed and finalized Sediment and Erosion plans are followed during construction for regulated developments.	Required permittees to sign soil erosion and sediment control affidavit. Affidavits kept on file.	Require permittees sign affidavit.
D.2	Erosion and Sediment Control BMPs	Prevent spreading of sediment and debris from construction sites.	Issued 196 citations for construction site cleanliness.	Perform inspections and issue citations as needed.
D.3	Other Waste Control Program	Encourage planned developments to exceed sustainable development guidelines. Require planned developments that are applying for additional benefits like TIF assistance or city land write-downs, to provide a holistic approach to	5 projects incorporated stormwater strategies into their developments as part of the Sustainable Development Policy.	Enforce planned developments applying for the specific programs to exceed sustainable development guidelines to receive benefits.



		sustainable development that exceeds minimum requirements.		
D.4	Site Plan Review Procedures	Review site plans for Stormwater Ordinance compliance. Ensure site plans that require a stormwater management review get reviewed and approved before construction begins.	Reviewed applicable site plans for Stormwater Ordinance compliance.	Review regulated construction site plans.
D.6	Site Inspection / Enforcement Procedures	For projects at O'Hare, complete inspections on a weekly basis and following precipitation events greater than .5" for regulated construction.	Inspections conducted weekly and after precipitation events greater than 0.5 inches.	Perform inspections weekly and after rain events greater than 0.5 inches.
D.7	Other Construction Site Runoff Controls	Prevent unnecessary debris from entering the system through catch basins during construction. When identified, require contractors to install debris covers on catch basins adjacent to construction sites.	Required contractors to cover catch basins adjacent to construction sites to prevent debris from entering the sewer system.	Require contractors to cover catch basins adjacent to construction sites.

### Post-Construction Stormwater Management

BMP No.	BMP Category	Brief Description of BMP	Year 18 Measurable Goal Progress	Year 19 Measurable Goals
E.1	Community Control Strategy	Collect and retain stormwater through the installation of green infrastructure on City property. Install green infrastructure as part of various projects including road reconstruction work, streetscape and traffic calming projects, schoolyard reconstruction, parking lot transformations, and sewer and water replacement projects.	Completed 26 projects incorporating green infrastructure, including schoolyard reconstruction, bioinfiltration areas, detention ponds, permeable pavers, and retention trenches.	Install green infrastructure as part of City projects.

E.2	Regulatory Control Program	Ensure correct post-construction runoff controls are being properly regulated through review of stormwater management documents.	Continued revising draft Regulations and Manual. Documents are planned to be finalized next year.	Finalize new update of the Stormwater Regulations and Manual.
E.3	Long Term O&M Procedures	Enforce development and implementation of O&M plans for regulated projects. Verify developments have an approved O&M plan in place prior to construction.	Reviewed applicable O&M plans for Stormwater Ordinance compliance.	Review O&M plans.
E.4	Pre-Construction Review of BMP Designs	Review site plans for BMP design compliance with Stormwater Ordinance.	Reviewed applicable site plans for Stormwater Ordinance compliance.	Review regulated construction site plans and their corresponding BMP designs.
E.6	Post-Construction Inspections	Ensure that post-construction runoff controls on all regulated construction projects are in compliance. Perform post-construction final inspection by licensed professional engineer on regulated projects to confirm that the site is in compliance with the Stormwater Ordinance, plans, approvals, and permit conditions.	Inspected approximately 200 project sites for Stormwater Ordinance compliance.	Inspect constructed projects for compliance for post-construction runoff controls.

### Pollution Prevention and Good Housekeeping

BMP No.	BMP Category	Brief Description of BMP	Year 18 Measurable Goal Progress	Year 19 Measurable Goals
F.1	Employee Training Program	Educate employees about stormwater management and pollution prevention BMPs. For the various departments in the City of Chicago, provide specific trainings and seminars that are applicable to the department and the employee's role.	For AIS, Fleet and Facility Operations employees completed trainings on pollution prevention BMPs, and new hires completed trainings as part of the Sustainable Operations Plan onboarding process.	Train employees about stormwater management and pollution prevention BMPs.

			<p>For CDA, regular trainings offered at O'Hare on spill reporting and prevention. During the permit year, 105 City employees and contractors received these specific trainings.</p> <p>For CDOT, staff completed training on construction site stormwater runoff controls.</p> <p>For DSS, completed street sweeper driver training, including BMPs on debris collection and disposal for backup/replacement drivers only due to COVID-19 pandemic.</p> <p>For DWM, staff attended the Illinois Association for Floodplain and Stormwater Management Annual Conference, and Construction Manager completed training on construction site runoff controls.</p>	
F.1	Employee Training Program	Educate employees about green infrastructure. For the various departments in the City of Chicago, provide specific trainings and seminars that are applicable to the department and the employee's role.	<p>For AIS, Fleet and Facility Operations employees completed trainings on green infrastructure BMPs.</p> <p>For CDOT, staff completed training on the MS4 program including green infrastructure utilized as runoff control.</p> <p>For DSS, completed street sweeper driver training, including Green Alley SOP for backup/replacement drivers only due to COVID-19 pandemic.</p>	Train employees about green infrastructure design, installation, maintenance, and repairs.

			For DWM, planning, design, and construction project managers completed training on permeable pavement, rain garden, detention, bioswale, and runoff BMPs design and maintenance.	
F.2	Inspection and Maintenance Program	Maintain and rehabilitate the sewer system through cleaning, lining and replacement.	Cleaned 17,688 structures, lined 30.7 miles of sewers and approximately 813 structures, and replaced 17.8 miles of sewers during the 2020 calendar year.	Clean 15,000 structures, line 42 miles of sewers, line 8,000 structures, and replace 22 miles of sewers for the 2021 calendar year.
F.3	Municipal Operations Stormwater Control	Prevent unnecessary debris from entering the system through catch basins. For catch basins that are part of CIP projects or are rehabbed/replaced, install new catch basin lids with small slots per the Americans with Disabilities Act (ADA lids) to prevent debris from entering system.	Installed ADA lids for catch basins that were addressed as part of CIP projects or rehabilitation work.	Install ADA lids.
F.4	Municipal Operations Waste Disposal	Institute a robust street sweeping protocol to prevent debris before entering the MS4 system. Deploy a street sweeper each day for every ward (50 wards) during sweeping season (April through November).	Swept 235,157 miles of streets and 7,845 alleys for the 2020 calendar year.	Sweep over 200,000 miles of streets and over 2,000 alleys for the 2021 calendar year.
F.4	Municipal Operations Waste Disposal	Utilize a trash collecting skimmer boat along the Riverwalk during the warmer months. The Riverwalk has significant pedestrian traffic and allows direct access to the water, which increases the likelihood of pollution and thus the need for additional attention.	Deployed 1 or 2 skimmer boats 7 days a week, weather permitting, along the Riverwalk from March through November 2020.	Deploy skimmer boat during warm weather months.
F.4	Municipal Operations Waste Disposal	On O'Hare property, remove and dispose of excess waste from pavement before entering the MS4 system. When needed, use a waste	Collected waste and litter from airport grounds as needed.	Collect waste and litter from airport grounds.

		collection contractor to collect municipal operations waste and take off-site to a municipal landfill. Collect litter from airfield pavement.		
F.5	Floodplain Management / Assess Guidelines	Ensure proper floodplain controls are performed. Perform floodplain reviews for regulated projects within and adjacent to the mapped floodplain.	Reviewed 3 regulated developments within floodplains to confirm compliance with the City's Flood Control Ordinance.	Review regulated projects within floodplains.
F.6	Other Municipal Operations Controls	Follow specific department policies that involve pollution prevention.	<p>For AIS, followed documented BMPs for both fleet operations and facility operations, including specific pollution prevention BMPs.</p> <p>For CDA, finalized update of the O'Hare site wide SWPPP. ILR10 site specific SWPPPs are continuously reviewed and approved based on project scope.</p> <p>For CDOT, continued enforcement of environmental terms and conditions. For Irving Park Bridge over the North Branch of the Chicago River, permitted through United States Army Corps of Engineers (USACE), Illinois Department of Natural Resources (IDNR), and the United States Coast Guard (USCG), and followed applicable water quality and pollution prevention measures.</p> <p>For DSS, salt usage is controlled with an iPad system to help new drivers use the right quantities for salt disbursement. Vehicles also have spreader controls that limit the amount of salt spread per lane</p>	Follow department specific processes.

			<p>mile. 95th Street Salt Pile is tarped when not in use, and facility follows specific BMPs.</p> <p>For DWM, followed documented BMPs for purification plant operations, including specific pollution prevention BMPs.</p>	
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**Section F**  
**Table 2**  
**Year 18 ILR10 Construction Projects**

<b>Project Name</b>	<b>NPDES ILR10 Permit #</b>	<b>NOI</b>	<b>NOC</b>	<b>NOT</b>
Northeast Cargo Development - Phase 3 Sitework	ILR10BN58	7/13/2020	8/18/2020	TBD
Terminal 5 Extension Core Expansion/Repurposing	ILR10BI14	3/10/2020	8/4/2020	TBD
Fuel System Improvement Program - Super Satellite Decom.	ILR10BL96	6/18/2020	8/4/2020	TBD
Runway 4R-22L Rehabilitation	ILR10BJ86	4/20/2020	5/22/2020	TBD
Fuel System Improvement Program - Tank Farm Improvements	ILR10BJ44	4/10/2020	5/13/2020	TBD
Relocation of Taxiway A&B - East/West Advance Work	ILR10BI42	3/16/2020	5/8/2020	TBD
Runway 9R-27L Extension - East	ILR10BF12	1/8/2020	2/14/2020	TBD
Northeast Cargo Snow Removal Pad	ILR10BD48	11/6/2019	12/6/2019	TBD
Fuel System Improvement Program - North Transmission Main	ILR10AT58	4/24/2019	5/22/2019	TBD
Terminal 5 - M Extension Site/Civil Package	ILR10AP57	1/25/2019	3/11/2019	TBD
Runway 9R RWSL	ILR10AM14	12/4/2018	1/4/2019	TBD

Fuel System Improvement Program - South Transmission Mains	ILR10AM24	12/4/2018	1/4/2019	TBD
Runway 9R-27L Extension - West	ILR10AM34	12/4/2018	1/4/2019	TBD
Temporary ATS Bus Storage Parking Lot	ILR10AL27	10/23/2018	11/9/2018	TBD
North ORD SMR Facility	ILR10AJ21	9/6/2018	9/24/2018	TBD
Runway 9C-27C Package 3	ILR10AH31	8/13/2018	9/4/2018	TBD
Fuel System Improvement Program - Vault Modifications	ILR10AC11	5/4/2018	6/11/2018	8/10/2020
Employee Parking Package 2	ILR10Z583	12/22/2017	1/22/2018	TBD
FSIP - Truck Rack Facility	ILR10Z568	12/14/2017	1/12/2018	TBD
Runway 9C-27C Package 2	ILR10Z457	11/6/2017	12/7/2017	TBD
Runway 10R-28L Safety and Security Additions Package 2	ILR10Y704	5/23/2017	6/23/2017	TBD
Fuel System Improvement Program	ILR10X889	12/30/2016	1/30/2017	TBD
Runway 9C-27C Bid Package 1	ILR10X890	12/30/2016	1/30/2017	8/10/2020
O'Hare Airport Transit System	ILR10W209	12/21/2015	1/22/2016	TBD
Joint Use Facility and ATS Extension	ILR10V084	4/22/2015	5/21/2015	TBD



**Table 3**  
**Year 18 CDOT Applicable Construction Projects**

<b>Project Name</b>	<b>USCG Bridge Permit #</b>	<b>USACE Permit #</b>	<b>IDNR Permit #</b>
Irving Park Rd. Bridge Over North Branch Chicago River	2-18-9	LRC-2011-538	NE2017022