

**Preamble to Notice of Intent for General Permit
Lake County, Illinois
Countywide Approach and Drainage Overview:
SMC as a Qualifying Local Program**

Countywide Approach

The Lake County Stormwater Management Commission (SMC) is a countywide governmental agency created by county ordinance under the authority of Illinois Revised Statute 55/5-1062. SMC's goals include the reduction of flood damage and water quality degradation and assurance that new development addresses nonpoint source pollution, does not increase flood and drainage hazards to others or create unstable conditions susceptible to erosion. To accomplish this, the SMC works cooperatively with individuals, groups, and units of government as well as serving as the corporate enforcement authority for the Lake County Watershed Development Ordinance. Certified communities are also required participants in the enforcement of the Watershed Development Ordinance. SMC utilizes technical assistance, education programs and watershed planning to increase public awareness of natural resources and the impacts of urbanization on stormwater quality. In addition, SMC provides solutions to problems related to stormwater and identifies better ways of managing natural resources.

SMC is currently helping small MS4s develop and establish an efficient and effective program to meet the requirements of the Illinois NPDES Phase II program via a countywide approach. SMC has been implementing a comprehensive, countywide stormwater program for 11 years, which already provides services under four of the six Minimum Control Measures (detailed in Notice of Intent for General Permit **Attachment 2a**). In 2002, SMC formed an Ad Hoc Municipal Advisory Committee (MAC) specifically to advise MS4s on the NPDES Phase II Permit program. The MAC is comprised of municipal, township, drainage district, consultants and county representatives. SMC is advising and assisting the MS4s in preparing their NOIs, but will not be a permittee as it does not own or operate any sewer systems.

SMC has sponsored informative workshops and roundtable discussions and formed the Municipal Advisory Committee (MAC) to receive input on how SMC can best assist local governments during the permit application process and implementation period. Through these discussions, it was decided that each municipality (or small MS4) will submit its own "Notice of Intent" (NOI) to be covered under IEPA's statewide general permit; however, using the countywide approach municipalities may take credit for the programs and ordinances developed by SMC as well as tailor specific local BMP programs for compliance with the Phase II rules.

As part of the countywide approach to comply with the NPDES Phase II program, SMC has already or plans to provide the following assistance to municipalities at no additional cost:

- Supported NPDES II presentations to local boards
- Developed model Notice of Intent (NOI)
- Provided countywide drainage system overview and receiving streams map
- Provided general 5-year Best Management Practices (BMP) Plan for NOI
- Developed specific BMP Measurable Goals and program development tasks for Year 1 for NOI
- Provided guidance to municipalities leading to the March 10, 2003 NOI submittal
- Serves as clearinghouse for all support information and acts as a liaison to IEPA and USEPA
- Supports an on-going Municipal Advisory Committee (MAC)
- Will draft a model of the Annual Performance Report and specific BMP Measurable Goals for the subsequent year
- Will provide model Illicit Discharge Ordinance language

Additionally, upon request and following MAC guidance, SMC may provide additional services to help municipalities with their responsibilities under Illicit Discharge Detection and Elimination and Pollution Prevention/Good Housekeeping. For example, SMC could produce a countywide, GIS stormwater conveyance system outfall map; develop training workshops for municipal employees; guide the development of municipal good housekeeping plans; and provide other "in the field" direct services that are defined in the future.

Various SMC countywide services qualify for credit under four of the six Minimum Control Measures. **Attachments 2a and 2b** to the NOI for General Permit provide details on specific activities conducted by SMC; a list below summarizes the SMC services:

1. **Public Education and Information:** SMC provides, through its Public Information Coordinator, various training workshops, homeowners workshops, brochures, training manuals, teacher/student education, videos, etc., which qualify for credit.
2. **Public Participation and Involvement:** SMC coordinates and participates in public meetings and committees, including the Municipal Advisory Committee (MAC), SMC Board of Commissioners, Technical Advisory Committee (TAC), citizen watershed planning committees, Watershed Management Board (WMB), and volunteer support.
3. **Construction Site Runoff Control:** SMC adopted the countywide Watershed Development Ordinance in 1992, which 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.
4. **Post-Construction Runoff Control:** The Watershed Development Ordinance also establishes standards for post-construction runoff control.

SMC will continue to foster the success of a countywide NPDES Phase II approach by continuing to provide support to local municipalities throughout the permit process and implementation phase by developing draft annual progress reports, draft year 2 measurable goals, and sponsoring MAC meetings annually or as needed.

Local MS4s will need to develop measures to address the two remaining minimum control measures, Illicit Discharge Detection and Elimination and Pollution Prevention/Good Housekeeping. Local activities to address Illicit Discharge Detection and Elimination include development of a map identifying outfalls to the drainage system and the development of a local ordinance. Pollution Prevention/Good Housekeeping activities include development of a run-off pollution source-control plan for municipal activities and employee training, etc. The first 5 years of the permit period will be used to develop and implement a program that addresses Illicit Discharges and Pollution Prevention. As mentioned previously, SMC staff will be available to provide guidance for these control measures. Unless the scope goes beyond the services normally provided by SMC, assistance will be provided at no cost to the municipalities.

Drainage Overview

Lake County is divided into four watersheds with drainage to major waterbodies. Three are rivers: the Fox, Des Plaines, and North Branch Chicago. The fourth is Lake Michigan. These four major watersheds are generally long and narrow, running from north to south. Topographic characteristics of the watersheds in Lake County are typical of those in northeastern Illinois. Floodplains tend to be broad and flat with relatively small channels. There is a generally poorly integrated drainage pattern with numerous poorly drained depressions and the absence of well-developed stream cut valleys. A majority of the county has a moderate to poorly drained natural condition. The watersheds essentially divide the county into three north-south sections, with the Fox River watershed in the western third, the Des Plaines River watershed in the central third, and the North Branch of the Chicago River watershed and the Lake Michigan watershed in the eastern third. The four major watersheds are further divided into 26 distinct drainage basins (subwatersheds). The Lake County Watersheds and Receiving Waters Map, **Exhibit 1**, illustrates the four major watersheds and twenty-six subwatersheds in Lake County.

The Fox River originates about 15 miles northwest of Milwaukee, Wisconsin and flows south and west eventually joining the Illinois River near Ottawa, Illinois. The Fox River watershed has a total drainage area of 2,658 square miles of which 938 sq. mi. are in Wisconsin. The Fox River watershed in Lake County is approximately 163 square miles (104,320 acres) which is approximately a third of the land area of the county. Nine subwatersheds make up the Fox River watershed in Lake County, including three subwatersheds that flow into the Fox Chain O' Lakes. Along the Fox River from the state line to Algonquin, the terrain is flat and contains many lakes and low-lying wetlands.

The Fox River Watershed wholly or predominantly includes the communities of Antioch, Barrington, Barrington Hills, Fox Lake, Fox River Grove, Fox River Valley Gardens, Hainesville, Island Lake, Lake Barrington, Lake Villa, Lake Zurich, Lakemoor, North Barrington, Round Lake, Round Lake Beach, Round

Lake Heights, Round Lake Park, Tower Lakes, Volo and Wauconda. Land use in the Fox River watershed can be divided into three groups. The northern area around the Chain O'Lakes is substantially developed around the many lakes, with farmland and wetland/lowland areas between the lake communities. The central portion of the watershed is being developed as a countryside area with agriculture and small developments. The southern area of the Fox River watershed is a mixture of existing development and estate and rural estate development. Currently, watershed planning efforts are underway for the Fox River subwatersheds of Sequoit Creek, Squaw Creek, and Fish Lake Drain. Water quality plans were developed in the mid-1990's for the Mutton Creek and Flint Creek subwatersheds.

The Des Plaines River originates in Racine and Kenosha Counties in Wisconsin flowing south into Illinois. The Des Plaines watershed in Lake County drains an area of approximately 202 square miles or 129,577 acres. It is the largest of the county's four major watersheds. The topography of the watershed is dominated by a gently rolling landscape with numerous wet marshy areas. The Des Plaines watershed in the county is divided into nine subwatersheds.

The Des Plaines River watershed wholly or predominantly includes the communities of Arlington Heights, Buffalo Grove, Deer Park, Grayslake, Gurnee, Hawthorn Woods, Indian Creek, Kildeer, Libertyville, Lincolnshire, Lindenhurst, Long Grove, Mettawa, Mundelein, Old Mill Creek, Riverwoods, Third Lake, Vernon Hills, Wadsworth and Wheeling. New development has centered around the many lakes in the watershed. Open space areas are concentrated along the Des Plaines River, where the Forest Preserve District of Lake County has substantial holdings, which stretch almost uninterrupted from the Wisconsin-Illinois border to Cook County. Watershed planning efforts are currently underway for the entire Des Plaines River watershed through the Upper Des Plaines River Comprehensive Watershed Plan, which is sponsored by the Illinois Department of Natural Resources, U.S. Army Corps of Engineers, Lake, Cook and DuPage Counties. Additionally, SMC is developing Watershed Plans for the Indian Creek, Newport Drain and Mill Creek subwatersheds.

The Lake Michigan watershed in Lake County runs north-south following the shoreline of Lake Michigan. The watershed is long and narrow with numerous short tributaries that drain east to the lake. The Lake Michigan watershed is the only Lake County watershed that drains to a potable water source. Approximately 80% of Lake County households rely on Lake Michigan for water. The southern portion of the watershed is dominated by steep bluffs and ravines and is generally well-drained, while the northern half is level to gently rolling with wet marshy areas. The entire Lake Michigan watershed in the county is divided into 5 subwatersheds with numerous small ravine tributary basins especially in the southern region of the Lake Michigan watershed.

The Lake Michigan watershed includes wholly or predominantly the communities of Beach Park, Highwood, Lake Bluff, North Chicago, Waukegan, Winthrop Harbor, and Zion. Of the four major watersheds in Lake County, this watershed is the most established from a land use perspective. With the exception of the extreme northeastern section; which includes a large forest preserve, the Great Lakes Naval Training Center and Illinois Beach State Park; the watershed is almost entirely developed. Initial watershed planning activities have begun in the Lake Michigan subwatersheds of Kellogg Creek and Dead River.

The North Branch Chicago River is a tributary of the Des Plaines River that originates with three tributaries in Lake County. The North Branch flows south to its confluence with the North Shore Channel, then on to the Chicago Sanitary and Ship Canal where it is diverted westward to the Des Plaines. The Lake County portion of the watershed is 50.3 square miles, and is the smallest of the county's four major watersheds. The watershed consists of three parallel drainage basins, which are long, flat and narrow. The northern reaches of the three tributaries are intermittent and interspersed with wetlands and the southern reaches maintain perennial flow.

Lake County communities located wholly or predominantly within the North Branch Chicago River watershed include Bannockburn, Deerfield, Green Oaks, Highland Park, Lake Forest and Park City. The southern third of the watershed consists of urban development, with well-established communities and limited areas of cultivation. Generally, the open space areas are centered along the three forks of the North Branch. The northern two-thirds of the watershed consists of suburban development. Approximately 25% of the land is cultivated. All three subwatersheds of the North Branch Chicago watershed; the Skokie, Middle Fork and West Fork; are encompassed by SMC's first officially adopted comprehensive watershed plan.

***Notice of Intent for General Permit for
Discharges from
Small Municipal Separate Storm Sewer Systems
(MS4s)***

Input forms in Word format are available
by via email.
marilyn.davenport@epa.state.il.us
or by calling the Permit Section at
217/782-0610

For Office Use Only – Permit No. ILR40 _____

Part I. General Information

1. MS4 Operator Name: Lake County
2. MS4 Operator Mailing Address:
Street- 18 N. County Street City- Waukegan
State- Illinois Zip Code- 60085
3. Operator Type: County
4. Operator Status: Local
5. Name(s) of Governmental Entity(ies) in which MS4 is located: Lake County, Illinois
6. Area of land that drains to your MS4 (in square miles): 470
7. Latitude/Longitude at approximate geographical center of MS4 for which you are requesting authorization to discharge: Latitude: 421716N Longitude: 0875703W
8. Name(s) of known receiving waters: *Attach additional sheets (Attachment 1) as necessary:*

(Refer to Attachment 1)

9. Persons Responsible for Implementation/Coordination of Storm Water Management Program:

<u>Name</u>	<u>Title</u>	<u>Telephone No.</u>	<u>Area of Responsibility</u>
<u>Barry Burton</u>	<u>County Administrator</u>	<u>847- 377-2228</u>	<u>Administrative responsibility for the entire program</u>
<u>Martin Buehler</u>	<u>County Engineer Superintendent</u>	<u>847-362-3950</u>	<u>County Highway System</u>
<u>Al Galantha</u>	<u>Public Works</u>	<u>847-377-7500</u>	<u>Water & Sanitary Sewer Service</u>
<u>Phil Rovang</u>	<u>Director Planning, Bldng. & Develop.</u>	<u>847-377-2136</u>	<u>Development Review, Code Enforcement</u>
<u>Dale Galassie</u>	<u>Executive Director</u>	<u>847-377-8000</u>	<u>Environmental Health Services</u>
<u>James Janda</u>	<u>Facilities Manager</u>	<u>847-377-2987</u>	<u>Facilities Management</u>
<u>Ward Miller</u>	<u>Executive Director</u>	<u>847-918-5260</u>	<u>Qualifying Local Program (QLP)</u>

Part II. Best Management Practices (include shared responsibilities) Proposed to be Implemented in the MS4 Area

(Details of BMP implementation for each checked BMP number, e.g., A.1, E.2, is required in Part IV of NOI.)

Year 1		Years 2-5		
QLP	MS4	QLP	MS4	
				A. Public Education and Outreach
X	X	X	X	A.1 Distributed Paper Material
			X	A.2 Speaking Engagement
X		X		A.3 Public Service Announcement
X	X	X	X	A.4 Community Event
		X		A.5 Classroom Education Material
X		X		A.6 Other Public Education
				B. Public Participation/Involvement
X		X		B.1 Public Panel
				B.2 Educational Volunteer
X	X	X	X	B.3 Stakeholder Meeting
	X		X	B.4 Public Hearing
	X		X	B.5 Volunteer Monitoring
X		X		B.6 Program Coordination
				B.7 Other Public Involvement
				C. Illicit Discharge Detection and Elimination
			X	C.1 Storm Sewer Map Preparation
X	X		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
X		X		C.10 Other Illicit Discharge Controls

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

Note: Certified communities have shared responsibility with SMC, the QLP, under BMPs D.1, D.2, D.3, D.4, D.5, D.6, E.2, E.3, E.4, E.5, E.6, and E.7.

Part III. Qualifying Local Programs

The Lake County Stormwater Management Commission (SMC) will serve as a Qualifying Local Program for MS4s in Lake County. As part of ongoing services, SMC will perform some functions related to each of the six minimum control measures, however, the MS4s will be providing additional services in their local programs, especially for Illicit Discharge Detection and Elimination and Pollution Prevention/Good Housekeeping BMPs. BMPs and measurable goals that will be performed by the QLP in Year 1 are described in Attachment 2a. Attachment 2b describes more general BMPs and future goals for the QLP during permit years 2-5.

Six Minimum Control Measures:

1. Public Education and Outreach.
2. Public Participation/Involvement.
3. Illicit Discharge Detection and Elimination.
4. Construction Site Runoff Control.
5. Post-Construction Runoff Control.
6. Pollution Prevention/Good Housekeeping.

Part IV. Measurable Goals (include shared responsibilities) Proposed to be Implemented by the MS4

Proposed BMPs are described on Attachment 3.

Part V. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fine and imprisonment.

Authorized Representative Name and Title

Signature

Date

Barry Burton / County Administrator

March 5, 2003

Mail completed form to:

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF WATER POLLUTION CONTROL
ATTN: PERMIT SECTION
POST OFFICE BOX 19276
SPRINGFIELD, ILLINOIS 62794-9276

**Attachment 1
Receiving Streams
(Refer to Attached Map)**

1. Upper Fox River

2. Sequoit Creek

3. Fish Lake Drain

4. Squaw Creek

5. Lower Fox River

6. Mutton Creek

7. Slocum Lake Drain

8. Tower Lake Drain

9. Flint Creek

10. North Mill Creek

11. Mill Creek

12. Newport Drainage Ditch

13. Upper Des Plaines River

14. Bull Creek

15. Indian Creek

16. Lower Des Plaines River

17. Buffalo Creek

18. Aptakisic Creek

19. Kellogg Creek

20. Dead River

21. Waukegan River

22. Pettibone Creek

23. Bluff/Ravine

24. Skokie River

25. Middle Fork Chicago River

26. West Fork Chicago River

27.

28.

Part III (Continued) Qualifying Local Programs

(Describe any qualifying local programs that you will implement in lieu of new permitting requirements.)

The Lake County Stormwater Management Commission (SMC) will serve as a Qualifying Local Program for MS4s in Lake County. As part of ongoing services, SMC will perform functions related to each of the six minimum control measures. BMPs and measurable goals that will be performed in Year 1 are described below. Attachment 2b describes more general BMPs and future goals for the program for permit years 2-5. Specific measurable goals for years 2-5 will be developed in the annual report for each prior year.

Attachment 2a - Year 1 Qualifying Local Program Activities

1. Public Education and Outreach.

The SMC will conduct Public Education and Outreach as part of its ongoing countywide services. Public Education and Outreach requires implementation of a program to distribute educational material to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants to stormwater runoff. BMPs will be implemented related to BMP numbers A.1, A.3, A.4 and A.6.

A.1 Distributed Paper Material

The SMC develops and distributes a variety of materials related to stormwater management in Lake County. A number of pamphlets and brochures related to BMPs and stormwater management have been produced. SMC prepares a quarterly newsletter, "Mainstream" as well as an Annual Report that highlights the stormwater management activities in Lake County. SMC also prepares Project Fact Sheets that provide information on ongoing and recently completed stormwater management projects. SMC has developed or collaborated on a number of manuals such as the "Riparian Areas Management: A Citizen's Guide", "A Citizen's Guide to Maintaining Stormwater Best Management Practices", and the "Streambank Stabilization Manual."

Measurable Goals: *Distribute informational materials from "take away" rack at SMC.*
Distribute "A Citizen's Guide to Maintaining Stormwater Best Management Practices" to municipalities for local distribution.
Distribute "Living With Wetlands: A Handbook for Homeowners in Northeastern Illinois" 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 the Quarterly Newsletter, "Mainstream."

Measurable Goal: *Include public service announcement in "Mainstream" once annually.*

A.4 Community Event

The SMC sponsors technical training and public awareness workshops. Watershed tours have been conducted for the public to familiarize them with the beneficial functions of natural resources. A technical training module that includes a field visit has been developed for soil erosion and sediment control procedures.

Measurable Goals: *Conduct soil erosion and sediment control workshop (bi-annual workshop scheduled to be conducted in 2003).*

A.6 Other Public Education

The SMC operates 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, allow for download of many SMC documents, and provide links to other resources. SMC has also obtained a CD-ROM from the Center for Watershed Protection on the impacts of urbanization that will be made available to the MS4s.

*Measurable Goal: Maintain and update the SMC website.
 Make Impacts of Urbanization CD-ROM available to MS4s.*

2. Public Participation/Involvement.

The SMC will support Lake County MS4s by performing activities and services related to the Public Participation/Involvement minimum control measure. BMPs will be implemented under BMP numbers B.1, B.3, and B.6 as described below.

B.1 Public Panel

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

The Technical Advisory Committee (TAC) was started in 1992 to assist in the development, revision and review of the Watershed Development Ordinance (WDO) standards and administrative procedures. TAC is made up of representatives from the development, environmental, municipal and consultant 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 and county representatives. MAC has worked to coordinate and review the Notice of Intent (NOI) and other NPDES Phase II program components. The MAC will continue to meet as needed during the implementation of the NPDES Phase II stormwater management program.

The Watershed Management Boards (WMBs) meet yearly 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 the boundaries of the watersheds.

*Measurable Goals: Provide notice of public meetings on SMC website.
 Track number of meetings conducted.*

B.3 Stakeholder Meeting

The 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. There are four active Watershed Planning Committees (Sequoit Creek, Squaw Creek, Fish Lake Drain, and North Branch Chicago River) with meeting dates published on SMC’s website. In addition, there is an Advisory Committee for the Des Plaines Phase II Management Plan. New planning committees will be established as watershed planning efforts continue.

*Measurable Goals: 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 to NPDES Phase II Permitting Summary identifies the role of SMC as a Qualifying Local Program. The SMC proactively formed the Municipal Advisory Committee (MAC) to facilitate coordination of the NPDES Phase II stormwater program in Lake County. SMC also prepared a presentation that can be used by municipal representatives to inform their board members about the NPDES II program and how it will be implemented in Lake County through existing local resources and programs. SMC will continue to coordinate the program and provide guidance for the regulated MS4s by continuing to facilitate MAC meetings through the program implementation phase. SMC will prepare a draft report on the Qualifying Local Program activities and provide guidance to MS4s in preparing their annual reports. SMC will also provide assistance to develop detailed measurable goals for Year 2 of the program.

Measurable Goals: Track number of MAC meetings conducted during program implementation.
 Prepare draft report on Qualifying Local Program activities at end of Year 1.
 SMC will develop Qualifying Local Program measurable goals for Year 2.
 Assist MS4s in developing measurable goals for Year 2.

3. Illicit Discharge Detection and Elimination.

The SMC will provide some supporting functions to MS4s for meeting the Illicit Discharge Detection and Elimination minimum control.

C.2 Regulatory Control Program

The SMC will provide model ordinance examples for MS4s to consider at the local level. The model ordinance language will prohibit non-storm water discharges to the storm sewer or drainage system.

Measurable Goal: Provide MS4s with model ordinance examples for their consideration.

C.10 Other Illicit Discharge Controls

The SMC will initiate the process of developing WDO amendments to prohibit illegal dumping to the storm sewer or drainage system.

Measurable Goal: Initiate the drafting of the WDO amendments by discussing prohibition of illegal dumping at a minimum of one TAC meeting.

4. 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. The enforcement of the WDO, in conjunction with other SMC activities and functions, implements BMPs under BMP numbers D.1, D.2, D.3, D.4, D.5 and D.6 as described below.

D.1 Regulatory Control Program

The WDO has been adopted as the regulatory mechanism to require erosion and sediment controls for construction activities in Lake County. The soil erosion and sedimentation 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.

Measurable Goal: Continue to enforce the countywide WDO.

D.2 Erosion and Sediment Control BMPs

Article IV, Section B.1.j of the WDO specifies the required soil erosion and sediment control measures for any land disturbance activity. This section of the WDO includes 15 requirements for soil erosion and sediment control measures 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 and when possible, size measures appropriate to the amount of 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.

The SMC has also prepared the Technical Reference Manual (TRM) for the WDO. The TRM is used to guide compliance with the WDO and provides detailed information on soil erosion and sedimentation control BMPs. The TRM is currently being updated and expanded to include BMP guidance chapters on Wetland Areas, Public Roadways, and Ordinance Administration and Enforcement.

*Measurable Goal: Continue to enforce the countywide WDO.
Complete TRM updates on Wetlands Areas.
Continue to prepare TRM updates for other chapters.*

D.3 Other Waste Control Program

The SMC will initiate the process of developing WDO amendments to include the control of waste and debris at construction sites.

*Measurable Goal: Initiate the drafting of the WDO amendments.
Discuss the control of waste and debris at construction sites at a minimum of one TAC meeting.*

D.4 Site Plan Review Procedures

Within each jurisdiction, one of the primary duties of the enforcement officer is to review all Watershed Development Applications and 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' Ordinance enforcement records and performance. Ongoing updates to the TRM include the addition of sections that discuss Ordinance Administration and Enforcement.

*Measurable Goals: Track number of enforcement officers who have passed the exam.
Track number of communities that undergo a performance review.
Begin preparation of Ordinance Administration and chapter of TRM.*

D.5 Public Information Handling Procedures

The SMC provides a number of opportunities for receipt and consideration of information submitted by the public. The 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 or concerns. An Interagency Coordination Agreement between SMC and the U.S. Army Corps of Engineers, the Lake County Soil and Water Conservation District 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 action to the property owner or coordinate with the certified community to find a solution.

Measurable Goal: 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 the minimum requirements for site inspection. Site inspections must be conducted by the enforcement officers within each certified community. SMC has direct responsibility for non-certified communities, LCDOT, and the Forest Preserve. Article VII of the WDO specifies the penalties and legal action that may be imposed if the WDO is violated. If a construction site is not in compliance with the requirements of the WDO, the jurisdictional enforcement officer may issue a stop work order on all development activity on the subject property or on the portion of the activity 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 Goals: *Track number of site inspections conducted by SMC.*

5. 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 that results in over 0.5 acres of new impervious area. The enforcement of the WDO, in conjunction with other SMC activities and functions, implements BMPs under BMP numbers E.2, E.3, E.4, E.5, E.6 and E.7 as described below.

E.2 Regulatory Control Program

The WDO requires that all applicants adopt a stormwater management strategy for controlling post-construction runoff. The applicant must develop a stormwater management strategy that minimizes the increase in runoff volumes and rates and addresses the water quality treatment requirements of the WDO. The proposed drainage plan must use the runoff reduction hierarchy in the WDO and implement BMPs as presented in the TRM. The WDO also requires the use of buffers when adjacent to existing waterbodies.

Measurable Goal: *Continue to enforce the countywide WDO.*

E.3 Long Term O&M Procedures

The WDO requires that a maintenance plan be prepared for all stormwater management system components for Major developments (as defined by the WDO). Enforcement officers may require maintenance plans to be prepared for all 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 and 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.

Measurable Goal: *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 Applications and issue permits for those projects that are in compliance with the provisions of the WDO. This includes a review of the proposed BMPs for post-construction runoff control.

Measurable Goal: *Continue to enforce the countywide WDO.*

E.5 Site Inspections During Construction

Article VI of the WDO provides both the recommended and the minimum requirements for site inspection. These inspections must be conducted by the enforcement officers for each certified community. Enforcement officers may inspect 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: *Continue to enforce the countywide WDO.*

E.6 Post-Construction Inspections

(See description of the inspection program provided under E.5)

Measurable Goal: *Continue to enforce the countywide WDO.*

E.7 Other Post-Construction Runoff Controls

Through the Watershed Management Boards (WMBs), SMC reviews and partially funds projects related to drainage and water quality improvements. The WMBs – representing the Lake Michigan, North Branch of the Chicago River, Fox and Des Plaines watersheds – meet yearly to make recommendations on project funding. Members include chief municipal elected officials, township supervisors, drainage district chairs, and county board members from each district within the boundaries of the watershed. The goal of the WMBs is to maximize opportunities for local units of government and other groups to have input and influence in local stormwater management problem solving. Projects have improved quality of water in streams and swales, and have enhanced stormwater facilities. For 2003, 11 of the 13 projects selected to receive funding include water quality improvement components.

Measurable Goals: *Conduct annual WMB meeting.*
 Track number of BMP projects to which SMC has contributed funding.

6. Pollution Prevention/Good Housekeeping.

This minimum control measure involves the development and implementation of an operation and maintenance program to reduce the discharge of pollutants from municipal operations. This program must include a training program for municipal employees. SMC will assist the MS4s with BMP number F.1 and perform services related to BMP number F.5.

F.1 Employee Training Program

The SMC will assist MS4s in developing programs for F.1 by serving as technical advisors and as a clearinghouse of information related to employee training BMPs.

Measurable Goal: *Provide list of available resources to MS4s.*

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: *Track number of projects that are reviewed for multi-objective opportunities.*

Attachment 2b

Part III (Continued) Qualifying Local Programs

(Describe any qualifying local programs that you will implement in lieu of new permitting requirements.)

The Lake County Stormwater Management Commission (SMC) will serve as a Qualifying Local Program for MS4s in Lake County. As part of ongoing services, SMC will perform functions related to each of the six minimum control measures. In general, all activities from Year 1 will be continued in subsequent years. Attachment 2b outlines years 2-5 program development activities. Specific measurable goals for years 2-5 will be developed in the annual report from each prior year.

Attachment 2b - Years 2-5 Qualifying Local Program Activities

1. Public Education and Outreach.

The SMC will conduct Public Education and Outreach as part of its ongoing countywide services. Public Education and Outreach requires implementation of a program to distribute educational material to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants to stormwater runoff. BMPs will be implemented related to BMP numbers A.1, A.3, A.4, A.5 and A.6.

A.1 Distributed Paper Material

The SMC develops and distributes a variety of materials related to stormwater management in Lake County. A number of pamphlets and brochures related to BMPs and stormwater management have been produced. SMC prepares a quarterly newsletter, "Mainstream" as well as an Annual Report that highlights the stormwater management activities in Lake County. SMC also prepares Project Fact Sheets that provide information on ongoing and recently completed stormwater management projects. SMC will develop or collaborate on manuals or manual updates related to stormwater management.

Measurable Goals: *Distribute informational materials from "take away" rack at SMC.*
Distribute materials to MS4s for local distribution.
Develop or coordinate manuals or manual updates related to stormwater management.

A.3 Public Service Announcement

A public service announcement related to the NPDES Phase II program will be written and included in the Quarterly Newsletter, "Mainstream."

Measurable Goal: *Include public service announcement in "Mainstream" once annually.*

A.4 Community Event

The SMC sponsors technical training and public awareness workshops. Watershed tours have been conducted for the public to familiarize them with the beneficial functions of natural resources. A technical training module that includes a field visit has been developed for soil erosion and sediment control procedures.

Measurable Goal: *Conduct soil erosion and sediment control workshop (bi-annually).*
Lead homeowner/landowner watershed tours.
Co-sponsor Urban Stormwater BMP workshop with NIPC.

A.5 Classroom Education

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

Measurable Goals: *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

The SMC operates 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, allow for download of many SMC documents, and provide links to other resources. SMC has also obtained a CD-ROM from the Center for Watershed Protection on the impacts of urbanization that will be made available to the MS4s. SMC will make its reference library available to the public.

Measurable Goals: *Maintain and update the SMC website.*
Make Impacts of Urbanization CD-ROM available to MS4s.
Notify MS4s and public that SMC reference library is open to them.

2. Public Participation/Involvement.

The SMC will support Lake County MS4s by performing activities and services related to the Public Participation/Involvement minimum control measure. BMPs will be implemented under BMP numbers B.1, B.3, and B.6 as described below.

B.1 Public Panel

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

The Technical Advisory Committee (TAC) was started in 1992 to assist in the development, revision and review of the Watershed Development Ordinance (WDO) standards and administrative procedures. TAC is made up of representatives from the development, environmental, municipal and consultant 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 and county representatives. The MAC will continue to meet as needed during the implementation of the NPDES Phase II stormwater management program.

The Watershed Management Boards (WMBs) meet yearly 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 the boundaries of the watersheds.

Measurable Goals: *Provide notice of public meetings on SMC website.*
Track number of meetings conducted.

B.3 Stakeholder Meeting

The 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 Goals: *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 to NPDES Phase II Permitting Summary identifies the role of SMC as a Qualifying Local Program. The SMC proactively formed the Municipal Advisory Committee (MAC) to facilitate coordination of the NPDES Phase II stormwater program in Lake County. SMC also prepared a presentation that can be used by municipal representatives to inform their board members about the NPDES II program and how it will be implemented in Lake County through existing local resources and programs. SMC will continue to coordinate the program and provide guidance for the regulated MS4s by continuing to facilitate MAC meetings through the program implementation phase. SMC will prepare a draft report on the Qualifying Local Program activities and provide guidance to MS4s in preparing their annual reports. SMC will also provide assistance to develop detailed measurable goals for each subsequent year of the program.

Measurable Goals: *Track number of MAC meetings conducted during program implementation.*
 Prepare draft report on Qualifying Local Program activities at end of each permit year.
 SMC will develop Qualifying Local Program measurable goals for the subsequent year at the end of each permit year..
 Assist MS4s in developing measurable goals for each permit year.

3. Illicit Discharge Detection and Elimination.

The SMC will provide some supporting functions to MS4s for meeting the Illicit Discharge Detection and Elimination minimum control

C.10 Other Illicit Discharge Controls

The SMC will adopt WDO amendments to prohibit illegal dumping to the storm sewer or drainage system.

Measurable Goal: *Adopt WDO amendments to prohibit illegal dumping.*

4. 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. The enforcement of the WDO, in conjunction with other SMC activities and functions, implements BMPs under BMP numbers D.1, D.2, D.3, D.4, D.5, and D.6 as described below.

D.1 Regulatory Control Program

The WDO has been adopted as the regulatory mechanism to require erosion and sediment controls for construction activities in Lake County. The soil erosion and sedimentation 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.

Measurable Goal: Continue to enforce the countywide WDO.

D.2 Erosion and Sediment Control BMPs

Article IV, Section B.1.j of the WDO specifies the required soil erosion and sediment control measures for any land disturbance activity. This section of the WDO includes 15 requirements for soil erosion and sediment control measures 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 and when possible, size measures appropriate to the amount of 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.

The SMC has also prepared the Technical Reference Manual (TRM) for the WDO. The TRM is used to guide compliance with the WDO and provides detailed information on soil erosion and sedimentation control BMPs.

*Measurable Goal: Continue enforcement of the countywide WDO.
Continue updates to the TRM as needed.*

D.3 Other Waste Control Program

The SMC will adopt WDO amendments to include the control of waste and debris at construction sites.

Measurable Goal: Adopt WDO amendments for 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 Applications and 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' Ordinance enforcement records and performance.

*Measurable Goals: Track number of enforcement officers who have passed the exam.
Track number of communities that undergo a performance review.*

D.5 Public Information Handling Procedures

The SMC provides a number of opportunities for receipt and consideration of information submitted by the public. The 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 or concerns. An Interagency Coordination Agreement between SMC and the U.S. Army Corps of Engineers, the Lake County Soil and Water Conservation District 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 action to the property owner or coordinate with the certified community to find a solution.

Measurable Goal: 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 the minimum requirements for site inspection. Site inspections must be conducted by the enforcement officers within each certified community. Article VII of the

WDO specifies the penalties and legal action that may be imposed if the WDO is violated. If a construction site is not in compliance with the requirements of the WDO, the jurisdictional enforcement officer may issue a stop work order on all development activity on the subject property or on the portion of the activity 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 Goals: Track number of site inspections conducted by SMC.

5. 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 that results in over 0.5 acres of new impervious area. The enforcement of the WDO, in conjunction with other SMC activities and functions, implements BMPs under BMP numbers E.1, E.2, E.3, E.4, E.5, E.6 and E.7 as described below.

E.1 Community Control Strategy

Part of SMC's mission is to improve surface water quality if funding is available. SMC will prepare a countywide water quality strategy to guide and unify the efforts of various organizations involved in water quality protection and enhancement.

Measurable Goal: Identify and pursue funding for the preparation of countywide water quality strategy.

E.2 Regulatory Control Program

The WDO requires that all applicants adopt a stormwater management strategy for controlling post-construction runoff. The applicant must develop a stormwater management strategy that minimizes the increase in runoff volumes and rates and addresses the water quality treatment requirements of the WDO. The proposed drainage plan must use the runoff reduction hierarchy in the WDO and implement BMPs as presented in the TRM. The WDO also requires the use of buffers when adjacent to existing waterbodies.

Measurable Goal: Continue to enforce the countywide WDO.

E.3 Long Term O&M Procedures

The WDO requires that a maintenance plan be prepared for all stormwater management system components for Major developments (as defined by the WDO). Enforcement officers may require maintenance plans to be prepared for all 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 and 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 Ordinance also requires that all stormwater management systems be located and described within a deed or plat restriction to ensure perpetuity and access for maintenance.

Measurable Goal: 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 Applications and issue permits for those projects that are in compliance with the provisions of the WDO. This includes a review of the proposed BMPs for post-construction runoff control.

Measurable Goal: Continue to enforce the countywide WDO.

E.5 Site Inspections During Construction

Article VI of the WDO provides both the recommended and the minimum requirements for site inspection. These inspections must be conducted by the enforcement officers for each certified community. Enforcement officers may inspect 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: *Continue to enforce the countywide WDO.*

E.6 Post-Construction Inspections

(See description of the inspection program provided under E.5)

Measurable Goal: *Continue to enforce the countywide WDO.*

E.7 Other Post-Construction Runoff Controls

Through the Watershed Management Boards (WMBs), SMC reviews and partially funds projects related to drainage and water quality improvements. The WMBs – representing the Lake Michigan, North Branch of the Chicago River, Fox and Des Plaines watersheds – meet yearly to make recommendations on project funding. Members include chief municipal elected officials, township supervisors, drainage district chairs, and county board members from each district within the boundaries of the watershed. The goal of the WMBs is to maximize opportunities for local units of government and other groups to have input and influence in local stormwater management problem solving. Projects have improved quality of water in streams and swales, and have enhanced stormwater facilities. For 2003, 11 of the 13 projects selected to receive funding include water quality improvement components.

Preservation of existing wetlands will assist in protecting water quality in Lake County. SMC will prepare a countywide wetland preservation plan.

Measurable Goals: *Conduct annual WMB meeting.*
 Contribute funding to water quality improvement projects through the WMBs.
 Prepare countywide wetland preservation plan.

6. Pollution Prevention/Good Housekeeping.

This minimum control measure involves the development and implementation of an operation and maintenance program to reduce the discharge of pollutants from municipal operations. This program must include a training program for municipal employees. SMC will assist the MS4s with BMP number F.1 and perform services related to BMP number F.5.

F.1 Employee Training Program

The SMC will assist MS4s in developing programs for F.1 by serving as technical advisors and as a clearinghouse of information related to employee training BMPs.

Measurable Goal: *Provide list of available resources to MS4s.*

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: *Track number of projects that are reviewed for multi-objective opportunities.*

Attachment 3

Part IV. (Continued) Measurable Goals (include shared responsibilities) Proposed to be Implemented by the MS4

BMP No. A.1.1

Brief Description of BMP: Lake County will distribute educational materials on a variety of stormwater quality topics to targeted groups.

Measurable Goal(s), including frequencies: Make available and distribute two SMC 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.

Milestones: **Year 1:** Identify local target groups and distribute manuals to groups as appropriate.
Year 2 -5: Distribute additional resources as appropriate.

BMP No. A.1.2

Brief Description of BMP: Lake County will distribute educational materials on a variety of stormwater 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 & Straw Bale Barriers” – Erosion control best practices.

“Site Development Permits” – Natural resource issues related to site development.

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

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

“Soil Erosion & Sediment Control” – General regulatory information as it relates to site development.

“Septic Systems” – Site development requirements.

“Swales” – Site development requirements.

Milestones: **Year 1:** Make publications available at permit counter and on web site.
Years 2-5: Distribute new or additional publications as warranted.

BMP No. A.1.3

Brief Description of BMP: Lake County 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.

“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 32 different lakes in Lake County.

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

Milestones: **Year 1:** Make publications available at Health Department offices, by request and on the web site.
Years 2-5: Distribute new or additional publications as warranted.

BMP No. A.2

Brief Description of BMP: Lake County will make employees available for speaking engagements to groups of interested residents on stormwater related topics.

Measurable Goal(s), including frequencies: The Lake County Communications Department will arrange to provide public speakers on stormwater related topics through it’s “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.

Milestones: **Year 1:** Speakers Bureau in place as a viable resource to public groups.
Years 2-5: Additional topics and speakers added as warranted.

BMP No. A.4

Brief Description of BMP: A soil erosion and sediment control workshop will be sponsored by the QLP and conducted on a bi-annual basis. This workshop is geared toward developers, engineers, municipalities and enforcement officers. Lake County will participate in the bi-annual workshop.

Measurable Goal(s), including frequencies: Participate in the bi-annual soil erosion and sediment control workshop.

Milestones: **Year 1:** Participate in workshop.
Year 2: No workshop planned.
Year 3: Participate in workshop.
Year 4: No workshop planned.
Year 5: Participate in workshop.

BMP No. B.3

Brief Description of BMP: 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 Lake County, then Lake County will publicize stakeholder meetings locally and participate by being represented at the stakeholder meetings.

Measurable Goal(s), including frequencies: Publicize and participate in relevant watershed planning committees and other stakeholder groups.

Milestones: **Year 1:** Participate in Squaw Creek Watershed planning committee meetings.
Years 2-5: To be determined

BMP No. B.4

Brief Description of BMP: Lake County will meet its own requirements for conducting a variety of public meetings or hearings on issues that are related to stormwater quality.

Measurable Goal(s), including frequencies: The following types of public meetings or hearings are held regularly and often include agenda items that are 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 Stormwater 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 Stormwater 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.

Milestones: Year 1: Present NPDES Phase II program information.

Year 2-5: Present ongoing program summary information annually.

BMP No. B.5

Brief Description of BMP: “Lake County Adopt-A-Highway Program”

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.

Milestones: Year 1: 210 centerline miles of highway cleaned twice

Year 2: To be determined

Year 3: To be determined

Year 4: To be determined

Year 5: To be determined

BMP No. C.1

Brief Description of BMP: Storm sewer system map

Measurable Goal(s), including frequencies: Completion of inventories and mapping. Annual updates.

Milestones: **Year 1:**
Year 2:
Year 3: Completion of asset inventories database and survey coordinates
Year 4: Storm sewer system maps completed
Year 5: Annual updates completed

BMP No. C.2

Brief Description of BMP: Review, consider and adopt ordinance language to prohibit non-storm water discharges to the storm sewer or drainage system.

Measurable Goal(s), including frequencies: Adopt ordinance amendment by end of Year 4.

Milestones: **Year 1:** Receive and review model ordinance language from SMC.
Year 2: Draft local ordinance amendment.
Years 3-4: Adopt ordinance amendment.
Year 5: Enforce new ordinance provisions.

BMP No. C.3

Brief Description of BMP: Design a prioritization plan for the detection and elimination of illicit discharges into the owned and operated storm sewer or drainage system.

Measurable Goal(s), including frequencies: Produce an implementation plan by Year 4

Milestones: **Year 1:**
Year 2:
Year 3: Plan Developed
Year 4: Implementation Plan Complete
Year 5:

BMP No. C.4

Brief Description of BMP: Develop procedures for tracing illicit discharges into the owned and operated storm sewer or drainage system.

Measurable Goal(s), including frequencies: Develop a detection and response plan and procedures. Budget necessary resources to implement plan and procedures. Implement plan and procedures.

Milestones: **Year 1:**
Year 2:
Year 3: Develop program
Year 4: Secure funding to implement program
Year 5: Implement program

BMP No. C.5

Brief Description of BMP: Develop and implement illicit source removal procedures.

Measurable Goal(s), including frequencies: Develop procedures. Respond to all reports of illicit discharges. Eliminate all confirmed sources of illicit discharges.

Milestones: **Year 1:**
Year 2:
Year 3:
Year 4: Procedures developed
Year 5: Procedures implemented

BMP No. C.6

Brief Description of BMP: Process for internal evaluation and assessment of the illicit discharge detection and elimination procedures.

Measurable Goal(s), including frequencies: Annual assessment of the effectiveness of implemented procedures.

Milestones: **Year 1:**
Year 2:
Year 3:
Year 4: Design annual assessment process
Year 5: Implement process

BMP No. C.7

Brief Description of BMP: Incorporate a regular program of visual screening for illicit discharges during dry weather periods.

Measurable Goal(s), including frequencies: Program implementation. Number of suspicious discharges detected.

Milestones: **Year 1:**
Year 2:
Year 3: Program Development
Year 4: Secure funding to implement program
Year 5: Implement program

BMP No. C.8

Brief Description of BMP: Develop and incorporate standards and procedures for field testing stormwater discharges.

Measurable Goal(s), including frequencies: Development of practical standards that can be readily administered by field personnel. Consistent and verifiable results. Meet necessary legal standards to enforce statutes and ordinances.

Milestones: **Year 1:**
Year 2:

Year 3: Develop standards and procedures

Year 4: Legal review

Year 5: Implement standards and procedures in conjunction with C.5

BMP No. C.9

Brief Description of BMP: Provide information to the public about the purpose of the illicit discharge detection and elimination program.

Measurable Goal(s), including frequencies: Develop and implement a public information program

Milestones: Year 1:

Year 2: Develop a public information program

Year 3: Implement public information program

Year 4:

Year 5: Review effectiveness of public information program and revise accordingly

BMP No. D.1

Brief Description of BMP: 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 5,000 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.

Milestones: Year 1: Local ordinance, permitting process and enforcement staff in place

Year 2:

Year 3: Consider need for ordinance updates and revisions

Year 4:

Year 5: Consider need for ordinance updates and revisions

BMP No. D.2

Brief Description of BMP: 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.

Milestones: Year 1: Plan review procedures, permitting process and field inspection process in place.

Years 2-5: Incorporate ordinance updates and revisions into staff procedures as required.

BMP No. D.3.1

Brief Description of BMP: The County of Lake is a member community in the Solid Waste Agency of Lake County which sponsors regular household chemical waste collection events throughout the county. Providing convenient means to the public for drop-off and disposal helps to keep these waste materials out of landfills and receiving streams.

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

Milestones: Years 1-5: This is an ongoing program.

BMP No. D.3.2

Brief Description of BMP: 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.

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

Milestones: Years 1-5: This is an ongoing program

BMP No. D.4

Brief Description of BMP: Site plan review

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.

Milestones: Years 1-5: This is an ongoing program. Approved site plan for every project requiring a permit.

BMP No. D.5

Brief Description of BMP: 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.

Milestones: Years 1-5: This program is in place.

BMP No. D.6.1

Brief Description of BMP: 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.

Milestones: Years 1-5: This program is in place.

BMP No. D.6.2

Brief Description of BMP: 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.

Milestones: Years 1-5: This program is in place.

BMP No. D.6.3

Brief Description of BMP: 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), including frequencies: Contractor compliance with plan requirements.

Milestones: Years 1-5: This program is in place.

BMP No. E.2

Brief Description of BMP: The adopted Watershed Development Ordinance minimum standards require that all applicants adopt a stormwater management strategy for controlling post-construction runoff. The applicant must develop a stormwater 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 waterbodies.

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

Milestones: Years 1-5: This program is in place

BMP No. E.3

Brief Description of BMP: Long Term O&M Procedures – The adopted Watershed Development Ordinance minimum standards require that a maintenance plan be prepared for all stormwater 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), including frequencies: Continue to enforce the existing ordinance.

Milestones: Years 1-5: This program is in place.

BMP No. E.4

Brief Description of BMP: 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), including frequencies: Continue to enforce the existing ordinance.

Milestones: Years 1-5: This program is in place.

BMP No. E.5

Brief Description of BMP: 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), including frequencies: Continue to enforce the existing ordinance.

Milestones: Years 1-5: This program is in place.

BMP No. E.6

Brief Description of BMP: 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), including frequencies: Continue to enforce the existing ordinance.

Milestones: Years 1-5: This program is in place.

BMP No. F.1

Brief Description of BMP: 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 stormwater management programs.

Measurable Goal(s), including frequencies: Develop employee training program specific to County operations and facilities. Conduct annual training for employees that will implement or utilize BMPs.

Milestones: Year 1: Inventory and categorize municipal activities that are classified as industrial.
Year 2: Develop training program for employees in relevant positions.
Year 3-5: Train municipal employees in relevant positions and update program as needed.

BMP No. F.2.1

Brief Description of BMP: Inspection and Maintenance Program – Develop and implement a stormwater pollution prevention plan for Lake County-owned facilities.

Measurable Goal(s), including frequencies: Plan development, implementation and future updates.

Milestones: Year 1:
Year 2:
Year 3: Plan development
Year 4: Plan implemented
Year 5:

BMP No. F.2.2

Brief Description of BMP: Inspection and Maintenance Program – Develop and implement a spill prevention and control plan for Lake County-owned facilities.

Measurable Goal(s), including frequencies: Plan development, implementation and future updates.

Milestones: Year 1:
Year 2:
Year 3: Plan development
Year 4: Plan implemented
Year 5:

BMP No. F.3.1

Brief Description of BMP: Storm sewer system and catch basin inspection and cleaning program.

Measurable Goal(s), including frequencies: Annually inspect 5% of system, and clean as needed.

Milestones: Year 1:
Year 2:
Year 3: 5% of storm sewer system inspected and cleaned
Year 4: 5% of storm sewer system inspected and cleaned
Year 5: 5% of storm sewer system inspected and cleaned

BMP No. F.3.2

Brief Description of BMP: Detention Basin Maintenance Program

Measurable Goal(s), including frequencies: Annually inspect and perform necessary maintenance on all County-owned stormwater detention basins.

Milestones: Year 1:
Year 2:
Year 3: Inspect and maintain detention basins
Year 4: Inspect and maintain detention basins
Year 5: Inspect and maintain detention basins

BMP No. F.4

Brief Description of BMP: Municipal Operations Waste Disposal

Measurable Goal(s), including frequencies: Incorporate waste disposal procedures into the facilities programs described above in F.2.1 and F.2.2

Milestones: **Year 1:**
Year 2:
Year 3: Plan development
Year 4: Plan implemented
Year 5:

BMP No. F.6

Brief Description of BMP: Street sweeping

Measurable Goal(s), including frequencies: Sweep all urban sections of the County Highway system 4 times per year.

Milestones: **Year 1:** Urban sections swept quarterly
Year 2: Urban sections swept quarterly
Year 3: Urban sections swept quarterly
Year 4: Urban sections swept quarterly
Year 5: Urban sections swept quarterly
