



ABOUT THE CONSORTIUM

Our Mission

The mission of the Skokie River Consortium is to effectively and efficiently address common and necessary flood mitigation, stormwater management and green infrastructure improvements.

Process

Quarterly meetings of consortium members and partner agencies to discuss drainage and flooding issues, evaluate problems, and seek solutions on a multi-jurisdictional level.

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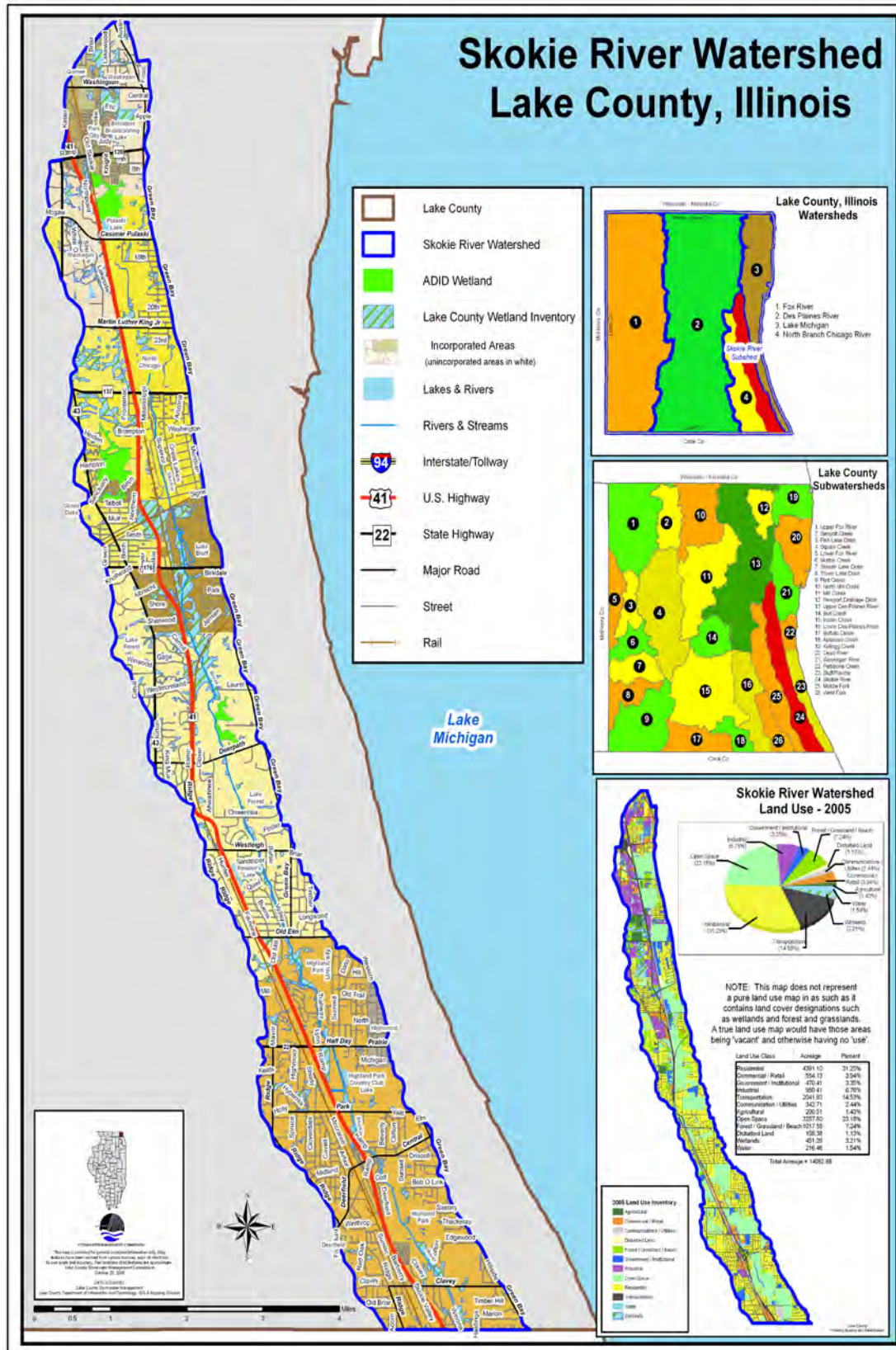
CONSORTIUM MEMBERS

City of Highland Park, City of Highwood, Village of Lake Bluff, City of Lake Forest, City of North Chicago, City of Park City, City of Waukegan, East Skokie Drainage District, Lake County Forest Preserve District, Lake County Stormwater Management Commission

HIGHLIGHTS OF THE YEAR

- Consortium partnership established
- Mission statement adopted
- Grant project progress

ABOUT THE WATERSHED



PROJECTS

North Branch Chicago River Watershed Project Locations

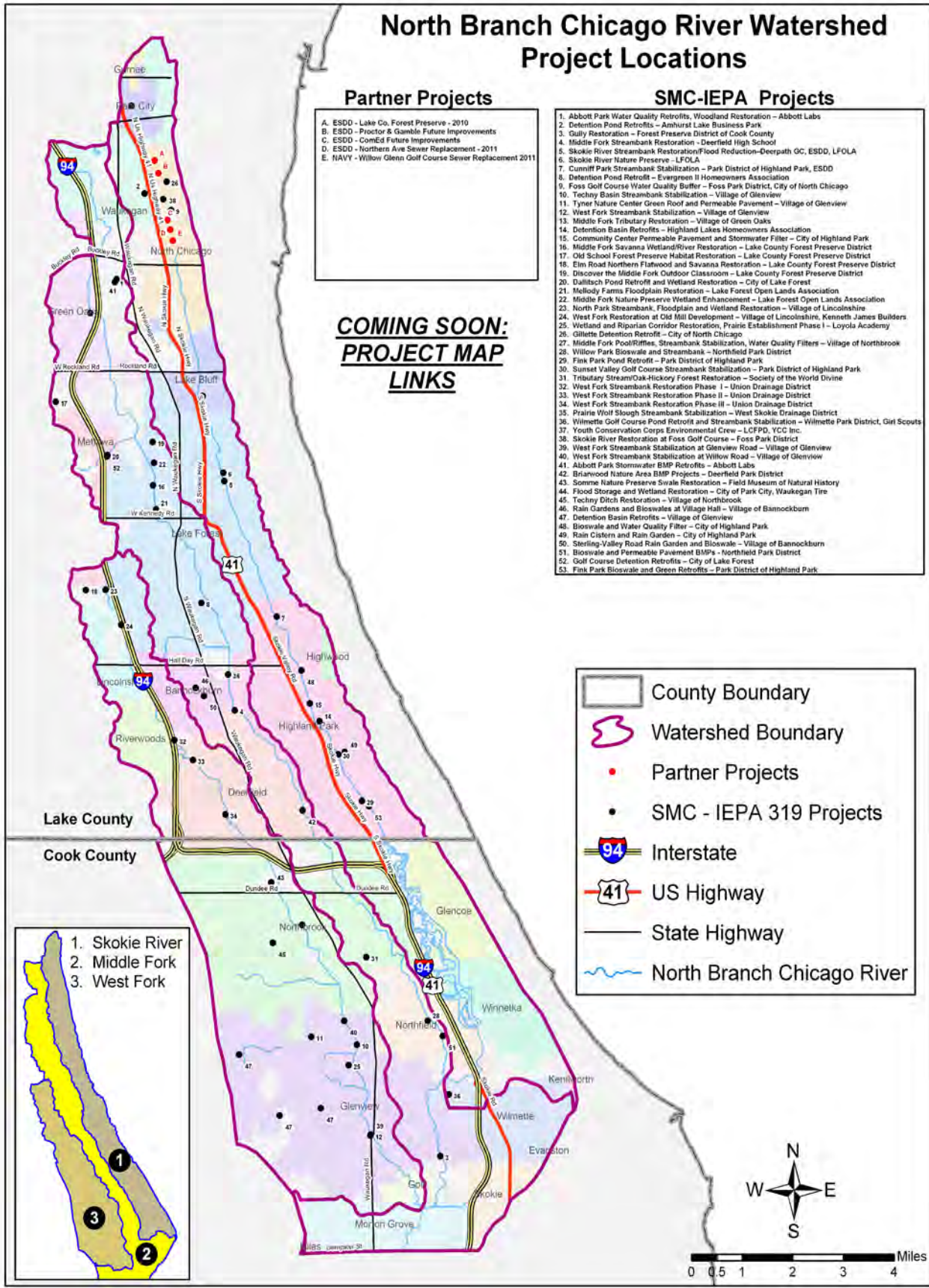
Partner Projects

- A. ESDD - Lake Co. Forest Preserve - 2010
- B. ESDD - Proctor & Gamble Future Improvements
- C. ESDD - ComEd Future Improvements
- D. ESDD - Northern Ave Sewer Replacement - 2011
- E. NAVY - Willow Glen Golf Course Sewer Replacement 2011

SMC-IEPA Projects

1. Abbott Park Water Quality Retrofits, Woodland Restoration - Abbott Labs
2. Detention Pond Retrofits - Amhurst Lake Business Park
3. Gully Restoration - Forest Preserve District of Cook County
4. Middle Fork Streambank Restoration - Deerfield High School
5. Skokie River Streambank Restoration/Flood Reduction-Deerpath GC, ESDD, LFOA
6. Skokie River Nature Preserve - LFOA
7. Cummin Park Streambank Stabilization - Park District of Highland Park, ESDD
8. Detention Pond Retrofit - Evergreen II Homeowners Association
9. Foss Golf Course Water Quality Buffer - Foss Park District, City of North Chicago
10. Techny Basin Streambank Stabilization - Village of Glenview
11. Tyler Nature Center Green Roof and Permeable Pavement - Village of Glenview
12. West Fork Streambank Stabilization - Village of Glenview
13. Middle Fork Tributary Restoration - Village of Green Oaks
14. Detention Basin Retrofits - Highland Lakes Homeowners Association
15. Community Center Permeable Pavement and Stormwater Filter - City of Highland Park
16. Middle Fork Savanna Wetland/River Restoration - Lake County Forest Preserve District
17. Old School Forest Preserve Habitat Restoration - Lake County Forest Preserve District
18. Elm Road Northern Flatwood and Savanna Restoration - Lake County Forest Preserve District
19. Discover the Middle Fork Outdoor Classroom - Lake County Forest Preserve District
20. Dallitsch Pond Retrofit and Wetland Restoration - City of Lake Forest
21. Melody Farms Floodplain Restoration - Lake Forest Open Lands Association
22. Middle Fork Nature Preserve Wetland Enhancement - Lake Forest Open Lands Association
23. North Park Streambank, Floodplain and Wetland Restoration - Village of Lincolnshire
24. West Fork Restoration at Old Mill Development - Village of Lincolnshire, Kenneth James Builders
25. Wetland and Riparian Corridor Restoration, Prairie Establishment Phase I - Loyola Academy
26. Gillette Detention Retrofit - City of North Chicago
27. Middle Fork Pools/Riffles, Streambank Stabilization, Water Quality Filters - Village of Northbrook
28. Willow Park Bioswale and Streambank - Northfield Park District
29. Park Pond Retrofit - Park District of Highland Park
30. Sunset Valley Golf Course Streambank Stabilization - Park District of Highland Park
31. Tributary Stream/Oak-Hickory Forest Restoration - Society of the World Divine
32. West Fork Streambank Restoration Phase I - Union Drainage District
33. West Fork Streambank Restoration Phase II - Union Drainage District
34. West Fork Streambank Restoration Phase III - Union Drainage District
35. Prairie Wolf Slough Streambank Stabilization - West Skokie Drainage District
36. Wilmette Golf Course Pond Retrofit and Streambank Stabilization - Wilmette Park District, Girl Scouts
37. Youth Conservation Corps Environmental Crew - LCPD, YCC Inc.
38. Skokie River Restoration at Foss Golf Course - Foss Park District
39. West Fork Streambank Stabilization at Glenview Road - Village of Glenview
40. West Fork Streambank Stabilization at Wilkos Road - Village of Glenview
41. Abbott Park Stormwater BMP Retrofits - Abbott Labs
42. Brianwood Nature Area BMP Projects - Deerfield Park District
43. Somme Nature Preserve Swale Restoration - Field Museum of Natural History
44. Flood Storage and Wetland Restoration - City of Park City, Waukegan Tire
45. Techny Ditch Restoration - Village of Northbrook
46. Rain Gardens and Bioswales at Village Hall - Village of Bannockburn
47. Detention Basin Retrofits - Village of Glenview
48. Bioswale and Water Quality Filter - City of Highland Park
49. Rain Cistern and Rain Garden - City of Highland Park
50. Sterling-Valley Road Rain Garden and Bioswale - Village of Bannockburn
51. Bioswale and Permeable Pavement BMPs - Northfield Park District
52. Golf Course Detention Retrofits - City of Lake Forest
53. Pink Park Bioswale and Green Retrofits - Park District of Highland Park

**COMING SOON:
PROJECT MAP
LINKS**



FACT OR FICTION

Fall/Winter 2010-11

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Issue 1

Why don't they ever open the gate at the Chicago Botanic Gardens when the river's high?

There is no movable gate or other water level control feature on the Skokie River within the Botanic Gardens. The Skokie River flows around the Gardens.

Can the drainage district or anyone else place a bigger pipe in the areas where the river currently flows through a pipe?

Any conveyance improvements cannot increase downstream flows or height of the river.

Why do our sanitary sewers back up?

Sanitary sewers back up when obstructions (i.e. rags, grease, and tree roots) are present in either the public sanitary sewer mains or private sanitary sewer lines connected to homes and businesses. Backups also occur when too much stormwater gets into the public sanitary sewer mains and/or the private sanitary sewer lines. This additional stormwater overloads the sanitary sewers resulting in backups of wastewater in lower levels and basements.

Several studies have indicated that approximately 80 to 85 percent of the stormwater that gets into the public sewer mains originates from the private sources. Leaky private sewer lines (bad pipe joints and cracks in pipe) and direct stormwater connections to the private sewer lines (building drain tiles, roof and yard drains, and stormwater sump pump connections) all contribute to the problem of too much stormwater flowing into the sanitary sewer lines and overwhelming the system.

State regulations and local building codes now require the complete separation of stormwater and sanitary sewer collection systems. However many older buildings and homes still retain drainage systems where stormwater feeds into the sanitary sewer lines, thus contributing to sanitary sewer overflows and basement backups.

What is the Skokie River Consortium doing to help reduce sanitary sewer backups?

The member communities of the Skokie River Consortium are diligently working to reduce the impact of wet weather events upon their sanitary sewer systems. For instance, many communities have programs in place to identify and rehabilitate leaking sanitary sewers and manholes. Several members of the Consortium have combined their communities' rehabilitation projects in order to obtain more favorable and competitive bids. Efforts are also being made to educate the public on measures they can take to reduce the amount of stormwater that enters sanitary sewer systems from private property through illegal stormwater connections and/or faulty sanitary sewer service laterals.

Will a reservoir in Lake Bluff reduce flooding downstream?

A reservoir at the Lake Bluff site has been studied and has not shown to be a cost-effective solution. For the complete study, link to: www.lakecountyil.gov/Stormwater/LakeCountyWatersheds/NBChicagoRiverWatershed.htm

MEMBER NEWS

Fall/Winter 2010-11

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Issue 1



City of Highland Park

www.cityhpil.com

Conducting illicit discharge inspections of outlets

Reviewing private improvement projects for compliance with floodway/floodway regulations

Contact: John M. Welch, P.E., CFM, City Engineer
847-432-0807 jwelch@cityhpil.com

Link to stormwater studies:
<http://www.cityhpil.com/pw/niip.html>



City of Highwood

www.cityofhighwood.com



Village of Lake Bluff

www.lakebluff.org/

On September 21, 2010, the Village of Lake Bluff received approval from the Illinois Nature Preserve Commission designating 24.2 acres of the Village's Skokie River Preserve as an Illinois Land and Water Reserve. The Village's Skokie Preserve is located along the east bank of the Skokie River approximately 1,500 feet south of Illinois Route 176.

The Village's Skokie River Preserve is an outstanding surviving mosaic of mesic and wet-mesic prairies and sedge meadow wetland arrayed along the Skokie River. Access to the Village Skokie River Preserve is from a parking lot, located directly off of Illinois Route 176 approximately 1/3rd of a mile east of the intersection with US Route 41. A trail extends south from that parking lot, looping once through the Skokie River Prairie, and then extends south through the Lake Bluff Forest Preserve owned by the IDNR and Lake County Forest Preserve District. From there, the trail extends south through the open lands in the City of Lake Forest.

The Village's Skokie River Preserve consists of a total of 35 acres of land formally platted in the 1920's as a 105 lot, but never constructed, subdivision. Throughout the recent decades the Village has been able to acquire title to 99 of the 105 platted lots within this area, and approximately 15 years ago designated the area as the Skokie River Preserve. It is the Village's intent to vacate the platted but never developed 9.6 acres of Right-Of-Way associated with the original subdivision once the remaining 6 privately held lots, totaling 1.5 acres in size, are acquired. The Village then plans to seek designation of this additional 11.1 acres as an Illinois Land and Water Reserve.

Lots within the far easterly portion of the Village's Skokie Preserve are outside of the 100 year floodplain and were by many measures considered to be buildable lots. The Village's acquisition of this area, and subsequent desire to move forward with registration of the area an Illinois Land and Water Reserve, helps to ensure preservation of this integral part of a 225 acre open space corridor centered along the Skokie River from Lake Bluff to Deerpath Road in the City of Lake Forest.

Contact: George Russell, Village Engineer
224-588-7808 grussell@lakebluff.org



City of Lake Forest

www.cityoflakeforest.com

The City of Lake Forest Flood Mitigation Efforts

The City of Lake Forest has several ongoing programs that were enacted to help alleviate the adverse impacts of flooding on the community. These programs are summarized as follows:

Storm Sewer Capacity Improvements

The City of Lake Forest has an ongoing program to upgrade the capacity of deficient sections of its storm sewer system that do not have an adequate overland drainage outlet.

Sanitary Sewer Lining Program

In 2001 The City of Lake Forest embarked on a sanitary sewer lining program to upgrade the structural integrity and to reduce the amount of stormwater infiltrating into its sanitary sewer system. To date over 20 miles of sanitary sewer has been lined.

Rainfall Emergency Plan

Prior to and during intense rainfall events The City of Lake Forest has City personnel present to ensure drainage ways are working efficiently and are in a position to respond quickly to an emergency situation.

Home Inspection Program

The City of Lake Forest has an ongoing program which requires a house to be inspected, at the time of sale, to ensure that there are no points of stormwater inflow into the sanitary sewer system from private sources. To date Lake Forest has inspected over 2500 houses and identified and brought into compliance over 300 improper connections.

Overhead Sewer Conversion Program

The City of Lake Forest has an ongoing program that offers up to \$3,000 to assist homeowners in converting their private sanitary sewer systems to an overhead system which will help prevent basements from flooding due to sanitary sewer surcharges that may occur during intense rainfall events.

Contact: Ken Magnus, City Engineer
847-810-3551 magnusk@cityoflakeforest.com



City of North Chicago

www.northchicago.org

Supporting East Skokie Drainage District in their drainage ditch improvement projects:

- Along Northern Avenue south of MLK
- Around the Comed property north of MLK
- Along the Proctor and Gamble (Gillette) property south of 14th Street
- In part of the Lake County Forest Preserve, north of 14th Street
- Supporting Naval Station Great Lakes in their improvements in the Willow Glen Golf Course
- Providing Detention Basin Inspections to ensure proper flows are being contained and that water released is proper water quality

Contact: Josh Wheeler, City Engineer
847-596-8691 jwheeler@ciorba.com

City of Park City

Contact: Mayor Steve Panell
847-623-5030 barb.plachy@parkcityil.org



City of Waukegan

www.waukeganweb.net



East Skokie Drainage District

www.esdd.org

The East Skokie Drainage District maintains twelve miles of open ditch and three miles of underground pipes within the eastern portion of the northern branch Chicago River Watershed. In 2010, the District completed an open ditch stabilization project and a pipe replacement project to facilitate proper conveyance of stormwater within the District.

The Foss Park Streambank Stabilization Project located in North Chicago, Illinois was completed in June

Also, an underground pipe project was completed this fall in the Greenbelt Forest Preserve. Approximately 500 feet of deteriorated pipe was replaced at the southern end of the Forest Preserve to facilitate the operations of the drainage system.

Upcoming projects for the District will include the potential "daylighting" of a currently buried pipe section located immediately north of the Foss Park Golf Course and the coordination of an "in-kind" (48 inch) pipe replacement project within the Navy Golf Course. For additional information about these projects and other district activities, please visit www.esdd.org.

Contact: Bryan Winter, Fuqua, Winter and Stiles, Ltd.
847-244-0770 Brywinter@aol.com



Lake County Forest Preserve District

www.lcfpd.org

Contact: Jim Anderson, Natural Resource Manager
847-968-3282 janderson@lcfpd.org



Lake County Stormwater Management Commission

www.lakecountyil.gov/stormwater

Stormwater Studies: www.lakecountyil.gov/Stormwater/LakeCountyWatersheds/NBChicagoRiverWatershed.htm

SMC submitted a Clean Water Act Section 319 grant application to the Illinois EPA in July that included 8 best management practice projects in the North Branch watershed. One project - the Park District of Highland Park Skokie River Woods site restoration - is located in the Skokie River watershed. A final funding recommendation should be received by SMC in late spring of 2011.

Contact: Patty Werner, Planning Supervisor
847-377-7717 pwerner@lakecountyil.gov

PARTNER ACTIVITIES



Lake County Division of Transportation

www.lakecountyil.gov/transportation

The Lake County Division of Transportation is responsible for planning, designing, constructing, operating and maintaining Lake County highways. These highways are identified by 5-sided blue and gold route markers. The Lake County highway system consists of almost 300 centerline miles of arterial and collector roads, 155 signalized intersections, 33 bridges and 48 miles of bike paths. A county highway is a road that meets the criteria established by state law, has been designated by the County Board and has been approved by the State. Like state highways, Lake County highways extend through municipalities.

Contact: Al Giertych, Asst. County Engineer
847-377-7400 agiertych@lakecountyil.gov



North Shore Sanitary District

www.northshoresanitary.org

The North Shore Sanitary District (NSSD) proactively works with its service communities in their efforts to find and eliminate the stormwater sources from their collector sewer systems. With respect to its own infrastructure, NSSD has completed several manhole and sanitary sewer rehabilitation projects and constructed excess flow storage basins at two of its pumping stations located along Lake Michigan.

The NSSD constructed a \$9 million underground storage basin at the Lake Forest pumping station in the fall of 2008. Since its completion, the basin has been utilized multiple times to prevent the overflow of raw sewage into Lake Michigan. Aside from a previously constructed sewage storage basin at its North Chicago pumping station, the NSSD is planning extensive improvements to its Highland Park and Lake Bluff pumping stations located along Lake Michigan to further protect the environment.

A summary of NSSD's efforts to strengthen its infrastructure and reduce the impacts of wet weather events may be found at www.northshoresanitary.org.

Contact: Sharon Thieszen, Special Projects Coordinator
847-623-6060 shthieszen@northshoresanitary.org



Illinois Dept. of Transportation

www.dot.state.il.us/



Illinois Dept. of Natural Resources

www.dnr.illinois.gov



Naval Station Great Lakes

www.cnic.navy.mil/greatlakes/index.htm



U.S. Army Corps of Engineers

www.lrc.usace.army.mil/

PROJECT FOCUS

HIGHLAND PARK WETLAND RESTORATION PROJECT COMES WITH MANY BENEFITS

The initial restoration work for Skokie River Woods, a project funded by the Lake County Stormwater Management Commission's (SMC) Wetland Restoration Funds (WRF), is now complete. The 25-acre site owned by the City of Highland Park is located south of Illinois Route 22 and east of U.S. Route 41 alongside the Skokie River. The project restored and enhanced over 20 acres of wetlands and buffers using \$380,000 in funds collected for wetland losses by development within the North Branch watershed. SMC partnered with the Park District of Highland Park for the project.

SMC created the WRF in 2007 as a way for developers impacting isolated wetlands to meet the Lake County Watershed Development Ordinance's wetland requirements. SMC collects fees and then solicits for projects that can replace the lost wetland acreage within the same watershed. Before the WRF option, mitigation for wetland filling in the North Branch and Lake Michigan watersheds occurred outside of the watershed resulting in net wetland losses in these watersheds.

"The Skokie River Woods project is a great example of using public/private partnerships to create wetlands in the watershed in which they were filled when development occurred. This project has allowed us to enhance flood protection for our residents and create wildlife habitat," said Anne Flanigan Bassi, County Board District 23.

The work included excavation of fill material overlaying existing historic wetland soils along the eastern property line of Skokie River Woods. The excavated areas will be revegetated with wet meadow, and the side slopes will be planted with mesic prairie species. Wetland restoration near the south end of Skokie River Woods consisted of removing an existing decrepit dam and constructing a new adjustable water level control structure at the southernmost limits of the wetland. The wetland buffer and uplands were enhanced by removing buckthorn and other invasive non-native species.

The project will improve water quality as it filters water discharging into the Skokie River and the newly created storage areas will help to reduce flooding downstream by holding runoff and allowing it to infiltrate into the groundwater table. Planting will occur in spring 2011 and a 5-year monitoring and maintenance program carried out by PDHP will continue until 2015.