

MS4 Annual Facility Inspection Report

**Illinois Environmental Protection Agency
National Pollutant Discharge Elimination System Phase II**

Permit Year 9: March 2011 - February 2012





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, 2011 To March, 2012

Permit No. ILR40 0517

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

Name: Lake County Mailing Address 1: 18 North County Street

Mailing Address 2: _____ County: Lake

City: Waukegan State: IL Zip: 60085 Telephone: 847-377-2232

Contact Person: Ryan Waller, Asst. County Administrator Email Address: RWaller@lakecountyil.gov
(Person responsible for Annual Report)

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

Lake County, Illinois

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


Owner Signature:

Barry Burton

Printed Name:

5/11/12
Date:

County Administrator

Title:

EMAIL COMPLETED FORM TO: 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

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed \$50,000 for the violation and an additional civil penalty of not to exceed \$10,000 for each day during which the violation continues (415 ILCS 5/42) and may also prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

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Part A. MS4 Changes to Best Management Practices, Year 9

Information regarding the status of all of the BMPs and measurable goals described in the MS4's SMPP is provided in the following table.

Note: X indicates BMPs that were implemented in accordance with the MS4's SMPP
 ✓ indicates BMPs that were changed during Year 9

Year 9	
MS4	
A. Public Education and Outreach	
X	A.1 Distributed Paper Material
X	A.2 Speaking Engagement
X	A.3 Public Service Announcement
X	A.4 Community Event
	A.5 Classroom Education Material
	A.6 Other Public Education
B. Public Participation/Involvement	
X	B.1 Public Panel
	B.2 Educational Volunteer
X	B.3 Stakeholder Meeting
X	B.4 Public Hearing
X	B.5 Volunteer Monitoring
	B.6 Program Coordination
	B.7 Other Public Involvement
C. Illicit Discharge Detection and Elimination	
X	C.1 Storm Sewer Map Preparation
X	C.2 Regulatory Control Program
X	C.3 Detection/Elimination Prioritization Plan
X	C.4 Illicit Discharge Tracing Procedures
X	C.5 Illicit Source Removal Procedures
X	C.6 Program Evaluation and Assessment
X	C.7 Visual Dry Weather Screening
X	C.8 Pollutant Field Testing
X	C.9 Public Notification
	C.10 Other Illicit Discharge Controls

Year 9	
MS4	
D. Construction Site Runoff Control	
X	D.1 Regulatory Control Program
X	D.2 Erosion and Sediment Control BMPs
X	D.3 Other Waste Control Program
X	D.4 Site Plan Review Procedures
X	D.5 Public Information Handling Procedures
X	D.6 Site Inspection/Enforcement Procedures
X	D.7 Other Construction Site Runoff Controls
E. Post-Construction Runoff Control	
	E.1 Community Control Strategy
X	E.2 Regulatory Control Program
X	E.3 Long Term O&M Procedures
X	E.4 Pre-Const Review of BMP Designs
X	E.5 Site Inspections During Construction
X	E.6 Post-Construction Inspections
	E.7 Other Post-Const Runoff Controls
F. Pollution Prevention/Good Housekeeping	
X	F.1 Employee Training Program
X	F.2 Inspection and Maintenance Program
X	F.3 Municipal Operations Storm Water Control
X	F.4 Municipal Operations Waste Disposal
	F.5 Flood Management/Assess Guidelines
X	F.6 Other Municipal Operations Controls

Part B. MS4 Status of Compliance with Permit Conditions, Year 9

Stormwater Management Activities, Year 9

The stormwater management activities that the MS4 performed during Year 9 and the status of each of the BMPs and measurable goals described in the MS4's SMPP, as of the end of Year 9, are described below.

A. Public Education and Outreach

The MS4 is committing to implementing the Public Education and Outreach component of its SMPP. The MS4's Public Education and Outreach program includes: the distribution of educational material to the community or conducting equivalent outreach activities about the impacts of stormwater discharges on water bodies and the steps that the public can take to reduce these impacts; supporting classroom education; supporting storm drain stenciling efforts; and, supporting SWALCO events.

A.1.1 Distributed Paper Material

Lake County will distribute publications received from SMC to local target groups.

Measurable Goals: SMC will distribute a variety of informational materials related to stormwater management through its "take away" rack and website. During Year 9, Lake County will make available and distribute two manuals "A Citizen's Guide to Maintaining Stormwater Best Management Practices" and "Living with Wetlands: A Handbook for Homeowners in Northeastern Illinois" to local entities such as homeowners associations and stakeholder groups.

Status: SMC distributed a variety of informational materials related to stormwater management through its "take away" rack and website. During Year 9, Lake County made available and distributed two manuals "A Citizen's Guide to Maintaining Stormwater Best Management Practices" and "Living with Wetlands: A Handbook for Homeowners in Northeastern Illinois" to local entities such as homeowners associations and stakeholder groups.

A.1.2 Distributed Paper Material

The Lake County Department of Planning, Building and Development will distribute educational materials on a variety of storm water quality topics to targeted groups.

Measurable Goal(s), including frequencies: The Lake County Planning, Building and Development Department will make available and distribute the following publications to permit applicants, developers, homeowner groups and any other interested groups or individuals.

"Silt Fences & Stabilized Construction Entrances" – Erosion control best practices.

"Wetlands" – General regulatory information as it relates to site development.

"Floodplains" – General regulatory information as it relates to site development.

"Swales" – Site development requirements.

"Berms" – Site development requirements.

- “Ponds” – Site development requirements.
- “Grading, Filling and Site Restoration” – Site development requirements.
- “Flood Safety Information” – Flood safety for floodplain residents.

Status: The Lake County Planning, Building and Development Department made available and distributed the following publications to permit applicants, developers, homeowner groups and any other interested groups or individuals. All of the publications were formally reviewed and revised for accuracy during Year 9.

- “Silt Fences & Stabilized Construction Entrances” – Erosion control best practices.
- “Wetlands” – General regulatory information as it relates to site development.
- “Floodplains” – General regulatory information as it relates to site development.
- “Swales” – Site development requirements.
- “Berms” – Site development requirements.
- “Ponds” – Site development requirements.
- “Grading, Filling and Site Restoration” – Site development requirements.
- “Flood Safety Information” – Flood safety for floodplain residents.

A.1.3 Distributed Paper Material

The Lake County Health Department will distribute educational materials on a variety of stormwater quality topics to targeted groups.

Measurable Goal(s), including frequencies: The Lake County Health Department will make available and distribute publications related to natural resources and water quality management during Year 9.

Status: The Lake County Health Department distributed the following publications related to natural resources and water quality management during Year 9:

- “Cattail Chronicles” – A quarterly newsletter published by the Lakes Management Unit of the Environmental Health Division of the Lake County Health Department dedicated to public education on water quality issues specific to Lake County.
- “Wastewater News” – A biannual newsletter.
- “Waterlines” – A water well newsletter targeting licensed well contractors.
- “National Groundwater Awareness Week” – Since 1999 the Lake County Health Department has issues a press release and reduced water analysis fees for private well samples during this annual observance. In 2006, Lake County expanded the reduced-fee tests available and produced a pamphlet explaining common water testing parameters.
- “National Recreational Water Illness Prevention Week” – New in 2006, the lake County Health Department is highlighting the value of healthy swimming and recreational water illness prevention.
- “Private Water Well Testing” – Publication.
- “Types of Wells in Lake County” – Publication.
- “Frequently Asked Questions about Water Wells” – Publication.
- “Well Chlorination Procedures” – Publication.
- “Investigate Before You Invest in a Vacant Lot” – Publication.

“Investigate Before You Invest in a Home” – Publication.

“Wastewater Treatment and Dispersal by Onsite Wastewater Treatment Systems” – Publication.

Numerous water related press releases (*i.e. Reduce Outdoor Water Use During Drought*)

“Lake Reports” – An annual report issued by the Lakes Management Unit of the Environmental Health Division of the Lake County Health Department. Report contains detailed information on the environmental health of 22 different lakes in Lake County.

“Buffer Strips – Why they should be part of your shoreline” – Best management practices for planting and maintaining shoreline property.

“Phosphorous in Lake County” – Educational brochure on limiting the use of phosphorous.

A.1.4 Distributed Paper Material

The Lake County Planning, Building and Development Department will maintain its status as a participant of the Federal Emergency Management Agency (FEMA) Community Rating System (CRS) by completing the annual outreach mailing to flood prone properties as well as preparing the annual press release notification of the completion of the Annual Evaluation of the Lake County All Natural Hazards Mitigation Plan.

Measurable Goals: The Lake County Planning, Building, and Development Department will upgrade its status to a Class 6 Community participant of the Federal Emergency Management Agency (FEMA) Community Rating System (CRS) through annual recertification.

Status: The Lake County Planning, Building and Development Department entered the FEMA CRS program as a Class 7 Community in December 2008 of Year 6; Lake County was accepted as a Class 6 Community in October 2011 of Year 9. As part of annual recertification in Year 9, an outreach mailing to flood prone properties was performed and an annual press release was issued regarding the completion of the annual Lake County All Natural Hazards Mitigation Plan Annual Evaluation Report.

A.2 Speaking Engagement

Lake County will make employees available for speaking engagements to groups of interested residents on storm water related topics. This program will be administered by the Communications Department of the Lake County Administrator’s Office.

Measurable Goal(s), including frequencies: Number and quality of speaking engagements arranged to groups of residents on storm water related topics.

Status: The Lake County Communications Department made available public speakers on storm water related topics through its “Speakers Bureau”. These services were provided upon request to interested public groups. Speakers are Lake County employees and are selected based upon their expertise on a requested topic. This is a well established program that is in place.

A.3 Public Service Announcement

Lake County will air three public service announcements that have been produced on the local cable access channel run by Lake County (LCTV). These PSAs will also be made available on the Lake County Division of Transportation website and will be shared for use by other MS4s in Lake County. Citizen participation in preserving storm water quality is the focus.

Measurable Goals: Number and quality of PSA's broadcast.

Status: These video PSAs were created during Year 7 and continued to air during Year 9. Lake County organized a working group of other MS4's located in Lake County and three (3) video PSAs were produced utilizing Lake County Communications Department video production resources. These video PSA's have been aired regularly on the local access channel run by Lake County (LCTV) as well as participating municipal (MS4) websites. The three PSA's are available on the Lake County Website at the following links:

- (1) "Keep Our Water Clean"
http://lakecnty.granicus.com/MediaPlayer.php?view_id=3&clip_id=372
- (2) "Lauren's Carwash Blues"
http://lakecnty.granicus.com/MediaPlayer.php?view_id=3&clip_id=329
- (3) "Stop Fertilizer Pollution"
http://lakecnty.granicus.com/MediaPlayer.php?view_id=3&clip_id=326

In addition, the Lake County local cable television access network (LCTV) regularly aired a program called "Lake County Health Focus" in which the Environmental Health Division staff of the Lake County Health Department addressed topics concerned with the protection of water resources in Lake County.

A.4.1 Community Event

A soil erosion and sediment control workshop will be sponsored by the QLP. This workshop is geared toward developers, engineers, municipalities and enforcement officers. Lake County will participate in the workshop. Participate in local initiatives directed at improving water quality.

Measurable Goal(s): Participate in the annual SMC sponsored soil erosion and sediment control workshop. Participation in locally sponsored efforts to improve water quality.

Status: Lake County participated in the bi-annual soil erosion and sediment control workshops sponsored by SMC and in other locally sponsored efforts to improve water quality. This is a well established program that is in place.

A.4.2 Community Event

The MS4 provides a convenient location where the general public can dispose of common household pollutants. Solid Waste Agency of Lake County (SWALCO) holds a minimum of six(6) household waste collection events in different communities in Lake County each year, which assist in collecting waste before it enters the storm sewer system. In addition, SWALCO has expanded their program to offer year around disposal of household chemical

waste materials at its facility in Gurnee, Illinois for all Lake County (and Illinois) residents. The MS4 publicizes these SWALCO events.

Measurable Goal(s): This is an established program. Continue to publicize and hold household waste collection events in Lake County. Number of participants in collection events. Amount of materials collected.

Status: The Solid Waste Agency of Lake County (SWALCO) held a number of household chemical waste (HCW) collection events in different communities throughout Lake County during Year 9. These HCW collection events provide all Lake County residents with a safe and convenient way to manage household chemicals and reduce the amount of chemicals entering the storm water sewer systems in Lake County. Lake County is a member of SWALCO and actively supports the promotion and importance of SWALCO's programs to reduce the toxicity of the waste stream in Lake County. SWALCO's program is well known in the county having been in existence since 1998 and having served over 91,000 households in Lake County (see the SWALCO website for additional information on collection events and waste disposal programs www.swalco.org). The Lake County Health Department has a prescription drug collection bin at its Highland Park clinic.

B. Public Participation/Involvement

Lake County is committed to implementing the Public Participation/Involvement component of its Stormwater Management Program. The Public Participation/Involvement program includes attending and publicizing watershed stakeholder meetings, presenting program information at a public meeting at least annually and publicizing IDDE reporting contact numbers. The MS4 commits to implementation of BMPs as described below.

B.1 Public Panel

Involvement on public panels. Number of meetings attended / degree of participation.

Measurable Goals: Representatives from the Lake County Department of Planning, Building and Development and the Lake County Division of Transportation will continue to serve on the SMC Technical Advisory Committee (8 meetings) and the SMC Municipal Advisory Committee (6 meetings) during Year 9.

Status: Representatives from the Lake County Department of Planning, Building and Development and the Lake County Division of Transportation actively served on the SMC Technical Advisory Committee (8 meetings) and the SMC Municipal Advisory Committee (6 meetings) during Year 9.

B.3 Stakeholder Meeting

Stakeholder meetings are conducted throughout the county for ongoing planning and project implementation efforts. When stakeholder groups (such as watershed planning committees) include the jurisdictional area of the MS4, the MS4 will publicize stakeholder meetings locally and participate by being represented at the stakeholder meetings.

Measurable Goals: Publicize and participate in relevant watershed planning committees and other stakeholder groups.

Status: This is a well established program effort. Lake County publicized and participated in watershed planning committees and stakeholder groups such as the following in Year 9:

- Chicago Wilderness Aquatic Task Force
- Barrington Area Council of Governments (BACOG) – Water Quality Committee
- Lake County Framework Plan and Unified Development Ordinance Committees regarding water supplies and water quality
- Fremont Township Well Committee
- Indian Creek Watershed Committee
- Bull Creek/Bull’s Brook Watershed Committee
- Upper Des Plaines River Watershed Committee
- Flint Creek Watershed Committee
- North Mill Creek Watershed Committee
- North Branch Chicago River Watershed Committee
- Fox River Watershed Committee
- Waukegan River Watershed Committee
- ISD (Onsite Wastewater) Steering Committee
- Management entities for individual lakes in Lake County (Homeowners Associations, Villages and/or Townships).

B.4 Public Hearing

Lake County will meet its own requirements for conducting a variety of public meetings or hearings on issues that are related to preserving storm water quality.

Measurable Goal(s), including frequencies: The number and types of public meetings or hearings held in Year 9 which include agenda items that are related to storm water quality.

Status: The following types of public meetings or hearings were held in Year 9 and they frequently included agenda items related to stormwater quality:

Lake County Board – The Lake County Board meets each month to conduct the business of Lake County. These meetings are open to the public and are broadcast on local cable television access. The County Board also has a number of working committees that members serve on which meet regularly and are also open to the public.

Zoning Board of Appeals – The Zoning Board of Appeals holds public hearings to consider applications for rezoning, conditional use permits and requests for variation and administrative appeals. All meetings of the Zoning Board of Appeals are open to the public.

Regional Planning Commission – The Regional Planning Commission is an advisory group to the Lake County Board on issues related to land development. The Commission meets twice monthly. All meetings of the Commission are open to the public.

Lake County Stormwater Management Commission – Lake County Board members comprise six of twelve representatives on this commission. The Commission has the

responsibility for implementing the Comprehensive Storm water Management Plan for Lake County which was previously adopted jointly by the Lake County Board and the Commission in 1990. The Commission meets monthly and all meetings are open to the public. The Lake County Storm water Management Commission serves as the Qualifying Local Program (QLP) for this submittal.

Technical Advisory Committee / Lake County Stormwater Management Commission – This is a working committee of representative staff from local government and private development interests in Lake County. Lake County has representatives from its Department of Planning, Building and Development and Division of Transportation that serve on this committee. The Technical Advisory Committee meets once each month and all meetings are open to the public.

Municipal Advisory Committee / Lake County Stormwater Management Commission – This is a working committee of representative staff from local government interests in Lake County. Lake County has representatives from its Department of Planning, Building and Development, Health Department and Division of Transportation that serve on this committee. The Municipal Advisory Committee meets once each month and all meetings are open to the public.

B.5 Volunteer Monitoring

“Lake County Adopt-A-Highway Program”. Volunteer groups “adopt” a section of County Highway and agree to remove litter twice each year. The Lake County Division of Transportation commits to administering and managing this program during Year 9.

Measurable Goal(s), including frequencies: Number of volunteer groups in the program. Amount of trash and debris picked up on sponsored highway segments.

Status: During Year 9, the Lake County Division of Transportation worked with 227 different volunteer groups that actively cleaned up approximately 170,000 pounds of litter and debris on sections of the county highway system.

C. Illicit Discharge Detection and Elimination

The MS4 will conduct activities related to the Illicit Discharge Detection and Elimination (IDDE) minimum control measure. According to the current General NPDES Permit No. ILR40, the MS4’s IDDE program must include:

- A storm sewer system map showing the locations of all outfalls and the names and locations of all waters that receive discharges from those outfalls;
- An ordinance or other regulatory mechanism that prohibits all non-storm water discharges into the storm sewer system and provides the authority for appropriate enforcement procedures and actions;
- A plan to detect and address all non-stormwater discharges, including illegal dumping, into the storm sewer system;
- A program to educate public employees, businesses, and the general public about the hazards associated with illegal discharges and improper disposal of waste; and,

- Periodic inspection of storm sewer outfalls for detection of non-stormwater discharges and illegal dumping.

C.1 Storm Sewer Map Preparation

Lake County will prepare an outfall map to allow for tracking of dry weather flow inspections and outfall maintenance. The Lake County Division of Transportation will implement and maintain a program to inventory and locate all storm water discharge points located on the County Highway System. This data will be stored in a GIS database for analysis and mapping use. Lake County is committed to working with other MS4's in Lake County to maintain data collection standards that will foster data sharing and county-wide mapping.

Measurable Goals: Percentage of storm sewer outlets mapped. Quality and compatibility of data with other MS4's in Lake County. Verify outfalls in the field and give each outfall a unique identifier to be used to document inspections. Update map regularly as improvements or new developments occur.

Status: 100% percent of storm sewer outlets inventoried and mapped in a GIS database. Inventory and database updated during Year 9 to reflect changes and additions. Storm sewer inventory and map is available to employees through workplace intranet as a tool to assist in working with storm water related issues including an on-going inspection and cleaning program.

C.2 Regulatory Control Program

Lake County will review, consider, adopt and maintain ordinance language to prohibit non-storm water discharges to the storm sewer or drainage system and to provide an enforcement mechanism for the illicit discharge detection and elimination program. The Lake County Division of Transportation and the Lake County Health Department will impose applicable statutory authority as an additional enforcement mechanism when necessary to eliminate identified illicit discharges from the system.

Measurable Goals: Continue development of IDDE program. Promote methods, activities, enforcement and schedule to identify and remove illicit discharges. Effectiveness of enforcement efforts. Identification and elimination of illicit discharges.

Status: Watershed Development Ordinance and Unified Development Ordinance are in place as enforcement mechanisms to eliminate illicit discharges. Continued work on development of IDDE program including field screening, sampling and review of storm sewer outfalls during dry weather conditions. This program is in place and well established.

C.3.1 Detection/Elimination Prioritization Plan

USEPA requires MS4s to develop a plan to detect and address illicit discharges. The plan developed by the MS4 will be dependent on several factors, including available resources, size of staff, degree and character of its illicit discharges. SMC has assembled various sources of information, including case studies on illicit discharge detection and elimination programs throughout the U.S.

Measurable Goals: Participate in the SMC sponsored Municipal Advisory Committee (MAC) meetings throughout Year 9. Illicit discharge detection planning and program development continues as a topic of discussion. Continue to develop and implement an Illicit Discharge Detection and Elimination program.

Status: Lake County has actively participated in the SMC sponsored Municipal Advisory Committee (MAC) meetings throughout Year 9. Illicit discharge detection planning and program development continues as a topic of discussion. Illicit Discharge Detection and Elimination Procedures have begun to be implemented but further work needs to be done. This effort was included in the development and implementation of a Stormwater Pollution Prevention Plan for the MS4 during Year 9.

C.3.2 Detection/Elimination Prioritization Plan

Implement plan established during original NOI to detect and address illicit discharges. Detection methods include dry-weather screening, regular storm sewer maintenance, and public reporting. Program will be implemented in accordance with performance milestones that will be established in SMPP. All outfalls observed to have dry weather flow during pre-screening (pre-screening activities completed during original NOI), were investigated by the end of Year 7. Complete dry weather screening of all outfalls on a rotating basis with each outfall being inspected at least once every 5-years. Enhance current plan based on SMPP template and implement plan enhancements.

Measurable Goal(s): Prepare and implement SMPP. Review, revise and accept SMPP template language related to this provision by the end of Year 9.

Status: Lake County developed a SMPP during Year 9 with final adoption expected early in Year 10. Dry weather screening and evaluation of all storm sewer system outlets conducted during Year 7 (including targeted and random sampling and testing) with no illicit discharges detected.

C.4 Illicit Discharge Tracing Procedures

Implement procedures established during original NOI to trace found/observed illicit discharges to their origin. Efforts to locate illicit discharges will be documented. Enhance current plan based on SMPP template and implement plan enhancements.

Measurable Goal(s): Prepare and implement SMPP. Review, revise and accept SMPP template language related to this provision by end of Year 9.

Status: SMPP in the process of being finalized and adopted by Lake County (MS4). Lake County currently relies upon its existing regulatory and statutory authority to correct any illicit upstream discharges that would be discovered. Efforts to identify illicit discharges conducted during Year 7 and documented in Lake County Division of Transportation – 2009 NPDES Outfall Inspection Report dated 11/24/09 9 (Appendix to Annual Facility Inspection Report for Permit Year 7). Efforts to implement an SMPP are nearing completion - carry over this item to Year 10.

C.5.1 Illicit Source Removal Procedures

Solid Waste Agency of Lake County (SWALCO) holds household waste collection events in various communities throughout Lake County. These events are used to collect waste before it enters Lake County's storm system through illicit dumping and also to publicize Lake County's illicit discharge detection and elimination plan.

Measurable Goal(s), including frequencies: Quantity and variety of waste materials collected. Public response to collection efforts.

Status: The Solid Waste Agency of Lake County (SWALCO) held mobile drop-offs in a variety of locations across Lake County in Year 9. Under SWALCO's unique hybrid program the Agency also held public drop-offs at its permanent HCW processing and transfer facility in Gurnee. This site is open year round on the second Saturday and fourth Monday of every month. In addition to these events and the permanent collection facility in Gurnee, the Agency partnered with the Lincolnshire-Riverwoods Fire Protection District in 2009 to establish the HCW Satellite Collection Program which became operational in the fall of 2009. Under this program the Fire Protection District collects HCW at its fire station in Lincolnshire and stores them in a specially permitted and equipped storage room. Collections are held every other Saturday. It is also important to note that SWALCO accepts all non-DEA regulated drugs and pharmaceuticals at its HCW collection events, thereby diverting them from entering our waterways. This is a well established program that is in place.

C.5.2 Illicit Source Removal Procedures

The MS4 will implement a program and train employees to remove potential and known sources of illicit discharges.

Measurable Goals: Begin to develop municipal employee IDDE training program. Consider targeting employees in relevant positions that will perform activities such as illicit discharge tracing procedures, visual dry weather storm water outfall screening and illicit source removal. Continue to advertise illicit discharge/illegal dumping hotline in local newsletter. Track hotline calls. Investigate suspicious reports in the field. (Depending upon level/type of implementation, related measurable goals could also be applied to C.7.). Create and distribute materials educating public about elements of IDDE program, such as illicit discharge/illegal dumping hotline, IDDE ordinance and SWALCO waste collection events. (Depending upon level/type of implementation, related measurable goals could also be applied to A.1 and/or A.4.) Contact SWALCO for relevant waste collection events in a specific community. Coordinate with SWALCO to market waste collection events to the public and to distribute IDDE-related information during the event. Conduct event and document participation.

Status: Municipal employee IDDE training program in place with employee training on municipal housekeeping completed. Budgeted for and acquired equipment for cleaning of stormwater inlets and catchbasins (Vactor). Began a work program for the systematic cleaning, inspection and labeling of storm sewer inlets on the County Highway system. This program was started in Year 7 and is on-going. During Year 9, crews inspected, cleaned and

repaired 160 or about 1% of the inlets, manholes and catch basins on the county highway system. Future progress will be subject to the ongoing availability of labor and equipment resources for this purpose. This work program is on-going and will continue to be implemented during Year 10.

C.6 Program Evaluation and Assessment

Lake County will periodically evaluate and assess their IDDE program.

Measurable Goals: Collaborate and share information about IDDE program and results through MAC. Share ideas about common illicit discharges, enforcement methods, prevention methods and public education/outreach techniques.

Status: An objective program assessment was conducted by an independent consultant during Year 7. This program assessment effort is complete with implementation of recommendations for improvement in place.

C.7 Visual Dry Weather Screening

The MS4 will conduct dry weather screening to locate illicit discharges.

Measurable Goals: Perform dry weather screening of all outfalls on a rotating basis with each outfall being inspected at least once every 5-years. Investigate citizen illicit discharge/illegal dumping hotline reports when noted in the field. Utilize targeted video pipe inspections when needed to trace illicit discharges.

Status: Visual dry weather storm sewer outfall screening was conducted during Year 7 for 1093 outfalls with a total of nine potential illicit discharge locations identified, investigated and ultimately resolved.

C.8 Pollutant Field Testing

The MS4 will perform field and/or laboratory testing of apparent illicit discharges for pollutants.

Measurable Goals: Percentage of apparent illicit discharges tested.

Status: Visual dry weather storm sewer outfall screening was conducted during Year 7 by an independent contractor for 1093 outfalls with a total of nine potential illicit discharge locations identified. Field test kits were utilized to further screen these nine locations during follow-up visits resulting in all but two being eliminated as illicit discharge locations. Those remaining two locations and ten additional random locations were then sampled and laboratory tested for signs of illicit discharge. Lab results did not indicate evidence of illicit discharge and no further action was taken (See Appendix to the Year 7 Annual Facility Inspection Report).

C.9 Public Notification

The Lake County Division of Transportation will continue to put in place during Year 9 informational storm water inlet markings at a select number of existing inlet locations on the County highway system as available labor and equipment resources permit. New

construction will utilize grate castings that incorporate an environmental notice onto the surface of the curb box.

Measurable Goals: Number and variety of installations. Quality and legibility of message provided on curb inlets.

Status: Informational markings at existing inlet locations have been incorporated into storm inlet cleaning procedures. This program is on-going and will continue to be implemented as labor and equipment resources can be made available for this purpose. During program Year 9, crews inspected, cleaned and repaired 160 or about 1% of the inlets, manholes and catch basins on the county highway system.

D. Construction Site Runoff Control

Lake County has adopted a Watershed Development Ordinance (WDO) that establishes the minimum stormwater management requirements for development in Lake County. The WDO, which is enforced by SMC as well as by certified communities in the county, establishes standards for construction site runoff control. In unincorporated portions of Lake County, the WDO has been incorporated into the Unified Development Ordinance (UDO) and is enforced by the Lake County Department of Planning, Building and Development. The enforcement of the WDO implements BMPs as described below.

A package of 83 amendments to the countywide WDO was released for public comment on Feb. 4, 2011. Since then, several additional amendments were added to address the requirements of the National Flood Insurance Program (NFIP). There are now proposed 91 amendments to the WDO. Two of these amendments will enhance the Designated Erosion Control Inspector (DECI) program and update the DECI inspection requirements to match those of the new General NPDES Permit No. ILR10. Two other amendments will address the Effluent Limitation Guidelines (ELGs) currently being developed by the US EPA, including guidelines on the erosion and sediment controls that will need to be implemented on construction sites to meet the ELGs. The MS4 anticipates that these amendments will be adopted during Year 10. Municipal adoption of the WDO amendment language is also expected to occur during Year 10.

D.1.1 Regulatory Control Program

Institute an effective local regulatory program for controlling runoff from construction sites. The Unified Development ordinance has been adopted by Lake County as the regulatory mechanism to require erosion and sediment controls for construction activities in unincorporated Lake County. At a minimum, these standards apply to any development that hydrologically disturbs 1,000 square feet or more.

Measurable Goal(s), including frequencies: Local ordinance in place. Staff dedicated to enforcement of regulatory provisions. Number of site development permits issued. Number of site inspections conducted.

Status: This program is in place. During the reporting period, from 3-15-11 to 3-15-12, the Lake County Department of Planning, Building and Development issued 303 Site Development Permits and conducted 4,042 field inspections.

D.1.2 Regulatory Control Program

Lake County will revise the Unified Development Ordinance to incorporate the changes in minimum requirements made necessary by the proposed revisions to the SMC Watershed Development Ordinance. This will require that Lake County open a public comment period and conduct a public meeting or public hearing on the proposed revisions.

Measurable Goals: Necessary ordinance revisions will be completed and implemented in Year 9.

Status: The Ordinance review and revision process is in process and necessary ordinance revisions will be finalized and implemented in Year 10.

D.2.1 Erosion and Sediment Control BMPs

Erosion and sediment control plans required for all regulated development.

Measurable Goal(s), including frequencies: Quality of approved erosion and sediment control site plans and BMPs incorporated. Degree of compliance with approved site plans during construction. Land area disturbed and length of time disturbed.

Status: This program is in place. The Lake County Department of Planning, Building and Development require storm water pollution prevention plans for all development requiring a site development permit. These plans are reviewed by staff prior to permit issuance and the start of construction activity. Construction sites are monitored by environmental inspectors employed by the Department.

D.2.2 Designated Erosion Control Inspector Program

Designated Erosion Control Inspectors are required for significant projects.

Measurable Goal(s), including frequencies: Number of projects requiring a site development inspector. Degree of compliance with approved site plans during construction. Land area disturbed and length of time disturbed.

Status: During Year 4, the Unified Development Ordinance was amended to include a soil and erosion control inspector's program for projects exceeding 10 acres of hydrologic disturbance or exceeding 1 acre of hydrologic disturbance and having a Regulatory Floodplain, Isolated Waters of Lake County or Waters of the United States on-site or on adjoining property. The Designated Erosion Control Inspector acts as a private consultant hired by the applicant. This effort is well established and on-going.

D.3.1 Other Waste Control Program

Measurable Goals: Quantity and variety of waste materials collected. Public response to collection efforts.

Status: Lake County, through its membership in SWALCO, has one of the most extensive and effective household chemical waste programs in the State. The program provides a convenient way for residents throughout the county to properly manage potentially harmful chemicals and keep them out of our waterways. Of the 590,000 pounds of HCW collected in 2009, 38% were paints, 24% flammables, 13% poisons, 7% aerosols, 8% oils/antifreeze, 5% corrosive/oxidizer, 2% asbestos and 3% other.

D.3.2 Other Waste Control Program

Lake County has in place a nuisance ordinance which prohibits junk and debris and junk vehicles from collecting on properties. Enforcement actions help to keep waste materials out of receiving streams.

Measurable Goal(s), including frequencies: Number of violation notices posted. Number of properties cleaned up. Quality of response to complaints received.

Status: Lake County has in place a nuisance ordinance which prohibits junk and debris and junk vehicles from collecting on properties. Helps to keep waste materials out of receiving streams. This program is well established and on-going.

D.3.3 Construction Project Recycling

Measurable Goal(s), including frequencies: Amount of construction waste recycled. Level of awareness by construction trades of available recycling alternatives.

Status: During Year 5, an intergovernmental agreement between Planning, Building and Development and SWALCO was maintained for Planning, Building and Development to inform and educate developers of subdivisions and commercial projects to recycle construction waste. During Year 9, a total of 10 permit applicants were informed of the program. Thresholds for the agreement are as follows:

- Any proposed subdivision containing 5 or more lots (with 5 or more new homes) and,
- Any non-residential development, including additions, consisting of new floor area in the amount of 10,000 square feet or more.
- Applicants are informed of the program during the building permit application process.

D.4 Site Plan Review Procedures

Conduct reviews of site plans for compliance with soil erosion and sediment control requirements and incorporation of best management practices. Dedicate adequate and qualified staff to these review assignments.

Measurable Goal(s), including frequencies: Conduct reviews of site plans for compliance with soil erosion and sediment control requirements and for incorporation of best management practices. Dedicate adequate and qualified staff to these review assignments.

Status: This program is in place and well established. The Planning, Building and Development Department conducts detailed reviews of site plans for compliance with minimum soil erosion and sediment control measures and incorporation of best management practices as a step in the site development permit review process. Field inspections are conducted on a regular basis to ensure compliance. In Year 9, 303 Site Development Permits were issued and 4,042 site inspections were conducted by the Lake County Department of Planning, Building and Development during the twelve month period from 03-15-11 to 03-15-12.

D.5 Public Information Handling Procedures

Establish procedures for processing information received from the public about active or proposed construction activities. Dedicate adequate trained staff to receive and process public inquiries or complaints.

Measurable Goal(s), including frequencies: Number of public inquiries processed. Public satisfaction with staff response.

Status: This program is well established and in place. During Year 9 of the program, Lake County processed 128 complaints.

D.6.1 Site Inspection/Enforcement Procedures

Conduct construction site inspections.

Measurable Goal(s), including frequencies: Number of site inspections completed. Deficiencies noted and compliance achieved. Inspect critical construction sites monthly or after rain events greater than 0.5 inches.

Status: This program is well established and in place. During Year 9 of the program, 4,042 site inspections were conducted by the Lake County Planning, Building and Development Department.

D.6.2 Site Inspection/Enforcement Procedures

The Lake County Division of Transportation will hold pre-construction meetings with the contractor to review site requirements and the soil erosion and sediment control plan for all highway improvement projects. The SMC field inspector will be invited to participate in these meetings.

Measurable Goal(s), including frequencies: Contractor compliance with plan requirements.

Status: This program is in place and well established. The Lake County Division of Transportation hosted preconstruction meetings for all of its public road improvement projects during Year 9.

D.6.3 Site Inspection/Enforcement Procedures

The Lake County Department of Planning, Building and Development will hold pre-construction meetings with the contractor to review site requirements and the soil erosion and sediment control plan for all new subdivision developments. The site development field inspector will be invited and will participate in these meetings.

Measurable Goal(s): Contractor compliance with plan requirements.

Status: This program is well established and in place. During Year 9 of the program, 18 pre-construction meetings were held.

D.7 Other Construction Site Run-off Controls

The Lake County Division of Transportation initiated a program to hire an engineering consultant to provide independent performance reviews and inspections of construction sites during the construction season. The consultant reviewed site compliance with the site specific SWPPP, prepared inspection reports and records associated with NPDES Phase II requirements and regularly evaluated the overall performance of the site BMP's while noting any deficiencies in the SWPPP for correction or modification. LCDOT staff to continue to provide post-storm event inspections and associated record keeping.

Measurable Goals: Number of site reviews conducted during Year 9, individual and collective jobsite compliance with NPDES Phase II performance measures, number of SWPPP deficiencies noted and corrected.

Status: This program is well established and in place.

E. Post-Construction Runoff Control

As described above, the Lake County Watershed Development Ordinance (WDO) establishes the minimum stormwater management requirements for development in Lake County. The WDO establishes standards for post-construction site runoff control. These standards apply to any new development or redevelopment resulting in over 0.5 acres of new impervious area. In unincorporated portions of Lake County, the WDO has been incorporated into the Unified Development Ordinance (UDO) and is enforced by the Lake County Department of Planning, Building and Development. The enforcement of the WDO implements BMPs as described below.

A package of 83 amendments to the countywide WDO was released for public comment on Feb. 4, 2011. Since then, several additional amendments were added to address the requirements of the National Flood Insurance Program (NFIP). There are now proposed 91 amendments to the WDO. Ten of these amendments will update the runoff volume reduction hierarchy section of the ordinance in accordance with SMC's approved runoff volume reduction guidance principles and the requirements of the new General NPDES Permit No. ILR40. The MS4 anticipates that these amendments will be approved and adopted during Year 10. Municipal adoption of the WDO amendments is also expected to occur during Year 10.

E.2 Regulatory Control Program

The adopted Watershed Development Ordinance minimum standards require that all applicants adopt a storm water management strategy for controlling post-construction runoff. The applicant must develop a storm water management strategy that minimizes the increase in runoff volumes and rates and addresses the water quality treatment requirements of the ordinance. The proposed drainage plan must use the runoff reduction hierarchy in the ordinance and implement BMPs as required. The ordinance also requires the use of buffers when adjacent to existing water bodies.

Measurable Goal(s), including frequencies: Continue to enforce the existing ordinance. All disturbed areas must be stabilized before final approval of a project. Implementation of necessary BMP's.

Status: This program is well established and in place. All disturbed areas must be stabilized before final approval of a project.

E.3 Long Term O&M Procedures

The adopted Watershed Development Ordinance minimum standards require that a maintenance plan be prepared for all storm water management system components for Major Developments (as defined in the ordinance). The maintenance plan must include: maintenance tasks, the party responsible, a description of all permanent public or private access maintenance easements and overland flow paths and compensatory storage areas and a description of dedicated sources of funding for the required maintenance.

Measurable Goal(s): This is an established program. Continue to enforce the existing ordinance.

Status: This program is well established and in place.

E.4 Pre-Construction Review of BMP Designs

A plan review is conducted for all soil erosion and sediment control plans submitted. This includes a review of the proposed BMPs for post-construction runoff control.

Measurable Goal(s): This is an established program. Continue to enforce the existing ordinance.

Status: This program is in place. During Year 9 of the program, 868 plan reviews were conducted.

E.5 Site Inspections During Construction

The adopted Watershed Development Ordinance provides both the recommended and the minimum requirements for site inspections. Enforcement officers may inspect a site development at any stage in the construction process. For major developments, the enforcement officer shall conduct site inspections, at a minimum, upon completion of installation of sediment and runoff control measures and after final stabilization and landscaping, prior to removal of sediment controls.

Measurable Goal(s): Continue to enforce the existing ordinance.

Status: This program is in place. During Year 9 of the program, 4,042 site inspections were performed.

E.6 Post-Construction Inspections

The enforcement officer shall conduct post-construction inspections prior to the release of performance guarantees, maintenance guarantees or certificates of occupancy as provided for in the ordinance.

Measurable Goal(s): Continue to enforce the existing ordinance.

Status: This program is well established and in place.

F. Pollution Prevention/Good Housekeeping

The MS4 is committing to implementing the Pollution Prevention/Good Housekeeping component of its SMPP. This program includes: the evaluation and improvement of municipal policies and procedures to reduce the discharge of pollutants from municipal activities and operations; and, a training program for municipal employees.

F.1 Employee Training Program

Lake County will develop a training program for employees. Any new training materials will be developed based on guidance that is widely available. Lake County will also evaluate and incorporate existing employee training programs into this program. The training program will be updated and expanded as Lake County continues to implement its storm water management programs.

Measurable Goal(s), including frequencies: Continue to develop and implement employee training programs specific to County operations and facilities. Conduct annual training for employees that will implement or utilize BMPs. Design and conduct employee spill control training in Year 9.

Status: Lake County Division of Transportation Resident Engineers and Design Engineers trained and certified as SMC Designated Erosion Control Inspectors (DECI) during Year 9. Lake County DOT Facilities Spill Response & Control Plan completed in Year 6 and updated annually since. During Year 9 Division of Transportation Maintenance Department employees were trained using the “Storm Watch – Everyday Best Management Practices” DVD training program produced by Excal Visual Training of Boulder, Colorado. This

training included BMP training for Illicit Discharge Detection and Elimination and Pollution Prevention and Good Housekeeping. During Year 8 (11/10) fifty four (54) employees were given spill control training, and 106 employees received HAZCOM training (4/10). Lake County Facilities Operations expanded the wetland management training program to include erosion control BMPs. Four Landscapers were provided the training during Year 8.

F.2.1 Inspection and Maintenance Program

The MS4 will examine and subsequently alter their own actions to help ensure a reduction in the amount and type of pollution that: (1) collects on streets, parking lots, open spaces, and storage and vehicle maintenance areas and is discharged into local waterways; and (2) results from actions such as environmentally damaging land development and flood management practices or poor maintenance of storm sewer systems.

Measurable Goals: This is an established program - continue to maintain a schedule for street sweeping to reduce the amount of pollution (sand, salt, leaves, etc) that accumulates on streets, which has the potential to reach waterways as runoff. Implement street sweeping at established annual frequency and document. Establish a schedule for visual storm sewer inspection. Inspect storm sewers at established regular frequency and document. Schedule additional maintenance as needed. Develop and implement an operations and maintenance program for detention and water quality ponds to ensure that they are operating to maximize water quality benefits and detention storage. Include formal inspection schedule, inspection checklist and record-keeping procedures. (Depending upon level/type of implementation, related measurable goals could also be applied to F.4.) Continue to distribute educational materials on spill prevention and control procedures to targeted County employees. (Depending upon level/type of implementation, related measurable goals could also be applied to F.4.)

Status: This program implementation is ongoing and will be carried over into Year 10. Street sweeping program is in place and well established. The 191 lane miles of County Highway that were targeted for sweeping during Year 9 were swept 10.4 times during that period. Storm water detention and water quality basins are inspected and maintained on a semi-annual program with a combination of in-house maintenance staff and contract personnel. Storm water detention and water quality basins were inventoried and evaluated in Year 9 with a retrofit project underway to improve the water quality function of 5 selected basins with design and construction programmed and planned for Year 10.

F.2.2 Inspection and Maintenance Program

Develop and implement a spill prevention and control plan for Lake County-owned facilities.

Measurable Goal(s): Plan is in place at the Division of Transportation. Continue development and implementation for other county facilities during Year 9. Update and train employees on the operational considerations of the plan elements during Year 9.

Status: Spill prevention and control plan was developed and implemented during Year 6 and has been updated annually for Division of Transportation facilities. Employee training conducted annually. The Lake County Facilities Department purchased spill containment

equipment to be used in the event of a spill in the underground parking garage and loading dock area in Waukegan during Permit Year 8. These efforts are on-going.

F.3.1 Municipal Operations Storm Water Control

Storm sewer system and catch basin inspection and cleaning program. Annually inspect 5% of system, and clean as needed. Lake County to expand program coverage in Year 9.

Measurable Goal(s): Percentage of the system inspected and cleaned.

Status: Equipment for cleaning of stormwater inlets and catchbasins (Vactor truck) has been acquired and is in use. Began a work program for the systematic cleaning, inspection and labeling of storm sewer inlets on the County Highway system. This program has been established in Year 7 and will be an ongoing annual program. As of the end of program Year 9, crews have inspected, cleaned and repaired 389 or about 3% of the inlets, manholes and catch basins on the county highway system. Future progress will be subject to the ongoing availability of labor and equipment resources for this purpose. This work program is well established and will be carried over into Year 10.

F.3.2 Detention Basin Maintenance Program

The Lake County Division of Transportation inventoried County-owned detention basins in 2003-2004. These inventories include basin features such as outlet structures, emergency overflow spillways and basin type. GPS coordinates were collected for incorporation of these inventories into a GIS database. Keep GIS Detention Basin inventory updated – add Lake County Facilities basins to the inventory in Year 9.

Basins inspected by maintenance personnel and necessary maintenance work items completed semi-annually. Prescriptive burns completed on two basins that incorporate prairie landscapes.

Measurable Goals: Semi-annually inspect and perform necessary maintenance on all County-owned storm water detention basins. Condition and functionality of detention basins.

Status: Basins inspected semi-annually by maintenance personnel and necessary maintenance work items completed each year. Storm water detention and water quality basins were re-inventoried and evaluated in Year 9 with a retrofit project underway to improve the water quality function of 5 selected basins with design and construction programmed and planned for Year 10. Operations and Maintenance Plans are being developed and implemented for each basin in the inventory (45) in Year 10. This program is in place and well established.

F.4 Municipal Operations Waste Disposal

Municipal Operations Waste Disposal - Incorporate waste disposal procedures into the facilities programs described above in F.2.1 and F.2.2.

Measurable Goal(s): Percentage of waste disposed of properly.

Status: This program is in place and well established. Approximately 1,450 cubic yards of street sweeping waste and stormwater inlet sediments were disposed of in Year 9.

F.6 Other Municipal Operations Controls

Highway sweeping.

Measurable Goal(s), including frequencies: Lane miles swept and frequency of sweeping during Year 9.

Status: Street sweeping program in place and well established. The 191 lane miles of County Highway that were targeted for sweeping during program Year 9 were swept 10.4 times during that period.

Stormwater Management Program Assessment, Year 9

An overall assessment of the MS4's stormwater management program and the appropriateness of its BMPs is provided below.

During Year 9, the MS4 focused on the formal preparation and implementation of a Stormwater Management Program Plan to better address the annual program assessment requirements of General NPDES Permit No. ILR40. It is expected that this SMPP will be finalized and adopted early in Year 10.

Part C. MS4 Information and Data Collection Results, Year 9

Annual Monitoring and Data Collection, Year 9

Information and data that the MS4 collected to meet the annual monitoring requirement of General NPDES Permit No. ILR40 are summarized below.

The Lake County Health Department coordinates the Illinois Volunteer lake Monitoring Program in Lake County. The program coordinated the activities of volunteer groups that monitored the water quality in 44 lakes in Lake County during Permit Year 9.

IDDE Monitoring and Data Collection, Year 9

Information and data that the MS4 collected as part of its illicit discharge detection and elimination program are summarized below.

No dry weather flow investigations were conducted during Year 9. Visual dry weather storm sewer outfall screening was conducted during Year 7 by an independent contractor for 1093 outfalls with a total of nine potential illicit discharge locations identified. Field test kits were utilized to further screen these nine locations during follow-up visits resulting in all but two being eliminated as illicit discharge locations. Those remaining two locations and ten additional random locations were then sampled and laboratory tested for signs of illicit discharge. Lab results did not indicate evidence of illicit discharge and no further action was taken (See Appendix to the Year 7 Annual Facility Inspection Report). During Year 10, the MS4 anticipates that it will continue its dry weather flow investigations and associated water quality testing in accordance with the procedures outlined in its SMPP.

Part D. MS4 Summary of Year 10 Stormwater Activities

The table below indicates the stormwater management activities that the MS4 plans to undertake during Year 10. Additional information about the BMPs and measurable goals that the MS4 will implement during Year 10 is provided in the section following the table.

Note: X indicates BMPs that will be implemented during Year 10

Year 9	
MS4	
A. Public Education and Outreach	
X	A.1 Distributed Paper Material
X	A.2 Speaking Engagement
X	A.3 Public Service Announcement
X	A.4 Community Event
	A.5 Classroom Education Material
	A.6 Other Public Education
B. Public Participation/Involvement	
X	B.1 Public Panel
	B.2 Educational Volunteer
X	B.3 Stakeholder Meeting
X	B.4 Public Hearing
X	B.5 Volunteer Monitoring
	B.6 Program Coordination
	B.7 Other Public Involvement
C. Illicit Discharge Detection and Elimination	
X	C.1 Storm Sewer Map Preparation
X	C.2 Regulatory Control Program
X	C.3 Detection/Elimination Prioritization Plan
X	C.4 Illicit Discharge Tracing Procedures
X	C.5 Illicit Source Removal Procedures
X	C.6 Program Evaluation and Assessment
X	C.7 Visual Dry Weather Screening
X	C.8 Pollutant Field Testing
X	C.9 Public Notification
	C.10 Other Illicit Discharge Controls

Year 9	
MS4	
D. Construction Site Runoff Control	
X	D.1 Regulatory Control Program
X	D.2 Erosion and Sediment Control BMPs
X	D.3 Other Waste Control Program
X	D.4 Site Plan Review Procedures
X	D.5 Public Information Handling Procedures
X	D.6 Site Inspection/Enforcement Procedures
X	D.7 Other Construction Site Runoff Controls
E. Post-Construction Runoff Control	
	E.1 Community Control Strategy
X	E.2 Regulatory Control Program
X	E.3 Long Term O&M Procedures
X	E.4 Pre-Const Review of BMP Designs
X	E.5 Site Inspections During Construction
X	E.6 Post-Construction Inspections
	E.7 Other Post-Const Runoff Controls
F. Pollution Prevention/Good Housekeeping	
X	F.1 Employee Training Program
X	F.2 Inspection and Maintenance Program
X	F.3 Municipal Operations Storm Water Control
X	F.4 Municipal Operations Waste Disposal
	F.5 Flood Management/Assess Guidelines
X	F.6 Other Municipal Operations Controls

The stormwater management activities that the MS4 plans to undertake during Year 10 are described in detail in the MS4's SMPP and in brief below. Beginning in Year 10, the MS4's SMPP can be viewed at www.lakecountyil.gov/Transportation/Pages/NPDES.aspx

A. Public Education and Outreach

The MS4 is committing to implement the Public Education and Outreach component of its SMPP. The MS4's Public Education and Outreach program includes: the distribution of educational material to the community or conducting equivalent outreach activities about the impacts of stormwater discharges on water bodies and the steps that the public can take to reduce these impacts; supporting classroom education; supporting storm drain stenciling efforts; and, supporting SWALCO events.

A.1.1 Distributed Paper Material

Lake County will distribute publications received from SMC to local target groups.

Measurable Goals: SMC will distribute a variety of informational materials related to stormwater management through its "take away" rack and website. During Year 10, Lake County will make available and distribute two manuals "A Citizen's Guide to Maintaining Stormwater Best Management Practices" and "Living with Wetlands: A Handbook for Homeowners in Northeastern Illinois" to local entities such as homeowners associations and stakeholder groups.

A.1.2 Distributed Paper Material

The Lake County Department of Planning, Building and Development will distribute educational materials on a variety of storm water quality topics to targeted groups.

Measurable Goal(s), including frequencies: The Lake County Planning, Building and Development Department will make available and distribute the following publications to permit applicants, developers, homeowner groups and any other interested groups or individuals.

"Silt Fences & Stabilized Construction Entrances" – Erosion control best practices.

"Wetlands" – General regulatory information as it relates to site development.

"Floodplains" – General regulatory information as it relates to site development.

"Swales" – Site development requirements.

"Berms" – Site development requirements.

"Ponds" – Site development requirements.

"Grading, Filling and Site Restoration" – Site development requirements.

"Flood Safety Information" – Flood safety for floodplain residents.

A.1.3 Distributed Paper Material

The Lake County Health Department will distribute educational materials on a variety of stormwater quality topics to targeted groups.

Measurable Goal(s), including frequencies: The Lake County Health Department will make available and distribute the following publications related to natural resources and water quality management.

“Cattail Chronicles” – A quarterly newsletter published by the Lakes Management Unit of the Environmental Health Division of the Lake County Health Department dedicated to public education on water quality issues specific to Lake County.

“Wastewater News” – A biannual newsletter.

“Waterlines” – A water well newsletter targeting licensed well contractors.

“National Groundwater Awareness Week” – Since 1999 the Lake County Health Department has issues a press release and reduced water analysis fees for private well samples during this annual observance. In 2006, Lake County expanded the reduced-fee tests available and produced a pamphlet explaining common water testing parameters.

“National Recreational Water Illness Prevention Week” – New in 2006, the lake County Health Department is highlighting the value of healthy swimming and recreational water illness prevention.

“Private Water Well Testing” – Publication.

“Types of Wells in Lake County” – Publication.

“Frequently Asked Questions about Water Wells” – Publication.

“Well Chlorination Procedures” – Publication.

“Investigate Before You Invest in a Vacant Lot” – Publication.

“Investigate Before You Invest in a Home” – Publication.

“Wastewater Treatment and Dispersal by Onsite Wastewater Treatment Systems” – Publication.

Numerous water related press releases (*i.e. Reduce Outdoor Water Use During Drought*)

“Lake Reports” – An annual report issued by the Lakes Management Unit of the Environmental Health Division of the Lake County Health Department. Report contains detailed information on the environmental health of 22 different lakes in Lake County.

“Buffer Strips – Why they should be part of your shoreline” – Best management practices for planting and maintaining shoreline property.

“Phosphorous in Lake County” – Educational brochure on limiting the use of phosphorous.

A.1.4 Distributed Paper Material

The Lake County Planning, Building and Development Department will maintain its status as a Class 6 Community participant of the Federal Emergency Management Agency (FEMA) Community Rating System (CRS) by completing the annual outreach mailing to flood prone properties as well as preparing the annual press release notification of the completion of the Annual Evaluation of the Lake County All Natural Hazards Mitigation Plan.

Measurable Goals: The Lake County Planning, Building, and Development Department will maintain its status as a Class 6 Community participant of the Federal Emergency Management Agency (FEMA) Community Rating System (CRS) through annual recertification.

A.2 Speaking Engagement

Lake County will make employees available for speaking engagements to groups of interested residents on storm water related topics. This program will be administered by the Communications Department of the Lake County Administrator’s Office.

Measurable Goal(s), including frequencies: The Lake County Communications Department will arrange to provide public speakers on storm water related topics through its “Speakers Bureau”. These services are provided upon request from interested public groups. Speakers are Lake County employees and are selected based upon their expertise on a requested topic.

A.3 Public Service Announcement

Lake County will and air three public service announcements that have been produced on the local cable access channel run by Lake County (LCTV). These PSAs will also be made available on the Lake County Division of Transportation website and will be shared for use by other MS4s in Lake County. Citizen participation in preserving storm water quality is the focus.

- (1) “Keep Our Water Clean”
http://lakecnty.granicus.com/MediaPlayer.php?view_id=3&clip_id=372
- (2) “Lauren’s Carwash Blues”
http://lakecnty.granicus.com/MediaPlayer.php?view_id=3&clip_id=329
- (3) “Stop Fertilizer Pollution”
http://lakecnty.granicus.com/MediaPlayer.php?view_id=3&clip_id=326

Measurable Goals: Number and quality of PSA’s broadcast.

A.4.1 Community Event

A soil erosion and sediment control workshop will be sponsored by the QLP. This workshop is geared toward developers, engineers, municipalities and enforcement officers. Lake County will participate in the workshop. Participate in local initiatives directed at improving water quality.

Measurable Goal(s): Participate in the soil erosion and sediment control workshop. Participation in locally sponsored efforts to improve water quality.

A.4.2 Community Event

The MS4 provides a convenient location where the general public can dispose of common household pollutants. Solid Waste Agency of Lake County (SWALCO) holds a minimum of six(6) household waste collection events in different communities in Lake County, which assist in collecting waste before it enters the storm sewer system. In addition, SWALCO has expanded their program to offer year around disposal of household chemical waste materials at its facility in Gurnee, Illinois for all Lake County (and Illinois) residents. The MS4 publicizes these SWALCO events.

Measurable Goal(s): This is an established program. Continue to publicize and hold household waste collection events in Lake County. Number of participants in collection events. Amount of materials collected.

B. Public Participation/Involvement

The MS4's Public Participation/Involvement program includes: maintaining a process for receiving and processing citizen input; attending and publicizing stakeholder meetings; and, publicizing IDDE reporting information.

Measurable Goal(s): Implement, and track progress, of BMPs as described in the SMPP. Present "The Big Picture: Water Quality, Regulations & NPDES", a presentation that will be made available by the QLP.

B.1 Public Panel

Involvement on public panels. Number of meetings attended / degree of participation.

Measurable Goals: Representatives from the Lake County Department of Planning, Building and Development and the Lake County Division of Transportation will continue to serve on the SMC Technical Advisory Committee (12 meetings) and the SMC Municipal Advisory Committee (6 meetings) during Year 10.

B.3 Stakeholder Meeting

Stakeholder meetings are conducted throughout the county for ongoing planning and project implementation efforts. When stakeholder groups (such as watershed planning committees) include the jurisdictional area of the MS4, the MS4 will publicize stakeholder meetings locally and participate by being represented at the stakeholder meetings.

Measurable Goals: Publicize and participate in relevant watershed planning committees and other stakeholder groups such as:

- Chicago Wilderness Aquatic Task Force
- Barrington Area Council of Governments (BACOG) – Water Quality Committee
- Lake County Framework Plan and Unified Development Ordinance Committees regarding water supplies and water quality
- Fremont Township Well Committee
- Indian Creek Watershed Committee
- Bull Creek/Bull's Brook Watershed Committee
- Upper Des Plaines River Watershed Committee
- Flint Creek Watershed Committee
- North Mill Creek Watershed Committee
- North Branch Chicago River Watershed Committee
- Fox River Watershed Committee
- Waukegan River Watershed Committee
- ISD (Onsite Wastewater) Steering Committee
- Management entities for individual lakes in Lake County (Homeowners Associations, Villages and/or Townships).

B.4 Public Hearing

Lake County will meet its own requirements for conducting a variety of public meetings or hearings on issues that are related to preserving storm water quality.

Measurable Goal(s), including frequencies: The following types of public meetings or hearings will be held in Year 10 and will often include agenda items that are related to storm water quality:

Lake County Board – The Lake County Board meets each month to conduct the business of Lake County. These meetings are open to the public and are broadcast on local cable television access. The County Board also has a number of working committees that members serve on which meet regularly and are also open to the public.

Zoning Board of Appeals – The Zoning Board of Appeals holds public hearings to consider applications for rezoning, conditional use permits and requests for variation and administrative appeals. All meetings of the Zoning Board of Appeals are open to the public.

Regional Planning Commission – The Regional Planning Commission is an advisory group to the Lake County Board on issues related to land development. The Commission meets twice monthly. All meetings of the Commission are open to the public.

Lake County Stormwater Management Commission – Lake County Board members comprise six of twelve representatives on this commission. The Commission has the responsibility for implementing the Comprehensive Storm water Management Plan for Lake County which was previously adopted jointly by the Lake County Board and the Commission in 1990. The Commission meets monthly and all meetings are open to the public. The Lake County Storm water Management Commission serves as the Qualifying Local Program (QLP) for this submittal.

Technical Advisory Committee / Lake County Stormwater Management Commission – This is a working committee of representative staff from local government and private development interests in Lake County. Lake County has representatives from its Department of Planning, Building and Development and Division of Transportation that serve on this committee. The Technical Advisory Committee meets once each month and all meetings are open to the public.

Municipal Advisory Committee / Lake County Stormwater Management Commission – This is a working committee of representative staff from local government interests in Lake County. Lake County has representatives from its Department of Planning, Building and Development, Health Department and Division of Transportation that serve on this committee. The Municipal Advisory Committee meets once each month and all meetings are open to the public.

B.5 Volunteer Monitoring

“Lake County Adopt-A-Highway Program”. Volunteer groups “adopt” a section of County Highway and agree to remove litter twice each year. The Lake County Division of Transportation commits to administering and managing this program during Year 10.

Measurable Goal(s), including frequencies: Volunteer groups “adopt” a section of County Highway and agree to remove litter twice each year. Program is managed by the Lake

County Division of Transportation. Number of volunteer groups in the program. Amount of trash and debris picked up on sponsored highway segments.

C. Illicit Discharge Detection and Elimination

The MS4 will conduct activities related to the Illicit Discharge Detection and Elimination (IDDE) minimum control measure. According to the current General NPDES Permit No. ILR40, the MS4's IDDE program must include:

- A storm sewer system map showing the locations of all outfalls and the names and locations of all waters that receive discharges from those outfalls;
- An ordinance or other regulatory mechanism that prohibits all non-storm water discharges into the storm sewer system and provides the authority for appropriate enforcement procedures and actions;
- A plan to detect and address all non-stormwater discharges, including illegal dumping, into the storm sewer system;
- A program to educate public employees, businesses, and the general public about the hazards associated with illegal discharges and improper disposal of waste; and,
- Periodic inspection of storm sewer outfalls for detection of non-stormwater discharges and illegal dumping.

C.1 Storm Sewer Map Preparation

Lake County will prepare an outfall map to allow for tracking of dry weather flow inspections and outfall maintenance. The Lake County Division of Transportation will implement and maintain a program to inventory and locate all storm water discharge points located on the County Highway System. This data will be stored in a GIS database for analysis and mapping use. Lake County is committed to working with other MS4's in Lake County to maintain data collection standards that will foster data sharing and county-wide mapping.

Measurable Goals: Percentage of storm sewer outlets mapped. Quality and compatibility of data with other MS4's in Lake County. Verify outfalls in the field and give each outfall a unique identifier to be used to document inspections. Update map regularly as improvements or new developments occur.

C.2 Regulatory Control Program

Lake County will review, consider, adopt and maintain ordinance language to prohibit non-storm water discharges to the storm sewer or drainage system and to provide an enforcement mechanism for the illicit discharge detection and elimination program. The Lake County Division of Transportation and the Lake County Health Department will impose applicable statutory authority as an additional enforcement mechanism when necessary to eliminate identified illicit discharges from the system.

Measurable Goals: Continue development of IDDE program. Promote methods, activities, enforcement and schedule to identify and remove illicit discharges. Effectiveness of enforcement efforts. Identification and elimination of illicit discharges.

C.3.1 Detection/Elimination Prioritization Plan

USEPA requires MS4s to develop a plan to detect and address illicit discharges. The plan developed by the MS4 will be dependent on several factors, including available resources, size of staff, degree and character of its illicit discharges. SMC has assembled various sources of information, including case studies on illicit discharge detection and elimination programs throughout the U.S.

Measurable Goals: Participate in the SMC sponsored Municipal Advisory Committee (MAC) meetings throughout Year 10. Illicit discharge detection planning and program development continues as a topic of discussion. Continue to develop and implement an Illicit Discharge Detection and Elimination program.

C.3.2 Detection/Elimination Prioritization Plan

Implement plan established during original NOI to detect and address illicit discharges. Detection methods include dry-weather screening, regular storm sewer maintenance, and public reporting. Program will be implemented in accordance with performance milestones that will be established in SMPP. All outfalls observed to have dry weather flow during pre-screening (pre-screening activities completed during original NOI), were investigated by the end of Year 8. Complete dry weather screening of all outfalls on a rotating basis with each outfall being inspected at least once every 5-years. Enhance current plan based on SMPP template and implement plan enhancements.

Measurable Goal(s): Prepare and implement SMPP. Review, revise and accept SMPP template language related to this provision by the end of Year 10.

C.4 Illicit Discharge Tracing Procedures

Implement procedures established during original NOI to trace found/observed illicit discharges to their origin. Efforts to locate illicit discharges will be documented. Enhance current plan based on SMPP template and implement plan enhancements.

Measurable Goal(s): Prepare and implement SMPP. Review, revise and accept SMPP template language related to this provision by end of Year 10.

C.5.1 Illicit Source Removal Procedures

Solid Waste Agency of Lake County (SWALCO) holds household waste collection events in various communities throughout Lake County. These events are used to collect waste before it enters Lake County's storm system through illicit dumping and also to publicize Lake County's illicit discharge detection and elimination plan.

Measurable Goal(s), including frequencies: Quantity and variety of waste materials collected. Public response to collection efforts.

C.5.2 Illicit Source Removal Procedures

The MS4 will implement a program and train employees to remove potential and known sources of illicit discharges.

Measurable Goals: Begin to develop municipal employee IDDE training program. Consider targeting employees in relevant positions that will perform activities such as illicit discharge tracing procedures, visual dry weather storm water outfall screening and illicit source removal. Continue to advertise illicit discharge/illegal dumping hotline in local newsletter. Track hotline calls. Investigate suspicious reports in the field. (Depending upon level/type of implementation, related measurable goals could also be applied to C.7.). Create and distribute materials educating public about elements of IDDE program, such as illicit discharge/illegal dumping hotline, IDDE ordinance and SWALCO waste collection events. (Depending upon level/type of implementation, related measurable goals could also be applied to A.1 and/or A.4.) Contact SWALCO for relevant waste collection events in your community. Coordinate with SWALCO to market waste collection events to the public and to distribute IDDE-related information during the event. Conduct event and document participation.

C.6 Program Evaluation and Assessment

Lake County will periodically evaluate and assess their IDDE program.

Measurable Goals: Collaborate and share information about IDDE program and results through MAC. Share ideas about common illicit discharges, enforcement methods, prevention methods and public education/outreach techniques.

C.7 Visual Dry Weather Screening

The MS4 will conduct dry weather screening to locate illicit discharges.

Measurable Goals: Perform dry weather screening of all outfalls on a rotating basis with each outfall being inspected at least once every 5-years. Investigate citizen illicit discharge/illegal dumping hotline reports when noted in the field. Utilize targeted video pipe inspections when needed to trace illicit discharges.

C.8 Pollutant Field Testing

The MS4 will perform field and/or laboratory testing of apparent illicit discharges for pollutants.

Measurable Goals: Percentage of apparent illicit discharges tested.

C.9 Public Notification

The Lake County Division of Transportation will continue to put in place during Year 10 informational storm water inlet markings at a select number of existing inlet locations on the County highway system as available labor and equipment resources permit. New construction will utilize grate castings that incorporate an environmental notice onto the surface of the curb box.

Measurable Goals: Number and variety of installations. Quality and legibility of message provided on curb inlets.

D. Construction Site Runoff Control

Lake County has adopted a Watershed Development Ordinance (WDO) that establishes the minimum stormwater management requirements for development in Lake County. The WDO, which is enforced by SMC as well as by certified communities in the county, establishes standards for construction site runoff control. In unincorporated portions of Lake County, the WDO has been incorporated into the Unified Development Ordinance (UDO) and is enforced by the Lake County Department of Planning, Building and Development. The enforcement of the WDO implements BMPs as described below.

A package of 83 amendments to the countywide WDO was released for public comment on Feb. 4, 2011. Since then, several additional amendments were added to address the requirements of the National Flood Insurance Program (NFIP). There are now proposed 91 amendments to the WDO. Two of these amendments will enhance the Designated Erosion Control Inspector (DECI) program and update the DECI inspection requirements to match those of the new General NPDES Permit No. ILR10. Two other amendments will address the Effluent Limitation Guidelines (ELGs) currently being developed by the US EPA, including guidelines on the erosion and sediment controls that will need to be implemented on construction sites to meet the ELGs. The MS4 anticipates that these amendments will be adopted during Year 10. Municipal adoption of the WDO amendment language is also expected to occur during Year 10.

Measurable Goal(s): Implement, and track progress, of BMPs as described in the SMPP. Enforce WDO requirements as adopted into the Unified Development Ordinance (UDO) for Lake County. Attend relevant training sessions on the WDO amendments.

D.1.1 Regulatory Control Program

Institute an effective local regulatory program for controlling runoff from construction sites. The Unified Development ordinance has been adopted by Lake County as the regulatory mechanism to require erosion and sediment controls for construction activities in unincorporated Lake County. At a minimum, these standards apply to any development that hydrologically disturbs 1,000 square feet or more.

Measurable Goal(s), including frequencies: Local ordinance in place. Staff dedicated to enforcement of regulatory provisions. Number of site development permits issued. Number of site inspections conducted.

D.1.2 Regulatory Control Program

Lake County will revise the Unified Development Ordinance to incorporate the changes in minimum requirements made necessary by the proposed revisions to the SMC Watershed Development Ordinance. This will require that Lake County open a public comment period and conduct a public meeting or public hearing on the proposed revisions.

Measurable Goals: Necessary ordinance revisions will be completed and implemented in Year 10.

D.2.1 Erosion and Sediment Control BMPs

Erosion and sediment control plans required for all regulated development.

Measurable Goal(s), including frequencies: Quality of approved erosion and sediment control site plans and BMPs incorporated. Degree of compliance with approved site plans during construction. Land area disturbed and length of time disturbed.

D.2.2 Designated Erosion Control Inspector Program

During Year 4, the Unified Development Ordinance was amended to include a soil and erosion control inspector's program for projects exceeding 10 acres of hydrologic disturbance or exceeding 1 acre of hydrologic disturbance and has a Regulatory Floodplain, Isolated Waters of Lake county or Waters of the United States on-site or on adjoining property. The site development inspector acts as a private consultant hired by the applicant.

Measurable Goal(s), including frequencies: Number of projects requiring a site development inspector. Degree of compliance with approved site plans during construction. Land area disturbed and length of time disturbed.

D.3.2 Other Waste Control Program

Lake County has in place a nuisance ordinance which prohibits junk and debris and junk vehicles from collecting on properties. Enforcement actions help to keep waste materials out of receiving streams.

Measurable Goal(s), including frequencies: Number of violation notices posted. Number of properties cleaned up. Quality of response to complaints received.

D.3.3 Construction Project Recycling

During Year 5, an intergovernmental agreement between Planning, Building and Development and SWALCO was maintained for Planning, Building and Development to inform the developers of subdivisions and commercial projects to recycle construction waste. Thresholds for the agreement are as follows:

- Any proposed subdivision containing 5 or more lots (with 5 or more new homes) and,
- Any non-residential development, including additions, consisting of new floor area in the amount of 10,000 square feet or more.

Measurable Goal(s), including frequencies: Track the number of applicants informed of the program during the building permit application process.

D.4 Site Plan Review Procedures

Conduct reviews of site plans for compliance with soil erosion and sediment control requirements and incorporation of best management practices. Dedicate adequate and qualified staff to these review assignments.

Measurable Goal(s), including frequencies: Conduct reviews of site plans for compliance with soil erosion and sediment control requirements and for incorporation of best management practices. Dedicate adequate and qualified staff to these review assignments.

D.5 Public Information Handling Procedures

Establish procedures for processing information received from the public about active or proposed construction activities. Dedicate adequate trained staff to receive and process public inquiries or complaints.

Measurable Goal(s), including frequencies: Number of public inquiries processed. Public satisfaction with staff response.

D.6.1 Site Inspection/Enforcement Procedures

Conduct construction site inspections.

Measurable Goal(s), including frequencies: Number of site inspections completed. Deficiencies noted and compliance achieved. Inspect critical construction sites monthly or after rain events greater than 0.5 inches.

D.6.2 Site Inspection/Enforcement Procedures

The Lake County Division of Transportation will hold pre-construction meetings with the contractor to review site requirements and the soil erosion and sediment control plan for all highway improvement projects. The SMC field inspector will be invited to participate in these meetings.

Measurable Goal(s), including frequencies: Contractor compliance with plan requirements.

D.6.3 Site Inspection/Enforcement Procedures

The Lake County Department of Planning, Building and Development will hold pre-construction meetings with the contractor to review site requirements and the soil erosion and sediment control plan for all new subdivision developments. The site development field inspector will be invited and will participate in these meetings.

Measurable Goal(s): Contractor compliance with plan requirements.

D.7 Other Construction Site Run-off Controls

The Lake County Division of Transportation initiated a program to hire an engineering consultant to provide independent performance reviews and inspections of construction sites during the construction season. The consultant reviewed site compliance with the site specific SWPPP, prepared inspection reports and records associated with NPDES Phase II requirements and regularly evaluated the overall performance of the site BMP's while noting any deficiencies in the SWPPP for correction or modification. LCDOT staff to continue to provide post-storm event inspections and associated record keeping.

Measurable Goals: Number of site reviews conducted during Year 10, individual and collective jobsite compliance with NPDES Phase II performance measures, number of SWPPP deficiencies noted and corrected.

E. Post-Construction Runoff Control

As described above, the Lake County Watershed Development Ordinance (WDO) establishes the minimum stormwater management requirements for development in Lake County. The WDO establishes standards for post-construction site runoff control. These standards apply to any new development or redevelopment resulting in over 0.5 acres of new impervious area. In unincorporated portions of Lake County, the WDO has been incorporated into the Unified Development Ordinance (UDO) and is enforced by the Lake County Department of Planning, Building and Development. The enforcement of the WDO implements BMPs as described below.

A package of 83 amendments to the countywide WDO was released for public comment on Feb. 4, 2011. Since then, several additional amendments were added to address the requirements of the National Flood Insurance Program (NFIP). There are now proposed 91 amendments to the WDO. Ten of these amendments will update the runoff volume reduction hierarchy section of the ordinance in accordance with SMC's approved runoff volume reduction guidance principles and the requirements of the new General NPDES Permit No. ILR40. The MS4 anticipates that these amendments will be approved and adopted during Year 10. Municipal adoption of the WDO amendments is also expected to occur during Year 10.

E.2 Regulatory Control Program

The adopted Watershed Development Ordinance minimum standards require that all applicants adopt a storm water management strategy for controlling post-construction runoff. The applicant must develop a storm water management strategy that minimizes the increase in runoff volumes and rates and addresses the water quality treatment requirements of the ordinance. The proposed drainage plan must use the runoff reduction hierarchy in the ordinance and implement BMPs as required. The ordinance also requires the use of buffers when adjacent to existing water bodies.

Measurable Goal(s), including frequencies: Continue to enforce the existing ordinance. All disturbed areas must be stabilized before final approval of a project. Implementation of necessary BMP's.

E.3 Long Term O&M Procedures

The adopted Watershed Development Ordinance minimum standards require that a maintenance plan be prepared for all storm water management system components for Major Developments (as defined in the ordinance). The maintenance plan must include: maintenance tasks, the party responsible, a description of all permanent public or private access maintenance easements and overland flow paths and compensatory storage areas and a description of dedicated sources of funding for the required maintenance.

Measurable Goal(s): This is an established program. Continue to enforce the existing ordinance.

E.4 Pre-Construction Review of BMP Designs

A plan review is conducted for all soil erosion and sediment control plans submitted. This includes a review of the proposed BMPs for post-construction runoff control.

Measurable Goal(s): This is an established program. Continue to enforce the existing ordinance.

E.5 Site Inspections During Construction

The adopted Watershed Development Ordinance provides both the recommended and the minimum requirements for site inspections. Enforcement officers may inspect a site development at any stage in the construction process. For major developments, the enforcement officer shall conduct site inspections, at a minimum, upon completion of installation of sediment and runoff control measures and after final stabilization and landscaping, prior to removal of sediment controls.

Measurable Goal(s): Continue to enforce the existing ordinance.

E.6 Post-Construction Inspections

The enforcement officer shall conduct post-construction inspections prior to the release of performance guarantees, maintenance guarantees or certificates of occupancy as provided for in the ordinance.

Measurable Goal(s): Continue to enforce the existing ordinance.

F. Pollution Prevention/Good Housekeeping

The MS4 is committing to implementing the Pollution Prevention/Good Housekeeping component of its SMPP. This program includes: the evaluation and improvement of municipal policies and procedures to reduce the discharge of pollutants from municipal activities and operations; and, a training program for municipal employees.

F.1 Employee Training Program

Lake County will develop a training program for employees. Any new training materials will be developed based on guidance that is widely available. Lake County will also evaluate and incorporate existing employee training programs into this program. The training program will be updated and expanded as Lake County continues to implement its storm water management programs.

Measurable Goal(s), including frequencies: Continue to develop and implement employee training programs specific to County operations and facilities. Conduct annual training for employees that will implement or utilize BMPs. Design and conduct employee spill control training in Year 10.

F.2.1 Inspection and Maintenance Program

The MS4 will examine and subsequently alter their own actions to help ensure a reduction in the amount and type of pollution that: (1) collects on streets, parking lots, open spaces, and storage and vehicle maintenance areas and is discharged into local waterways; and (2) results

from actions such as environmentally damaging land development and flood management practices or poor maintenance of storm sewer systems.

Measurable Goals: This is an established program - continue to maintain a schedule for street sweeping to reduce the amount of pollution (sand, salt, leaves, etc) that accumulates on streets, which has the potential to reach waterways as runoff. Implement street sweeping at established annual frequency and document. Establish a schedule for visual storm sewer inspection. Inspect storm sewers at established regular frequency and document. Schedule additional maintenance as needed. Develop and implement an operations and maintenance program for detention and water quality ponds to ensure that they are operating to maximize water quality benefits and detention storage. Include formal inspection schedule, inspection checklist and record-keeping procedures. (Depending upon level/type of implementation, related measurable goals could also be applied to F.4.) Continue to distribute educational materials on spill prevention and control procedures to targeted County employees. (Depending upon level/type of implementation, related measurable goals could also be applied to F.4.)

F.2.2 Inspection and Maintenance Program

Develop and implement a spill prevention and control plan for Lake County-owned facilities.

Measurable Goal(s): Plan is in place at the Division of Transportation. Continue development and implementation for other county facilities during Year 10. Update and train employees on the operational considerations of the plan elements during Year 10.

F.3.1 Municipal Operations Storm Water Control

Storm sewer system and catch basin inspection and cleaning program. Annually inspect 5% of system, and clean as needed and as resources permit.

Measurable Goal(s): Percentage of the system inspected and cleaned.

F.3.2 Detention Basin Maintenance Program

The Lake County Division of Transportation inventoried County-owned detention basins in 2003-2004. These inventories include basin features such as outlet structures, emergency overflow spillways and basin type. GPS coordinates were collected for incorporation of these inventories into GIS database. Keep GIS Detention Basin inventory updated.

Basins inspected by maintenance personnel and necessary maintenance work items completed semi-annually. Prescriptive burns completed on two basins that incorporate prairie landscapes.

Measurable Goals: Semi-annually inspect and perform necessary maintenance on all County-owned storm water detention basins. Condition and functionality of detention basins.

F.4 Municipal Operations Waste Disposal

Municipal Operations Waste Disposal - Incorporate waste disposal procedures into the facilities programs described above in F.2.1 and F.2.2.

Measurable Goal(s): Percentage of waste disposed of properly.

F.6 Other Municipal Operations Controls

Highway sweeping.

Measurable Goal(s), including frequencies: Lane miles swept and frequency of sweeping during Year 10.

Part E. Notice of Qualifying Local Program

The Lake County Stormwater Management Commission (SMC) serves as a Qualifying Local Program (QLP) for MS4s in Lake County. In accordance with the General Permit, as a QLP, SMC performs activities related to each of the six minimum control measures. This part of the Annual Report, which summarizes the stormwater management activities performed by SMC as a QLP, consists of the following five subparts:

- **Part E1** identifies changes to Best Management Practices (BMPs) that occurred during Year 9 and includes information about how these changes affected the QLP's stormwater management program.
- **Part E2** describes the stormwater management activities that the QLP performed during Year 9.
- **Part E3** summarizes the information and data collected by the QLP during Year 9.
- **Part E4** describes the stormwater management activities that the QLP plans to undertake during Year 10.
- **Part E5** lists the construction projects that were funded by the QLP during Year 9.

Part E1. QLP Changes to Best Management Practices, Year 9

Note: X indicates BMPs that were implemented as planned
 ✓ indicates BMPs that were changed during Year 9

Year 9	
QLP	
A. Public Education and Outreach	
X	A.1 Distributed Paper Material
	A.2 Speaking Engagement
X	A.3 Public Service Announcement
X	A.4 Community Event
X	A.5 Classroom Education Material
X	A.6 Other Public Education
B. Public Participation/Involvement	
X	B.1 Public Panel
	B.2 Educational Volunteer
X	B.3 Stakeholder Meeting
	B.4 Public Hearing
	B.5 Volunteer Monitoring
X	B.6 Program Coordination
	B.7 Other Public Involvement
C. Illicit Discharge Detection and Elimination	
	C.1 Storm Sewer Map Preparation
X	C.2 Regulatory Control Program
	C.3 Detection/Elimination Prioritization Plan
	C.4 Illicit Discharge Tracing Procedures
	C.5 Illicit Source Removal Procedures
	C.6 Program Evaluation and Assessment
	C.7 Visual Dry Weather Screening
	C.8 Pollutant Field Testing
	C.9 Public Notification
	C.10 Other Illicit Discharge Controls

Year 9	
QLP	
D. Construction Site Runoff Control	
X	D.1 Regulatory Control Program
X	D.2 Erosion and Sediment Control BMPs
X	D.3 Other Waste Control Program
X	D.4 Site Plan Review Procedures
X	D.5 Public Information Handling Procedures
X	D.6 Site Inspection/Enforcement Procedures
X	D.7 Other Construction Site Runoff Controls
E. Post-Construction Runoff Control	
	E.1 Community Control Strategy
X	E.2 Regulatory Control Program
X	E.3 Long Term O&M Procedures
X	E.4 Pre-Const Review of BMP Designs
X	E.5 Site Inspections During Construction
X	E.6 Post-Construction Inspections
X	E.7 Other Post-Const Runoff Controls
F. Pollution Prevention/Good Housekeeping	
X	F.1 Employee Training Program
	F.2 Inspection and Maintenance Program
	F.3 Municipal Operations Storm Water Control
	F.4 Municipal Operations Waste Disposal
X	F.5 Flood Management/Assess Guidelines
	F.6 Other Municipal Operations Controls

Part E2. QLP Status of Compliance with Permit Conditions, Year 9

The Lake County Stormwater Management Commission (SMC) serves as a Qualifying Local Program (QLP) for MS4s in Lake County. In accordance with the General Permit, as a QLP, SMC performs activities related to each of the six minimum control measures. The stormwater management activities that the QLP performed during Year 9 are described below.

A. Public Education and Outreach

A.1 Distributed Paper Material

Measurable Goal(s): Distribute informational materials from “take away” rack at SMC. Upon request, distribute materials directly to municipalities for local distribution.

SMC distributes a variety of informational materials related to stormwater management through its “take away” rack and website.

Upon request, informational materials are distributed directly to Lake County MS4s in .PDF format for use on community websites, in community newsletters, and in community “take away” racks.

A.3 Public Service Announcement

Measurable Goal(s): Include public service announcement highlighting community accomplishments related to the NPDES Phase II process in “Mainstream” once annually. Post watershed identification signage with LCDOT. Upon request, present “The Big Picture: Water Quality, Regulations & NPDES” to Lake County MS4s. Host a public hearing on the proposed WDO amendments.

SMC includes announcements highlighting community accomplishments related to the NPDES Municipal Stormwater Program on its website, in its newsletter, and through other media outlets.

Watershed identification signage is located throughout the county.

SMC presented “The Big Picture: Water Quality, Regulations & NPDES” to Lake County MS4s upon request. According to records, between March 1, 2011 and February 29, 2012, 1 MS4 received the presentation.

A public hearing on the proposed amendments to the countywide WDO was held on March 16, 2011.

A.4 Community Event

Measurable Goal(s): Conduct or co-sponsor workshop on NPDES related topic.

SMC sponsored or co-sponsored a number of workshops and events on stormwater-related topics between March 1, 2011 and February 29, 2012, including:

- **Designated Erosion Control Inspector (DECI) Workshops held on Feb. 8, 9 & 16, 2011**
- **Presentation on Water Quality, Regulations and NPDES at Mar. 18, 2011 MAC meeting**
- **Drain Tile Workshop held on Mar. 22, 2011**
- **Homeowners Association (HOA) Stormwater Maintenance Workshop held on Apr. 12, 2011**
- **Presentation on West Union, IA Green Street Pilot Project at May 11, 2011 MAC meeting**
- **Bull Creek/Bull's Brook & Indian Creek Watershed Tour held on June 10, 2011**
- **Webcast on The Top Actions Local Governments Can Take to Address Numeric Goals, Such as Total Maximum Daily Loads (TMDLs) and Watershed Implementation Plans (WIPs) at Jul. 13, 2011 MAC meeting**
- **Designated Erosion Control Inspector (DECI) Workshop held on Aug. 2, 2011**
- **Presentation on DuPage Co., IL Cooperative Illicit Discharge Investigation Program at Sep. 14, 2011 MAC meeting**
- **Roadway De-Icing Workshop held on Oct. 11, 2011**
- **Presentation on California MS4 Permits & Program Implementation at Nov. 9, 2011 MAC meeting**
- **Presentation on Glenview, IL Local Drainage Inspection Program at Jan. 11, 2012 MAC meeting**
- **Webcast on Stormwater Retrofitting: A Guide to Retrofitting the World on Feb. 29, 2012**

A.5 Classroom Education

*Measurable Goal(s): Develop and compile information for stormwater educational kit for distribution upon request.
Provide materials and training on storm sewer inlet stenciling kits to teachers upon request.*

Stormwater educational materials were compiled for use at several public education events that were held between March 1, 2011 and February 29, 2012, including:

- **Lake County Green Living Fair held on Mar. 12, 2011**
- **Fremont Township Well and Water Day held on Apr. 9, 2011**
- **Countryside Lake Family Day held on Jun. 19, 2011**

A.6 Other Public Education

*Measurable Goal(s): Maintain and update the NPDES Phase II portion SMC website with resource materials such as model ordinances, case studies, brochures and web links.
Make "The Big Picture: Water Quality, Regulations & NPDES" presentation available to Lake County MS4s.*

As new information and resource materials become available, they are posted to the SMC website and/or distributed directly to Lake County MS4s. SMC made “The Big Picture: Water Quality, Regulations & NPDES” presentation available to Lake County MS4s and presented it upon request. According to records, between March 1, 2011 and February 29, 2012, 1 MS4 received the presentation.

B. Public Participation/Involvement

B.1 Public Panel

*Measurable Goal(s): Provide notice of public meetings on SMC website.
Track number of meetings conducted.*

Notice of all public meetings continues to be provided on the SMC website and through direct mailings and e-mailings to distribution lists. SMC tracked the number of Stormwater Management Committee Board (SMC) meetings, Technical Advisory Committee (TAC) meetings, Municipal Advisory Committee (MAC), and Watershed Management Board (WMB) meetings conducted during Year 9. According to records, there were 12 SMC meetings, 8 TAC meetings, 6 MAC meetings, and 1 WMB meeting conducted during this reporting period.

B.3 Stakeholder Meeting

*Measurable Goal(s): Provide notice of stakeholder meetings on SMC website.
Track number of watershed planning committee meetings conducted.
Establish watershed planning committees for each new watershed planning effort.*

Notice of all stakeholder meetings continues to be provided on the SMC website and through direct mailings and e-mailings to stakeholder lists. SMC tracked the number of stakeholder meetings conducted for the various watershed planning committees during the reporting period. The list below summarizes the watershed planning committee meetings that were conducted during Year 9:

- North Branch Chicago River Planning Committee – 4**
- Skokie River Consortium – 1**
- Bull Creek/Bull’s Brook Watershed Council – 6**
- Indian Creek Watershed Committee – 1**
- North Mill Creek Watershed Planning Committee – 6**
- Flint Creek Watershed Partnership – 5**

SMC continues to establish watershed planning committees for each new watershed planning effort.

B.6 Program Coordination

*Measurable Goal(s): Track number of MAC meetings conducted during Year 9.
Prepare draft report on Qualifying Local Program activities at end of Year 9.*

SMC tracked the number of Municipal Advisory Committee (MAC) meetings conducted during Year 9. According to records, there were 6 MAC meetings conducted during this reporting period.

The stormwater management activities that SMC performed during Year 9 are described in the Annual Facility Inspection Report (Annual Report) template that has been provided to Lake County MS4s. The stormwater management activities that SMC plans to perform during Year 10 are described in Part E4 of the Annual Report template.

C. Illicit Discharge Detection and Elimination

C.2 Regulatory Control Program

Measurable Goal(s): Continue to enforce the countywide WDO.

SMC continues to enforce the countywide WDO.

C.10 Other Illicit Discharge Controls

Measurable Goal(s): Sponsor or co-sponsor and track the number of attendees at an Illicit Discharge Detection and Elimination training workshop.

SMC co-sponsored an Illicit Discharge Detection and Elimination training workshop on March 20, 2012. According to records, 69 people attended the training workshop.

D. Construction Site Runoff Control

D.1 Regulatory Control Program

*Measurable Goal(s): Continue to enforce the countywide WDO.
Administer the Designated Erosion Control Inspector (DECI) program as outlined by the WDO.
Approve and adopt WDO amendments.
Sponsor or co-sponsor training sessions on the WDO amendments.*

SMC continues to enforce the countywide WDO.

SMC continues to administer the Designated Erosion Control Inspector (DECI) program as outlined by the WDO.

A package of 83 amendments to the countywide WDO was released for public comment on Feb. 4, 2011. Since then, several additional amendments were added to address comments received from the public and from local, state, and federal agencies and organizations. There are now 100 proposed amendments to the WDO. Two of these amendments will enhance the Designated Erosion Control Inspector

(DECI) program and will update the DECI inspection requirements to match those of the new General NPDES Permit No. ILR10. Although previously expected to occur during Year 9, approval and adoption of the proposed amendments has not yet occurred.

Training sessions on the WDO amendments have been deferred until after the WDO amendment process is complete.

D.2 Erosion and Sediment Control BMPs

Measurable Goal(s): Continue to enforce the countywide WDO.

Complete TRM update and work toward final approval and publication of the document.

Approve and adopt WDO amendments.

Sponsor or co-sponsor training sessions on the WDO amendments.

SMC continues to enforce the countywide WDO.

The process of updating the TRM has been deferred until after the WDO amendment process is complete.

A package of 83 amendments to the countywide WDO was released for public comment on Feb. 4, 2011. Since then, several additional amendments were added to address comments received from the public and from local, state, and federal agencies and organizations. There are now 100 proposed amendments to the WDO. Several of these amendments are related to erosion and sediment control BMPs. Although previously expected to occur during Year 9, approval and adoption of the proposed amendments has not yet occurred.

Training sessions on the WDO amendments have been deferred until after the WDO amendment process is complete.

D.3 Other Waste Control Program

Measurable Goal(s): Enforce WDO provisions regarding the control of waste and debris at construction sites.

SMC continues to enforce the countywide WDO.

D.4 Site Plan Review Procedures

Measurable Goal(s): Track number of enforcement officers who have passed the exam.

Track number of communities that undergo a performance review.

Complete ordinance administration and enforcement chapter of TRM.

SMC continues to track the number of enforcement officers (EOs) who have passed the EO exam and have become EOs. According to records, as of the end of Year 9, there are currently 92 EOs in Lake County.

SMC completed the community re-certification process, which included a performance review of all 55 certified and non-certified communities, during the reporting period. The next community re-certification process, which will include another performance review of all certified and non-certified communities, is currently scheduled to be completed by the end of Year 12.

The process of updating the TRM has been deferred until after the WDO amendment process is complete.

D.5 Public Information Handling Procedures

Measurable Goal(s): Track number of complaints received and processed related to soil erosion and sediment control.

SMC continues to track the number of complaints received and processed related to soil erosion and sediment control. According to records, between March 1, 2011 and February 29, 2012, 0 SE/SC complaints were received and processed by SMC staff.

D.6 Site Inspection/Enforcement Procedures

Measurable Goal(s): Track number of site inspections conducted by SMC.

SMC continues to track the number of site inspections conducted by SMC staff. According to records, between March 1, 2011 and February 29, 2012, 634 site inspections were conducted by SMC staff.

E. Post-Construction Runoff Control

E.2 Regulatory Control Program

*Measurable Goal(s): Continue to enforce the countywide WDO.
Approve and adopt WDO amendments.
Sponsor or co-sponsor training sessions on the WDO amendments.*

SMC continues to enforce the countywide WDO. A package of 83 amendments to the countywide WDO was released for public comment on Feb. 4, 2011. Since then, several additional amendments were added to address comments received from the public and from local, state, and federal agencies and organizations. There are now 100 proposed amendments to the WDO. Ten of these amendments will update the runoff volume reduction hierarchy section of the ordinance in accordance with SMC's approved runoff volume reduction guidance principles and the requirements of the new General NPDES Permit No. ILR40. Although previously expected to occur during Year 9, approval and adoption of the proposed amendments has not yet occurred. Training sessions on the WDO amendments have been deferred until after the WDO amendment process is complete.

E.3 Long Term O&M Procedures

Measurable Goal(s): Continue to enforce the countywide WDO.

SMC continues to enforce the countywide WDO.

E.4 Pre-Construction Review of BMP Designs

Measurable Goal(s): Continue to enforce the countywide WDO.

SMC continues to enforce the countywide WDO.

E.5 Site Inspections During Construction

Measurable Goal(s): Continue to enforce the countywide WDO.

SMC continues to enforce the countywide WDO.

E.6 Post-Construction Inspections

Measurable Goal(s): Continue to enforce the countywide WDO.

SMC continues to enforce the countywide WDO.

E.7 Other Post-Construction Runoff Controls

Measurable Goal(s): Conduct annual WMB meeting.

Contribute funding to flood reduction and water quality improvement projects, including stormwater retrofits, through the WMB.

The annual WMB meeting was held on Dec. 8, 2011.

At the annual WMB meeting, 16 flood reduction and water quality improvement projects, including stormwater retrofit projects, were selected to receive \$150,000 of funding through the WMB.

F. Pollution Prevention/Good Housekeeping

F.1 Employee Training Program

Measurable Goal(s): Provide list of available resources to MS4s.

Make available the Excal Visual Municipal Storm Water Pollution Prevention Storm Watch Everyday Best Management Practices software.

SMC continues to provide information on training opportunities and training resources to Lake County MS4s.

SMC continues to make available the Excal Visual Storm Watch Municipal Stormwater Pollution Prevention software to Lake County MS4s. According to records, between March 1, 2011 and February 29, 2012, 1 MS4 borrowed the Excal Visual software.

F.5 Flood Management/Assess Guidelines

Measurable Goal(s): Track number of projects that are reviewed for multi-objective opportunities.

SMC continues evaluate all SMC-sponsored projects for multi-objective opportunities, such as flood control and water quality.

Part E3. QLP Information and Data Collection Results, Year 9

The QLP did not collect any monitoring data on behalf of Lake County's MS4s during Year 9. However, SMC has reviewed information presented by the Illinois EPA in the 2010 Illinois Integrated Water Quality Report and 303(d) List and has developed the brief "State of Lake County's Waters" report provided below.

State of Lake County's Waters April 2012

This brief report is based on information contained in the Illinois EPA's 2010 Illinois Integrated Water Quality Report and Section 303(d) List, dated December 2011. Its purpose is to provide basic information to Lake County's MS4 on the condition of surface waters within Lake County. More detailed information about the condition of surface waters in Lake County can be found in the Illinois EPA's 2010 Illinois Integrated Water Quality Report and Section 303(d) List.

Streams

An analysis of data accompanying the Illinois EPA's 2010 Illinois Integrated Water Quality Report and Section 303(d) List shows that 231 stream miles in Lake County have been assessed by the Illinois EPA for attainment of at least one designated use. The degree of support (attainment) of a designated use in a particular stream segment is determined by the Illinois EPA through an analysis of various types of information, including biological, physicochemical, physical habitat, and toxicity data. When sufficient data are available, the Illinois EPA assesses each applicable designated use in a particular stream segment as Fully Supporting (good), Not Supporting (fair), or Not Supporting (poor). Waters in which at least one applicable use is not fully supported are called "impaired."

An analysis of data accompanying the Illinois EPA's 2010 Illinois Integrated Water Quality Report and Section 303(d) List shows that 187 stream miles (of the 231 stream miles that have been assessed) in Lake County are considered impaired by the Illinois EPA. These stream segments have been mapped and are shown in Figure E3.1.

Lakes

As with streams, the degree of support (attainment) of a designated use in a particular lake is determined by the Illinois EPA through an analysis of various types of information, including biological, physicochemical, physical habitat, and toxicity data. When sufficient data are available, the Illinois EPA assesses each applicable designated use in a particular lake as Fully Supporting (good), Not Supporting (fair), or Not Supporting (poor). Waters in which at least one applicable use is not fully supported are called "impaired."

An analysis of data accompanying the Illinois EPA's 2010 Illinois Integrated Water Quality Report and Section 303(d) List shows that 128 inland lakes in Lake County are considered impaired by the Illinois EPA. These lakes have been mapped and are shown in Figure E3.1.

Lake Michigan

Lake Michigan is monitored annually through a cooperative agreement between the City of Chicago and the Illinois EPA. The State of Illinois has jurisdiction over approximately 1,526 square miles of open water and 63 shoreline miles of Lake Michigan bordering Cook and Lake Counties.

About ten percent of the total Lake Michigan waters in Illinois were assessed for the Illinois EPA's 2010 Illinois Integrated Water Quality Report and Section 303(d) List, and all were rated as Fully Supporting for the following uses: aquatic life use, primary contact (swimming) use, secondary contact use, and public and food processing water supply use. However, fish consumption use in the Illinois portion of Lake Michigan is assessed as Not Supporting (Poor) due to contamination from polychlorinated biphenyls (PCBs) and mercury. In addition, all Lake Michigan beaches in Illinois were assessed by the Illinois EPA as Not Supporting (poor) for primary contact use due to bacterial contamination from *Escherichia coli* (*E. coli*) bacteria.

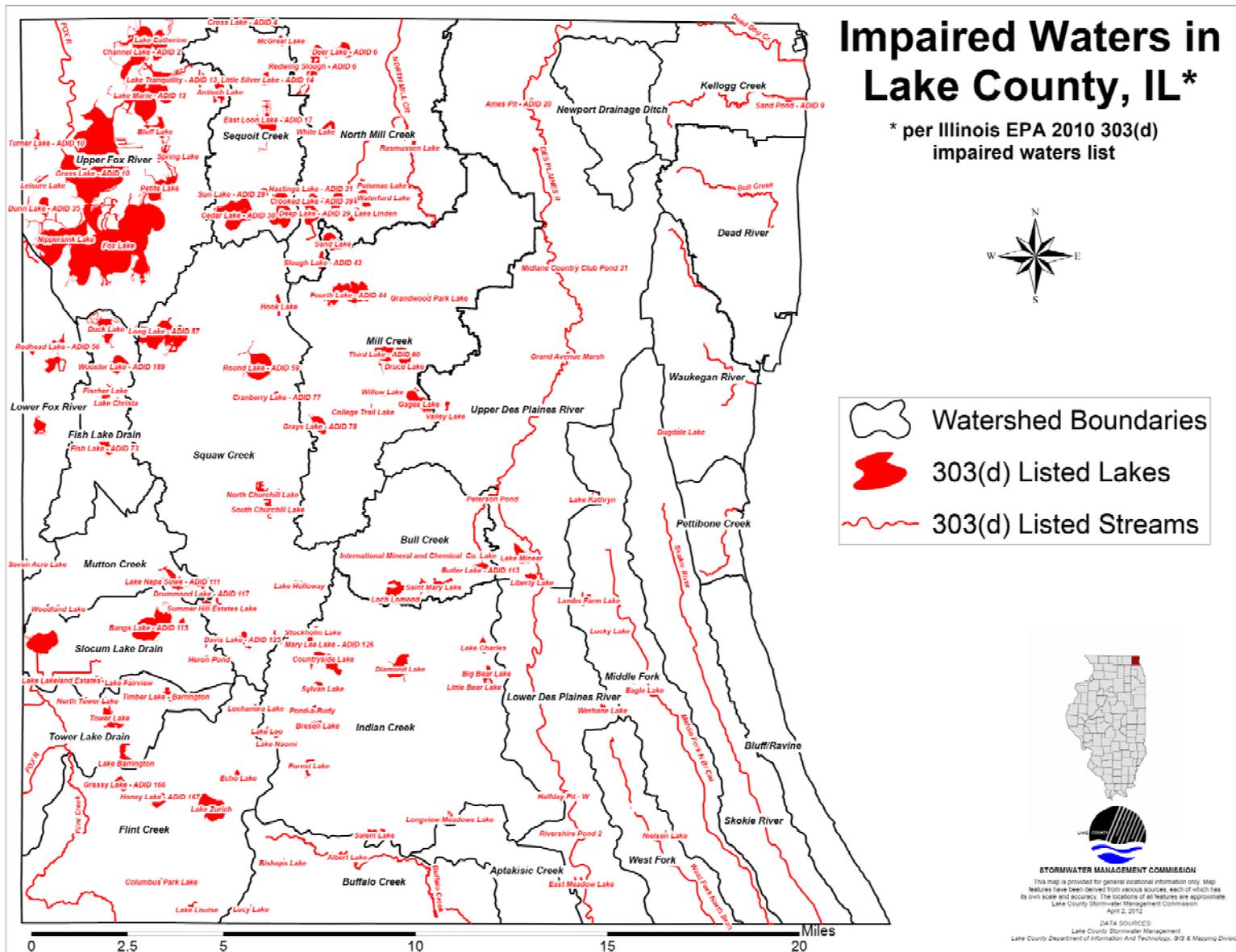


Figure E3.1

Part E4. QLP Summary of Year 10 Stormwater Activities

The table below indicates the stormwater management activities that the QLP plans to undertake during Year 10. Additional information about the BMPs and measurable goals that the QLP will implement during Year 10 is provided in the section following the table.

Note: X indicates BMPs that will be implemented during Year 10

Year 9	
QLP	
A. Public Education and Outreach	
X	A.1 Distributed Paper Material
	A.2 Speaking Engagement
X	A.3 Public Service Announcement
X	A.4 Community Event
X	A.5 Classroom Education Material
X	A.6 Other Public Education
B. Public Participation/Involvement	
X	B.1 Public Panel
	B.2 Educational Volunteer
X	B.3 Stakeholder Meeting
	B.4 Public Hearing
	B.5 Volunteer Monitoring
X	B.6 Program Coordination
	B.7 Other Public Involvement
C. Illicit Discharge Detection and Elimination	
	C.1 Storm Sewer Map Preparation
X	C.2 Regulatory Control Program
	C.3 Detection/Elimination Prioritization Plan
	C.4 Illicit Discharge Tracing Procedures
	C.5 Illicit Source Removal Procedures
	C.6 Program Evaluation and Assessment
	C.7 Visual Dry Weather Screening
	C.8 Pollutant Field Testing
	C.9 Public Notification
X	C.10 Other Illicit Discharge Controls

Year 9	
QLP	
D. Construction Site Runoff Control	
X	D.1 Regulatory Control Program
X	D.2 Erosion and Sediment Control BMPs
X	D.3 Other Waste Control Program
X	D.4 Site Plan Review Procedures
X	D.5 Public Information Handling Procedures
X	D.6 Site Inspection/Enforcement Procedures
X	D.7 Other Construction Site Runoff Controls
E. Post-Construction Runoff Control	
	E.1 Community Control Strategy
X	E.2 Regulatory Control Program
X	E.3 Long Term O&M Procedures
X	E.4 Pre-Const Review of BMP Designs
X	E.5 Site Inspections During Construction
X	E.6 Post-Construction Inspections
X	E.7 Other Post-Const Runoff Controls
F. Pollution Prevention/Good Housekeeping	
X	F.1 Employee Training Program
	F.2 Inspection and Maintenance Program
	F.3 Municipal Operations Storm Water Control
	F.4 Municipal Operations Waste Disposal
X	F.5 Flood Management/Assess Guidelines
	F.6 Other Municipal Operations Controls

In addition to the stormwater management activities described below, SMC will continue to provide general support to Lake County MS4s as they continue to implement their stormwater management programs. SMC also anticipates that it will complete its review and revision of the Stormwater Management Program Plan (SMPP) template, which it started in Year 9, to provide additional guidance on addressing the monitoring and program assessment requirements of General NPDES Permit No. ILR40.

A. Public Education and Outreach

SMC will support Lake County MS4s by performing activities related to the Public Education and Outreach minimum control measure, as described below.

A.1 Distributed Paper Material

SMC develops and distributes a variety of materials related to stormwater management in Lake County. SMC has produced a number of pamphlets and brochures related to stormwater management and BMPs and prepares a quarterly newsletter, “Mainstream,” as well as an Annual Report, that highlight stormwater management activities conducted in Lake County. SMC also prepares project fact sheets that provide information on ongoing and recently completed stormwater management projects. In addition, SMC has developed or collaborated on a number of manuals related to stormwater management, such as “Riparian Areas Management: A Citizen’s Guide,” “A Citizen's Guide to Maintaining Stormwater Best Management Practices,” and the “Streambank Stabilization Manual,” and will continue to develop or collaborate on such manuals or manual updates.

Measurable Goal(s): Distribute informational materials from “take away” rack at SMC. Upon request, distribute materials directly to municipalities for local distribution.

A.3 Public Service Announcement

A public service announcement related to the NPDES Phase II program will be written and included in SMC’s Quarterly Newsletter, “Mainstream.” SMC will coordinate with the Lake County Department of Transportation (LCDOT) to post watershed identification signage in watersheds where watershed planning activities occur. Upon request, SMC will provide an educational presentation on the NPDES Stormwater Management Program to Lake County MS4s.

Measurable Goal(s): Include public service announcement highlighting community accomplishments related to the NPDES Phase II process in “Mainstream” once annually. Post watershed identification signage with LCDOT. Upon request, present “The Big Picture: Water Quality, Regulations & NPDES” to Lake County MS4s.

A.4 Community Event

SMC sponsors and co-sponsors technical training and public awareness workshops. Each year, SMC will sponsor or co-sponsor at least one workshop on a NPDES related topic, such

as soil erosion and sediment control, illicit discharge detection and elimination, or best management practices that can be used to protect water quality.

Measurable Goal(s): Sponsor or co-sponsor workshop on NPDES related topic.

A.5 Classroom Education

SMC will contribute to the development and compilation of a stormwater educational material kit for local teachers.

Measurable Goal(s): Develop and compile information for stormwater educational kit for distribution upon request.

Provide materials and training on storm sewer inlet stenciling kits to teachers upon request.

A.6 Other Public Education

SMC maintains a website that provides many resources for citizens, developers, engineers, and municipalities. The website includes pages such as “Citizens Assistance,” “Watershed Planning,” “Projects,” “Best Management Practices,” “Publications,” “Press Releases,” and “Links.” These pages provide notices of upcoming meetings and ongoing projects, publications, allow for download of many SMC documents, and provide links to other NPDES Phase II and BMP resources. In addition to the resources available through the website, SMC will make an educational presentation on the NPDES Stormwater Management Program available to Lake County MS4s.

Measurable Goal(s): Maintain and update the NPDES Phase II portion SMC website with resource materials such as model ordinances, case studies, brochures and web links.

Make “The Big Picture: Water Quality, Regulations & NPDES” presentation available to Lake County MS4s.

B. Public Participation/Involvement

SMC will support Lake County MS4s by performing activities related to the Public Participation/Involvement minimum control measure, as described below.

B.1 Public Panel

SMC coordinates and conducts public meetings as well as committee meetings that include public representation. A monthly Stormwater Management Commission meeting is open to the public and involves the SMC Board of Commissioners, which includes six municipal representatives and six county board members.

The Technical Advisory Committee (TAC) was created in 1992 to assist in the development, review, and revision of the Watershed Development Ordinance (WDO) and the associated administrative policies and procedures. TAC is made up of representatives from the development, environmental, municipal, and consulting engineering fields. TAC meetings are held monthly or on an as-needed basis.

The Municipal Advisory Committee (MAC) is made up of municipal, township, drainage district, consulting firm, and county representatives. MAC has worked to discuss, coordinate, and collaborate on the implementation of the NPDES Municipal Stormwater Program. MAC will continue to meet as needed to assist Lake County MS4s with the implementation of the NPDES Municipal Stormwater Program.

The Watershed Management Board (WMB) meets annually to make recommendations on BMP project funding. Members include chief municipal elected officials, township supervisors, drainage district chairs, and county board members from each district within each of Lake County's four major watersheds.

*Measurable Goal(s): Provide notice of public meetings on SMC website.
Track number of meetings conducted.*

B.3 Stakeholder Meeting

SMC is actively involved in watershed planning throughout Lake County. SMC believes that the watershed planning process cannot happen and will not be successful without the input, interest, and commitment of stakeholders. Stakeholders may include municipalities, townships, drainage districts, homeowner associations, developers, county agencies, lakes management groups, landowners, and local, state, and federal agencies.

*Measurable Goal(s): Provide notice of stakeholder meetings on SMC website.
Track number of watershed planning committee meetings conducted.
Establish watershed planning committees for each new watershed planning effort.*

B.6 Program Coordination

The countywide approach that has been taken toward the implementation the NPDES Municipal Stormwater Program in Lake County places SMC in the role of a Qualifying Local Program (QLP). In this role, SMC proactively formed the Municipal Advisory Committee (MAC) as a way to coordinate the efforts of Lake County MS4s during implementation of their stormwater management programs. SMC will continue to facilitate MAC meetings and will continue to provide general support to Lake County MS4s during implementation of their stormwater management programs. SMC will prepare an annual report on the QLP's stormwater management activities and will provide guidance to Lake County MS4s in preparing their own annual reports.

*Measurable Goal(s): Track number of MAC meetings conducted during Year 10.
Prepare annual report on Qualifying Local Program activities at end of Year 10.*

C. Illicit Discharge Detection and Elimination

SMC will support Lake County MS4s by performing activities related to the Illicit Discharge Detection and Elimination minimum control measure, as described below.

C.2 Regulatory Control Program

SMC provided model ordinances for MS4s to consider at the local level. The language included in the model ordinances prohibits all non-stormwater discharges, including illegal dumping, to the storm sewer system. Additionally, the countywide WDO includes provisions that prohibit illegal discharges to the storm sewer system during construction.

Measurable Goal(s): Continue to enforce the countywide WDO.

C.10 Other Illicit Discharge Controls

SMC sponsors and co-sponsors technical training workshops. SMC will sponsor or co-sponsor an illicit discharge detection and elimination or other NPDES related training workshop and track the number of attendees that attend the workshop.

Measurable Goal(s): Sponsor or co-sponsor and track the number of attendees at an Illicit Discharge Detection and Elimination or other NPDES related training workshop.

D. Construction Site Runoff Control

Lake County has adopted a countywide Watershed Development Ordinance (WDO) that establishes the minimum stormwater management requirements for development in Lake County. The WDO, which is enforced by SMC, as well as by certified communities in Lake County, establishes standards for construction site runoff control. SMC will support Lake County MS4s in the implementation of the construction site runoff control minimum control measure by enforcing the WDO and performing other stormwater activities, as described below.

D.1 Regulatory Control Program

The WDO has been adopted as the regulatory mechanism that requires erosion and sediment controls for construction activities in Lake County. The soil erosion and sediment control performance standards are included in Article IV, Section B.1.j. of the WDO. At a minimum, these standards apply to any development that hydrologically disturbs 5,000 square feet or more.

SMC has also created a Designated Erosion Control Inspector (DECI) program. The purpose of the program is to facilitate positive communication between the permit issuing agency, whether it be SMC or a certified community, and the permit holder, by creating a single point of contact for soil erosion and sediment control issues. Furthermore, the program is intended to improve site conditions, minimize environmental impacts, and educate contractors, developers, and inspectors about proper soil erosion and sediment control BMPs. The DECI program was designed to closely mirror the inspection requirements of General NPDES Permit No. ILR10.

Measurable Goal(s): Continue to enforce the countywide WDO.

Administer the Designated Erosion Control Inspector (DECI) program outlined by the WDO.

D.2 Erosion and Sediment Control BMPs

Article IV, Section B.1.j of the WDO specifies the soil erosion and sediment control measures that must be used in conjunction with any land disturbing activity. This section of the WDO specifies 15 soil erosion and sediment control BMPs including: minimize soil disturbance; protect adjoining properties from erosion and sedimentation; complete installation of soil erosion and sediment control features prior to commencement of hydrologic disturbance; stabilize disturbed areas within 14 days of active disturbance; avoid disturbance of streams whenever possible; use controls that are appropriate for the size of the tributary drainage area; protect functioning storm sewers from sediment; prevent sediment from being tracked onto adjoining streets; limit earthen embankments to slopes of 3H:1V; identify soil stockpile areas; and utilize statewide standards and specifications as guidance for soil erosion and sediment control.

SMC has also prepared a Technical Reference Manual (TRM) to accompany the WDO. The TRM is used to guide the creation of development plans that are in compliance with the provisions of the WDO and provides detailed information on the use of soil erosion and sediment control BMPs. The TRM is currently being updated and expanded to include guidance on wetland areas, public roadways, and ordinance administration and enforcement.

*Measurable Goal(s): Continue to enforce the countywide WDO.
Complete TRM update and work toward final approval and publication of the document.*

D.3 Other Waste Control Program

The WDO includes provisions regarding the control of waste and debris at construction sites.

Measurable Goal(s): Enforce WDO provisions regarding the control of waste and debris at construction sites.

D.4 Site Plan Review Procedures

Within each jurisdiction, one of the primary duties of the enforcement officer is to review all Watershed Development Permit applications and to issue permits for those projects that are in compliance with the provisions of the WDO. SMC provides training for all new enforcement officers and enforcement officers must pass an exam in order to be certified. SMC periodically reviews all certified communities' enforcement records and performance. Ongoing updates to the TRM include the addition of sections that discuss WDO administration and enforcement.

*Measurable Goal(s): Track number of enforcement officers who have passed the exam.
Track number of communities that undergo a performance review.
Complete ordinance administration and enforcement chapter of TRM.*

D.5 Public Information Handling Procedures

SMC provides a number of opportunities for the receipt and consideration of information submitted by the public. SMC's Citizen Inquiry Response System (CIRS) documents and tracks the resolution of reported problems and citizen complaints. SMC's website provides information on "who to call" for various problems and concerns. An Interagency Coordination Agreement between SMC, the US Army Corps of Engineers, and the National Resources Conservation Service specifies that if any of these agencies receive a report of a soil erosion and sediment control issue, they will contact SMC. SMC will then investigate the report and prescribe corrective actions. This information is provided directly to the property owner. Where applicable, investigations are coordinated with certified communities.

Measurable Goal(s): Track number of complaints received and processed related to soil erosion and sediment control.

D.6 Site Inspection/Enforcement Procedures

Article VI of the WDO provides both the recommended and minimum requirements for site inspections. The enforcement officers within each certified community must conduct these site inspections; SMC is responsible for conducting site inspections in non-certified communities and on Lake County Division of Transportation (LCDOT) and Lake County Forest Preserve District (LCFPD) projects.

Article VII of the WDO specifies the penalties and legal actions that may be imposed if the WDO is violated. If a construction site is not in compliance with the requirements of the WDO, the enforcement officer may issue a stop work order on all development activity on the subject property or on the activities that are in direct violation of the WDO. In addition, failure to comply with any of the requirements of the WDO constitutes a violation, and any person convicted thereof may be fined.

Measurable Goal(s): Track number of site inspections conducted by SMC.

E. Post-Construction Runoff Control

As described above, the Lake County Watershed Development Ordinance (WDO) establishes the minimum stormwater management requirements for development in Lake County. The WDO establishes standards for post-construction runoff control. These standards apply to any new development or redevelopment that results in over 0.5 acres of new impervious area. SMC will support Lake County MS4s in the implementation of the post-construction runoff control minimum control measure by enforcing the WDO and performing other stormwater activities, as described below.

E.2 Regulatory Control Program

The WDO requires all applicants to adopt a stormwater management strategy for controlling post-construction stormwater runoff. The applicant must develop a stormwater management strategy that minimizes increases in stormwater runoff rates and volumes and addresses the water quality treatment requirements of the WDO. The proposed drainage plan must use the

runoff reduction hierarchy included in the WDO and must implement BMPs in accordance with the guidance provided in the TRM.

Measurable Goal(s): Continue to enforce the countywide WDO.

E.3 Long Term O&M Procedures

The WDO requires that a maintenance plan be developed for all stormwater management systems designed to serve major developments (as defined by the WDO). Enforcement officers may require maintenance plans to be prepared for all stormwater management systems serving development sites that require a NPDES permit. The maintenance plan must include: maintenance tasks; the party responsible for performing the maintenance tasks; a description of all permanent public or private access maintenance easements, overland flow paths, and compensatory storage areas; and a description of dedicated sources of funding for the required maintenance. The TRM includes a sample maintenance plan. The WDO also requires that all stormwater management systems be located within a deed or plat restriction to ensure perpetuity and access for maintenance.

Measurable Goal(s): Continue to enforce the countywide WDO.

E.4 Pre-Construction Review of BMP Designs

Within each jurisdiction, one of the primary duties of the enforcement officer is to review all Watershed Development Permit applications and to issue permits for those projects that are in compliance with the provisions of the WDO. This includes a review of the BMPs that will be used for post-construction runoff control.

Measurable Goal(s): Continue to enforce the countywide WDO.

E.5 Site Inspections During Construction

Article VI of the WDO provides both the recommended and minimum requirements for site inspections. The enforcement officers for each certified community must conduct these site inspections. Enforcement officers may inspect developments at any stage in the construction process. For major developments, the enforcement officer shall conduct site inspections, at a minimum, upon completion of installation of sediment and runoff control measures and after final stabilization and landscaping, prior to the removal of sediment controls.

Measurable Goal(s): Continue to enforce the countywide WDO.

E.6 Post-Construction Inspections

Article VI of the WDO provides both the recommended and minimum requirements for site inspections. The enforcement officers for each certified community must conduct these site inspections. Enforcement officers may inspect developments at any stage of the construction process, including final stabilization and landscaping. For major developments, the enforcement officer shall conduct site inspections, at a minimum, upon completion of installation of sediment and runoff control measures and after final stabilization and landscaping, prior to the removal of sediment controls.

Measurable Goal(s): Continue to enforce the countywide WDO.

E.7 Other Post-Construction Runoff Controls

Through the Watershed Management Board (WMB), SMC provides partial funding for flood control and water quality improvement projects. The WMB, which includes representatives from the Lake Michigan, North Branch of the Chicago River, Fox River, and Des Plaines River watersheds, meets annually to review potential projects and to make recommendations on project funding. Members of the WMB include chief municipal elected officials, township supervisors, drainage district chairs, and county board members from each district found within each of Lake County's four major watersheds. The goal of the WMB program is to maximize opportunities for local units of government and other groups to have input and influence on the solutions used to address local stormwater management problems. Previous WMB-funded projects have improved water quality in Lake County's streams, lakes, and wetlands and have enhanced existing stormwater management facilities.

*Measurable Goal(s): Conduct annual WMB meeting.
Contribute funding to flood reduction and water quality improvement projects, including stormwater retrofits, through the WMB.*

F. Pollution Prevention/Good Housekeeping

SMC will support Lake County MS4s by performing activities related to the Pollution Prevention/Good Housekeeping minimum control measure.

F.1 Employee Training Program

SMC will assist MS4s with their employee training programs by incorporating recommended actions into the SMPP template. Additionally, SMC will serve as a technical advisor and as a clearinghouse of information related to employee training. SMC will sponsor or co-sponsor employee training workshops or events.

*Measurable Goal(s): Provide list of available resources to MS4s.
Sponsor or co-sponsor employee training workshops or events.
Make available the Excal Visual Municipal Storm Water
Pollution Prevention Storm Watch Everyday Best Management
Practices software.*

F.5 Flood Management/Assess Guidelines

By adopted policy in the Lake County Stormwater Management Plan, SMC's standard operating procedure is to assess the feasibility of implementing water quality functions in all flood control designs. SMC will evaluate all SMC-sponsored projects for multi-objective opportunities.

Measurable Goal(s): Track number of projects that are reviewed for multi-objective opportunities.

Part F. MS4 Construction Projects Conducted During Year 9

Project Name	Project Size (acres)	Construction Start Date	Construction End Date
Washington St – Cemetery Rd to IL Route 21	0.6 linear miles	October 2009	September 2011
North Ave – IL Rt 83 to Deep Lake Rd	3.0 linear miles	Sept. 2009	June 2011
Peterson Road Realignment at IL Route 60	41 Acres	June 2010	December 2011
Midlothian Road Extension	8 Acres	March 2011	September 2011
Hunt Club Road at Millburn Rd / Wadsworth Rd	12 Acres	March 2011	April 2012
Lake Avenue – IL Route 173 to WI State Line	8 Acres	March 2011	November 2011
Libertyville Campus Loop Road Extension	10 Acres	August 2011	May 2012
Libertyville Campus Storage Facility	5 Acres	March 2013	September 2013
Waukegan Campus Parking Expansion	4 Acres	Dec 2012	May 2013
Cedar Lake Road – Town Line Road to IL Route 120	25 Acres	August 2011	December 2012
Delany Road – Sunset Avenue to Yorkhouse Road	43 Acres	Sept 2011	December 2013
Delany Road – Yorkhouse Road to Wadsworth Road	43 Acres	January 2012	December 2013
Wadsworth Road – DesPlaines River to Kilbourne Rd	9 Acres	May 2012	December 2012
Petite Lake Road – Fairfield Rd to IL Route 83	23 Acres	April 2012	December 2012
Prairie Crossing Bike Path – IL Rte 176 to Peterson Rd	3 Acres	April 2012	December 2012
IL Route 176 Tunnels at Fairfield Road Bike Trails	40 Acres	April 2012	December 2012
Hunt Club Rd Roundabouts at Millburn & Wadsworth	12 Acres	April 2011	June 2012
Quentin Rd – Long Grove Rd to White Pine	20 Acres	August 2012	December 2013
Peterson Road – US Route 45 to West of IL Route 83	40 Acres	October 2012	August 2014
Libertyville Campus – Skilled Nursing Care facility	20 Acres	July 2014	September 2016
Mill Creek Water Reclamation Facility Expansion	2 Acres	March 2010	November 2011
LCPW 2010 Watermain Replacement	2 Acres	Dec 2010	November 2011
NEC pumping station Forcemain	1 Acre	Nov 2009	June 2011
Hawthorne Woods Glennshire water System	7 Acres	Nov 2009	June 2011
Mettawa Grainger Forcemain	2 Acres	May 2010	June 2011
LCPW 2011 Watermain replacement	2 Acres	June 2011	June 2012

