

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
NOTICE OF INTENT FOR NEW OR RENEWAL OF
GENERAL PERMIT FOR DISCHARGES FROM
SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS
(MS4s)

Input forms in Word format are available via email.
terri.lemasters@illinois.gov
or by calling the Permit Section at 217/782-0610
See address for mailing on last page

For Office Use Only – Permit No. ILR40_____

Part 1. General Information

1. MS4 Operator Name: Village of Carol Stream

2. MS4 Operator Mailing Address: 500 North Gary Avenue Carol Stream IL 60188
Street City State Zip

3. Operator Type:

- | | | |
|---|---|---|
| <input type="checkbox"/> City | <input type="checkbox"/> Borough | <input type="checkbox"/> DOT/Highway Adm |
| <input type="checkbox"/> County | <input type="checkbox"/> Precinct | <input type="checkbox"/> Sewer District |
| <input type="checkbox"/> Parish | <input type="checkbox"/> Hospital | <input type="checkbox"/> Flood Control Dist |
| <input type="checkbox"/> Reservation | <input type="checkbox"/> Prison | <input type="checkbox"/> Drainage District |
| <input checked="" type="checkbox"/> Village | <input type="checkbox"/> Military Base | <input type="checkbox"/> Association |
| <input type="checkbox"/> Town | <input type="checkbox"/> Park | <input type="checkbox"/> Other (list) |
| <input type="checkbox"/> Township | <input type="checkbox"/> College/University | |

4. Operator Status Federal State County Local Other

5. Names(s) of Governmental Entity(ies) in which MS4 is located:

DuPage County Carol Stream Park District

6. Area of land that drains to your MS4 (in square miles): 8

7. Latitude/Longitude at approximate geographical center of MS4 for which you are requesting authorization to discharge:

Latitude: N41 55 00 Longitude: W88 08 00
DEG. MIN. SEC. DEG. MIN. SEC.

8. Names(s) of known receiving waters *Attach additional sheets (Attachment 1) as necessary:*

- | | |
|-----------------------------|--|
| 1. <u>Thunderbird Creek</u> | 2. <u>Klein Creek</u> |
| 3. <u>Winfield Creek</u> | 4. <u>West Branch Tributary #4 of DuPage River</u> |
| 5. _____ | 6. _____ |
| 7. _____ | 8. _____ |

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>James Knudsen</u>	<u>Director of Engineering Services</u>	<u>(630) 871-6220</u>	<u>A, B, C, D, E & F</u>
<u>Al Turner</u>	<u>Director of Public Works</u>	<u>(630) 871-6260</u>	<u>B7, C2, C5, C6, D2, D6, E3, E6, F1, F2 & F4</u>
<u>Bob Mellor</u>	<u>Assistant Village Manager</u>	<u>(630) 871-6250</u>	<u>F1, F2 & F4</u>
<u>Chris Oakley</u>	<u>Assistant to the Village Manager</u>	<u>(630) 871-6250</u>	<u>A1, A3 & A4</u>

Part II. Best Management Practices (include shared responsibilities) which has been implemented in the MS4 Area in the Past 5 years or proposed to be implemented

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

A. Public Education and Outreach

- A.1 Distributed Paper Material
- A.2 Speaking Engagement
- A.3 Public Service Announcement
- A.4 Community Event
- A.5 Classroom Education Material
- A.6 Other Public Education

B. Public Participation/Involvement

- B.1 Public Panel
- B.2 Educational Volunteer
- B.3 Stakeholder Meeting
- B.4 Public Hearing
- B.5 Volunteer Monitoring
- B.6 Program Coordination
- B.7 Other Public Involvement

C. Illicit Discharge Detection and Elimination

- C.1 Storm Sewer Map Preparation
- 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

D. Construction Site Runoff Control

- D.1 Regulatory Control Program
- D.2 Erosion and Sediment Control BMPs
- D.3 Other Waste Control Program
- D.4 Site Plan Review Procedures
- D.5 Public Information Handling Procedures
- D.6 Site Inspection/Enforcement Procedures
- D.7 Other Construction Site Runoff Controls

E. Post-Construction Runoff Control

- E.1 Community Control Strategy
- E.2 Regulatory Control Program
- E.3 Long Term O&M Procedures
- E.4 Pre-Construction Review of BMP Designs
- E.5 Site Inspections During Construction
- E.6 Post-Construction Inspections
- E.7 Other Post-Construction Runoff Controls

F. Pollution Prevention/Good Housekeeping

- F.1 Employee Training Program
- F.2 Inspection and Maintenance Program
- F.3 Municipal Operations Storm Water Control
- F.4 Municipal Operations Waste Disposal
- F.5 Flood Management/Assessment Guidelines
- F.6 Other Municipal Operations Controls

Information required by this form must be provided to comply with 415 ILCS 5/39 (2000). Failure to do so may prevent this form from being processed and could result in your application being denied.

Part III. Qualifying Local Programs

Attach additional Sheets (Attachment 2) as necessary:

(Describe any qualifying local programs that your MS4 has implemented or will propose to implement)

1. Public Education and Outreach:

Carol Stream will utilize cooperative efforts by DuPage County as identified in Attachment 2 to meet this minimum control measure. See DuPage County's NOI for their final minimum control measure BMP description, measurable goal and milestones.

2. Public Participation/Involvement:

Carol Stream will utilize cooperative efforts by DuPage County as identified in Attachment 2 to meet this minimum control measure. See DuPage County's NOI for their final minimum control measure BMP description, measurable goal and milestones.

3. Illicit Discharge Detection and Elimination:

Carol Stream will utilize cooperative efforts by DuPage County as identified in Attachment 2 to meet this minimum control measure. See DuPage County's NOI for their final minimum control measure BMP description, measurable goal and milestones.

4. Construction Site Runoff Control:

Carol Stream will utilize cooperative efforts by DuPage County as identified in Attachment 2 to meet this minimum control measure. See DuPage County's NOI for their final minimum control measure BMP description, measurable goal and milestones.

5. Post-Construction Runoff Control:

Carol Stream will utilize cooperative efforts by DuPage County as identified in Attachment 2 to meet this minimum control measure. See DuPage County's NOI for their final minimum control measure BMP description, measurable goal and milestones.

6. Pollution Prevention/Good Housekeeping:

Carol Stream will utilize cooperative efforts by DuPage County as identified in Attachment 2 to meet this minimum control measure. See DuPage County's NOI for their final minimum control measure BMP description, measurable goal and milestones.

Copy and complete this page if additional pages are necessary:

Part IV. Measurable Goals

Public Education and Outreach

BMP No. A.1 Distribution of Paper Material

Brief Description of BMP:

Carol Stream utilizes paper materials to assist in providing information for programs, procedures, and research to residents and non-residents of Carol Stream. The Village has created two brochures: *Pond Shoreline Restoration Program* and *Living Along A Shoreline Or Stream Bank – How The Village Maintains These Valuable Areas & What You Can Do To Help*, and one booklet: *Jay Stream Shoreline Enhancement Project – Plant Identification Photo Gallery*. We also use numerous other brochures, fact sheets and handouts developed by other organizations such as DuPage County, The Conservation Foundation, Forest Preserve District of DuPage County, United Recycle, COM2, Flood Bros., Clarke Environmental Mosquito Management Inc., Illinois Environmental Protection Agency, Christopher B. Burke Engineering, Ltd. and other governmental agencies. These paper materials provide information about various Village programs, including pond shoreline stream bank stabilization; the promotion of best management practices; and provide general guidance on how to improve water quality throughout the County.

Measurable Goal(s), including frequencies:

(Past)

Distributed and made the following informational material available:

- *Your Wetland Resource How we care for it How you can help* – Christopher B. Burke Engineering, Ltd.
- *West Nile Virus Mosquito* – DuPage County Health Department
- *Mulch* – DuPage County Department of Environmental Concerns
- *Living with Canada Geese in DuPage County* – Forest Preserve District of DuPage County
- *Together we can control mosquitoes and enjoy the great outdoors* – Clarke Mosquito Control
- *Nature Friendly Yard* – The Conservation Foundation
- *DuPage County 2004 – 2005 Recycling Guide* – DuPage County
 - *Automotive Products*
 - *Drop-off Recycling Centers*
 - *Large Appliances*
 - *Propane Tanks*
 - *Construction and Demolition (C&D) Recycling*
 - *Scrap Metal Recyclers*
 - *Resale Shops*
 - *Latex Paint Management*
 - *Batteries*
 - *Books*
 - *Waste Haulers*
 - *Thermostats – Fire Extinguishers – Smoke Detectors*
 - *Computers and Electronics*
 - *Household Hazardous Waste*
- *COM2 Computers & Technology* – Purchases used computers and laptops
- *Glen Ellyn Recycle Extravaganza* – Village of Glen Ellyn
- *Do You Have Unwanted Latex Paint* – DuPage County Public Works
- *Free Recycled Latex Paint* – DuPage County Public Works

- 2006 Household Hazardous Waste Collection Event – DuPage County & IEPA

Published the following Correspondent News articles:

- *Minding Your Curbside Manners*
- *Don't Mow – Grow! How to Create a Nature Friendly Yard*
- *Village Codes to Abide By – Be a Good Neighbor*
- *Mobile Household Hazardous Waste Collection Event*
- *Rain Gardens Catching On*
- *Battery Recycling Locations*
- *Find Electronic Recycling Info on the Earth 911 Website*
- *Electronics Resale Shop Now Open*
- *Storm Water Management Program*
- *Medical Sharps Disposal By Mail Program*
- *Holiday Tree, Wreath & Bough Collection*
- *How You Can Reduce Pollution Into Storm Sewer System*
- *Fall Leaf Disposal News*
- *New State Law Stiffens Penalty for Littering a Highway*
- *Watering Restrictions*
- *Earth Day Events*
- *The Buzz on West Nile Virus (WNV) – Infection Protection and Mosquito Control & West Nile Virus Infection Protection*
- *Parkway Tree Program*
- *Volunteers Needed*
- *Thank You from the Bottom of Our Hearts*
- *Latex Paint Recycling Drop Off*
- *Dell Launches Free Computer Recycling*
- *IRA Launches I Recycle Material & Service Exchange Web Link*
- *Clothing Recycle Drop Box*
- *Help Stop Sewer Overflows*
- *DuPage River Coalition Invites Residents to Attend Quarterly Meetings*
- *Mayor's Letter*

Published several Village Happenings news letter articles on:

- *IEPA Hosts Household Hazardous Waste Collection*
- *Parkway Tree Program*
- *Clean Up Efforts*
- *Free Unlimited Leaf Pickup*
- *Household Hazardous Waste Collection Events*
- *Watering Conservation & Restrictions*
- *Electronics Recycling Event Scheduled*
- *6-Week Fall Leaf Sticker Period*
- *Village Ordinance Prohibits Raking Leaves into the Street/Curb*
- *Recycling Events*
- *West Nile Mosquito Control*
- *Yard Waste & Leaf Disposal*

(Future)

- Continue to distribute existing brochures, fact sheets and handouts.
- As new material is developed, distribute additional material that is prepared by other groups and agencies.
- Continue publication of Correspondent News articles.
- Continue publication of Village Happenings news letter articles.

Milestones:

Years 1-5: Continue with the publication and distribution of available paper materials.

BMP No. A.2 Speaking Engagement

Brief Description of BMP:

The Village has used speaking engagements as an additional means to provide the public with information on storm water issues, procedures, and information. Village Staff have made several different presentations and seminars on storm water quality.

Measurable Goal(s), including frequencies;

(Past)

- Presented two seminars on “Stormwater BMPs for Communities”.
- Researched and presented information to the Stormwater Quality Stakeholders Committee on storm water quality and funding.
- Provided educational materials to volunteers for the Village’s Jay Stream Pond Shoreline Enhancement Project.
- Educated members of the Village’s Storm Water Advisory Committee.
- Held several workshops with local homeowners associations on the importance of constructed wetlands and native prairie buffers and how to maintain these areas.
- Presented storm water quality information to our Village Board.

(Future)

- Continue to present information to residents and elected officials on storm water quality issues and solutions.

Milestones:

Years 1-5: Continue to provide homeowners associations and other groups with information about storm water issues, values, procedures, maintenance efforts and solutions to better educate them and equip them to play a role. Encourage Staff to seek opportunities and participation in speaking engagements.

BMP No. A.3 Public Service Announcement

Brief Description of BMP:

Public service announcements are utilized to reach large groups of people and inform them of issues regarding storm water management and water quality.

Measurable Goal(s), including frequencies:

(Past)

Prepared numerous News Releases that included:

- *Household Hazardous Waste Collection Events*
- *Watering Conservation & Restrictions*
- *Recycling Events*
- *Village Earns Outstanding Government Recycling Award*
- *West Nile Mosquito Control*
- *Annual Earth Day Recycling Event*
- *Yard Waste & Leaf Disposal*
- *Clean Up Efforts*

Local newspaper articles:

- *Village hopes for flood of volunteers at River Sweep*
- *Millner teams up with URI to recycle electronics*
- *Village pays tribute to Kline Creek Farm*
- *Keeping the Community Clean Throughout the Year*
- *A New Solution to an Old Problem*
- *Snakes and snails*
- *Group working to improve local area waterways*
- *Recycling program lands Carol Stream 'cool' award.*

The Village Board adopted the following proclamations:

- *Take Pride in Carol Stream Day*
- *2004 National Volunteer Week*
- *2004 Arbor Day in Carol Stream - Friday, April 30th*
- *Carol Stream Hosts 2004 Pond & Stream Sweep in Support of American Rivers Month*
- *Endorsing the U.S. Mayors Climate Protection Agreement*

(Future)

- Continue preparation of News Releases.

Milestones:

Years 1-5: Continue with the preparation and release of storm water quality related articles to local news papers.

BMP No. A.4 Community Event**Brief Description of BMP:**

Community events provide opportunities for Carol Stream personnel to provide information to volunteers, residents, businesses and the general public about a variety of storm water management and water quality issues. The Village utilizes several different events to reach these people.

Measurable Goal(s), including frequencies:**(Past)**

- The Village has been holding our annual Pond & Stream Sweep for the past nine years. At this event storm water educational material is provided to all the volunteers.
- Conducted another separate Community Park Clean Up where over 30 volunteers from 6 organizations removed 6 tons of litter from the wetland and cleaned up the park.
- Held a community education event entitled "Tribute to Klein Creek". Participants were presented with opportunities to learn about critters that live in the water and how to test water chemistry, view interactive river models and obtain information on natural landscape resources, trails and the Village's shoreline restoration projects.

(Future)

- Continue to provide educational material to all volunteers in our annual Pond & Stream Sweep event.

Milestones:

Years 1-5: Continue conducting the yearly Pond & Stream Sweep and provide informational material on storm water quality related topics to all volunteers.

BMP No. A.6 Other Public Education

Brief Description of BMP:

Other public education initiatives allow further opportunities to promote storm water management and water quality issues.

Measurable Goal(s), including frequencies:

(Past)

- Designed, purchased and installed nine educational signs that describe how shoreline erosion affects water quality, how the Village's projects restored and protected the shoreline through the use of native vegetation and what residents can do to help.
- S.C.A.R.C.E conducted Energy/Energy Conservation workshop discussing water usage and water pollution associated with water production of nuclear power and other energy sources. Most energy sources that are utilized today incorporate water usage in the production and or causes water pollution as an unintended consequence.
- Began creating a Village environmental web page that would provide information and links on storm water quality topics. It would also illustrate the Village's efforts toward environmental stewardship and suggestions for residents and businesses on how they can make an impact.

(Future)

- Finalize the creation of the environmental web page.

Milestones:

Year 1: Finish the environmental web page.

Years 2-5: Continue updating the Village's environmental web page as new and better information becomes available.

Public Information/Involvement

BMP No. B.3 Stakeholder Meeting

Brief Description of BMP:

Stakeholder meetings provide the opportunity for individuals and groups of people with a vested interest in storm water management and water quality to exchange ideas and goals.

Measurable Goal(s), including frequencies:

(Past)

- Village Staff regularly attended and participated in the monthly Municipal Engineers Advisory Group meetings. At these meetings DuPage County and municipal engineers discuss and make recommendations to the DuPage County Storm Water Committee on issues related to the DuPage County Countywide Stormwater Management and Floodplain Ordinance.
- Village Staff have also attended the DuPage County Storm Water Quality Stakeholders' Committee meetings on a regular basis to discuss issues related to NPDES Phase I. The Committee makes recommendations to the Municipal Engineers Advisory Group on how to meet the six minimum control measures of the NPDES Phase II rule.
- Provided technical assistance to the Storm Water Quality Stakeholders Committee on permanent and temporary BMPs and illicit discharge and detection elimination programs (IDDE) through research of existing and recommended programs.

- The DuPage River/Salt Creek Workgroup (DRSCW) meets regularly to discuss and address TMDL issues. Staff participates with other municipal Engineers, Public Works Directors, POTWs, IEPA and various environmental groups.
- Village Staff has participated on several committees of the DRSCW for the West Branch, the Chloride Usage Education & Reduction Study and the Phosphorus Reduction Study. Led the West Branch Project Committee on preparing a report recommending various projects to be undertaken within the West Branch watershed to address potential TMDLs.
- Carol Stream was an active member of the DuPage River Coalition that seeks to address storm water quality issues throughout the watershed. Sat on the Conservation 2000 Project Selection and the DuPage River Watershed Plan Update Committees.

(Future)

- Continue support of the DRSCW, Municipal Engineers Advisory Group and the Storm Water Quality Stakeholders' Committee meetings.

Milestones:

Years 1-5: Continue participation in the DRSCW, Municipal Engineers Advisory Group and the Storm Water Quality Stakeholders' Committee meetings. Continue financial support of the DRSCW.

BMP No. B.4 Public Hearing

Brief Description of BMP:

The Village utilizes several different public hearings or meetings to allow for public comment and involvement. These meetings afford the opportunity for concerned citizens to gain insight into the different storm water policies, procedures, regulations, programs and initiatives. Public hearings can be in the form of informational meetings for private as well as public projects, Plan Commission and Zoning Board of Appeals meetings, Village Board meetings or committee meetings. Changes or variances to the Storm Water Ordinance will require Village Board approval at a Board meeting.

Measurable Goal(s), including frequencies:

(Past)

- The Village has taken all proposed ordinance changes and variances to the Storm Water Ordinance to the Village Board for approval at their regularly scheduled Board meetings.
- All subdivisions, grant of easements, annexations, preliminary plans, final plans, special use permits and planned unit developments are taken to the Plan Commission and Zoning Board of Appeals and to the Village Board for their consideration. This provides ample opportunity for public review and input on storm water concerns.
- The Village has conducted open house informational meetings on major construction projects being undertaken by the Village.
- Carol Stream formed the Storm Water Financing Committee consisting of Village and Park District Staff and Board members. At public meetings this Committee discussed ways to fund our storm water management activities.
- The Village utilized a specially formed Storm Water Advisory Committee to develop our Storm Water Management Program. Open meetings were held where to gain input from various stakeholders on how the Program should be constructed and funded.

(Future)

- Hold public meetings as necessary for any storm water ordinance changes or variances.
- Continue to hold Plan Commission and Zoning Board of Appeals and Village Board meetings for subdivisions, grant of easements, annexations, preliminary plans, special use permits and planned unit developments.

- Conduct open house informational meetings on major Village projects.

Milestones:

Years 1-5: Continue to hold public hearings or meetings for storm water ordinance changes, variances, subdivisions, grant of easements, annexations, preliminary plans, special use permits, planned unit developments and major Village projects.

BMP No. B.6 Program Coordination

Brief Description of BMP:

The Village’s Storm Water Management Program provides policy, direction and procedures to ensure all programs are properly coordinated.

Measurable Goal(s), including frequencies:

(Past)

- The Village created a Storm Water Management Program to address the six minimum control measures required under our NPDES Phase II permit.

(Future)

- Continue to review and update the Program as needed.

Milestones:

Years 1-5: Review the Storm Water Management Program and make the appropriate changes where necessary.

BMP No. B.7 Other Public Involvement

Brief Description of BMP:

In 1999 the Village began its annual Pond & Stream Sweep clean up event. This event was modeled after the popular DuPage County River Sweep where volunteers clean up sections of rivers. The Village had previously implemented a successful Adopt-A-Highway Program and felt our ponds and streams also needed attention. The Village began its Pond Shoreline & Stream Bank Restoration Program in 1998. This Program saw the completion of four restoration projects utilizing bioengineering practices on pond shorelines, stream banks and wetlands. The Village then began its Pond & Stream Management Program where these and other natural areas are continually evaluated and maintained.

Measurable Goal(s), including frequencies:

(Past)

- The Village installed signs surrounding all our waterways where we have rehabilitated wetlands and native prairie buffers. The purpose of these signs is to notify people that it is illegal to mow, disturb or dump in these valuable areas.
- Since 1999 the Village has held our annual Pond & Stream Sweep where almost 750 volunteers have removed over 11 tons of trash and debris from 103 miles of stream banks and pond shorelines.
- Over the last five years Carol Stream’s Adopt-A-Highway Program has utilized numerous volunteers from 32 organizations. They have cleaned 45 miles of streets removing trash that could’ve otherwise entered our streams and ponds.

(Future)

- Continue with the Pond & Stream Sweep and Adopt-A-Highway Programs.
- Maintain the existing illegal dumping signs around the protected areas.

Milestones:

Years 1-5: Continue to conduct both our annual Pond & Stream Sweep and our Adopt-A-Highway Program events. Maintain existing illegal dumping signs.

Illicit Discharge Detection and Elimination

BMP No. C.1 Storm Sewer Map Preparation**Brief Description of BMP:**

The Village has created a map showing the location of all storm sewer outfalls within our jurisdiction. This map was created using a global positioning system (GPS) to locate features and a geographical information system (GIS) to map those features. We have also created a GIS storm sewer system map utilizing an existing mylar map. These maps have been provided to DuPage County in GIS format and will be utilized in their regional IDDE Program for monitoring and tracing purposes. We have begun collecting GPS coordinates and attribute data on all the storm sewer network features.

Measurable Goal(s), including frequencies:**(Past)**

- Completed a GIS Study that included an element for remapping storm sewer outfalls as well as the entire storm sewer system. The future project will involve accurately locating storm sewer structures using a global positioning system (GPS).
- Purchased GPS equipment for the remapping of the storm sewer system.
- Developed a process and procedure for locating infrastructure points using a global positioning system (GPS).
- Developed a process and procedure for converting GPS data points into differentially corrected accurate locations.
- Developed a process and procedure for creating a geographical information system (GIS) storm sewer map based on the newly acquired and accurate GPS storm sewer outfall points.
- The Village has created a map of all its MS4 storm sewer outfalls utilizing GIS and GPS technologies.
- A database of MS4 outfalls was created.
- Carol Stream also has a GIS map of its storm sewer system that was created from mylar drawings.
- The storm sewer system and storm sewer outfall maps have been provided to DuPage County in GIS geodatabase format.
- We have begun collecting GPS coordinates of our storm water map features.

(Future)

- The Village will update our MS4 storm sewer outfall map as necessary.
- We will continue to collect GPS coordinates of storm water map features and revise our storm sewer system map.
- Both the storm sewer system and storm sewer outfall maps will be provided to DuPage County as updates are made.

Milestones:

Years 1-5: Carol Stream will continue to update both its storm sewer outfall and storm sewer system maps using GPS and GIS technology. We will provide revised maps to DuPage County in the requested format.

BMP No.C.2 Regulatory Control Program

Brief Description of BMP:

Carol Stream was required to participate with DuPage County and other municipalities in the formation of regulatory controls as part of the IDDE control measure. Carol Stream participated in the Storm Water Quality Stakeholders' Committee monthly meetings throughout all five years of the permit. The Committee's recommendations on mapping, monitoring, tracing and enforcement processes and procedures were periodically brought to the Municipal Engineers Advisory Group. The Committee has also produced a draft IDDE ordinance.

Measurable Goal(s), including frequencies:

(Past)

- Served continuously on the Storm Water Quality Stakeholders' Committee where we provided recommendations on regulatory controls.
- Researched and provided to the Storm Water Quality Stakeholders' Committee more effective ordinances which prohibit non-storm water discharges into the storm sewer system and include better enforcement procedures.
- Also researched and provided different monitoring methods and procedures for the IDDE program.
- Worked with the Committee on the preparation of a draft IDDE ordinance.
- One employee an IDDE Program seminar.

(Future)

- Adopt an Illicit Discharge Detection & Elimination ordinance.
- Participate on both the Storm Water Quality Stakeholders' Committee and the Municipal Engineers Advisory Group in the preparation of regulatory processes and procedures.

Milestones:

Year 1: Adopt an Illicit Discharge Detection and Elimination ordinance. Begin coordinating administrative duties with DuPage County.

Years 1-5: Participate on the Storm Water Quality Stakeholders' Committee and the Municipal Engineers Advisory Group in the preparation, review or revision of regulatory processes and procedures. Communicate and exchange with DuPage County the required information for an effective program.

BMP No.C.5 Illicit Source Removal Procedures

Brief Description of BMP:

The Village's IDDE ordinance will provide the necessary legal structure and the authority to remove the source of an illicit discharge. This measure is being written into Carol Stream's IDDE ordinance and will be tested when an illicit discharge has been detected. Upon notification from DuPage County that they have positively identified the illicit discharge source, the Village will follow the protocols to have the illicit discharge removed.

Measurable Goal(s), including frequencies:

Carol Stream staff will measure the success of this BMP by reviewing how many illicit discharges were removed compared to how many were traced to their source. If there are instances where an illicit discharge source was identified but we were not legally able to remove that discharge the removal procedures and process may need to be modified.

Milestones:

Years 1-5: Once DuPage County notifies the Village of the source of an illicit discharge, the protocols set forth in the technical guidance chapter will be followed to have that illicit discharge removed. Carol Stream will provide DuPage County with the status of each illicit discharge that is in the process of being removed.

BMP No.C.6 Program Evaluation and Assessment**Brief Description of BMP:**

Carol Stream staff will review our mapping, regulatory control program and source removal procedures of the IDDE Program on an annual basis. The review will focus on the effectiveness of the Program and recommendations will be provided when staff believes changes should be made to the program. A review of the program is an essential step that will allow Carol Stream to modify the IDDE Program as it is needed.

Measurable Goal(s), including frequencies:

The success of this BMP will be measured by the number of reviews performed. If the Program is successful, and there are no recommendations calling for any changes to the Program, this step will have afforded staff the opportunity to learn from the successes of the Program. Any necessary changes to the mapping, regulatory control or source removal procedures that would aid in removing illicit discharges will be evaluated for modifications to the Program. Changes will be made where deemed appropriate and necessary.

Milestones:

Year 1: Develop a process for evaluating these three components of the IDDE Program (mapping, regulatory control and the source removal procedures). Review the status of the map preparations and make changes as needed. If legal or regulatory issues occur, the IDDE ordinance and regulatory processes will be reviewed and modified to address these issues. We will review the removal processes and procedures followed and prepare a report of findings and recommendations for improvement. If necessary, the appropriate changes will be made to our processes and procedures. The Village will coordinate and communicate with DuPage County on any changes to our elements of the IDDE Program.

Years 2-5: Continue with the annual evaluation and assessment processes developed in the first year.

Construction Site Runoff Control

BMP No.D.1 Regulatory Control Program**Brief Description of BMP:**

In 1991 Carol Stream adopted and implemented the DuPage County Countywide Storm Water and Flood Plain Ordinance (Storm Water Ordinance). The Storm Water Ordinance has been amended numerous times over the past seventeen year, five times since the last NOI was issued in February 2002 and most recently in February 2006. The Storm Water Ordinance promotes effective, equitable, acceptable and legal storm water management control measures. Carol Stream enforces all provisions of the Storm Water Ordinance.

Measurable Goal(s), including frequencies:

The Storm Water Ordinance was revised in February '06 to reflect changes to the sediment and erosion control provisions. However, updating Technical Guidance Appendix E was not completed due to lack of staffing and lack of funds. Updating Appendix E will resume in the new permit, beginning with the inclusion of the DuPage County Water Quality Best Management Practices Technical Manual (BMP Manual).

(Past)

- Researched and prepared a draft revision to the soil erosion control section of the DuPage County Countywide Stormwater and Flood Plain Ordinance.
- Provided technical advice and information to the Storm Water Quality Stakeholders Committee on effective soil and erosion control measures and made a recommendation to model our Ordinance on Illinois Environmental Protection Agency's (IEPA) IRL10 requirements for a storm water pollution prevention plan (SWPPP) and to perform those plan reviews.

(Future)

- Assist DuPage County with the adoption of the BMP Manual.
- Adopt an updated Storm Water Ordinance that incorporates the BMP Manual.
- Continue to adopt the Storm Water Ordinance as new revisions are made.
- Train staff on the new requirements of the Storm Water Ordinance and the technical guidance in the BMP Manual.

Milestones:

Year 1: Assist DuPage County with the adoption of the DuPage County Water Quality Best Management Practices Technical Manual (BMP Manual) into Appendix E by participating in the Municipal Engineers Advisory Group meetings.

Year 2: Adopt an updated Storm Water Ordinance to implement changes that incorporate the DuPage County Water Quality Best Management Practices Technical Manual (BMP Manual).

Year 3-5: Carol Stream will continue to adopt the Storm Water Ordinance as it is updated by DuPage County to keep up with local and national regulations while implementing appropriate best management practices to lower quantities of pollutants from ending up in our waterways and drinking water.

Years 1-5: Village personnel will attend educational and training sessions as offered by DuPage County to help maintain a more consistent and effective application of the regulations throughout the county.

BMP No. D.2 Erosion and Sediment Control BMPs

Brief Description of BMP:

The DuPage County Water Quality Best Management Practices Technical Manual (BMP Manual) provides guidance on the design and implementation of development practices that prevent storm water quality degradation and enhance the overall quality of storm water. The BMP manual promotes and gives guidelines on the installation of vegetated filter strips, vegetated swales, infiltration systems, permeable pavers, manufactured structures, and storm water detention BMPs such as dry detention basins, wet detention basins, constructed wetland detention basins and underground detention basins. These BMPs can be utilized for construction site run-off control. In addition the Storm Water Ordinance has specific requirements in the sediment and erosion control section which must be met before a storm water permit will be issued for the proposed work.

Measurable Goal(s), including frequencies:

Updating Appendix E to include the BMP Manual was not completed during the previous permit; however the BMP Manual will be completed and adopted into Appendix E during this permit period.

(Past)

- Researched numerous articles, documents, studies and ordinances on Best Management Practices (BMPs) effectiveness and provided the information to the Storm Water Quality Stakeholders Committee.
- Participated with DuPage County staff, the Storm Water Quality Stakeholders Committee and the Municipal Engineers Advisory Group in the preparation of the BMP Manual.

(Future)

- Attend training sessions on how to regulate the BMP Manual.
- Train staff on new regulations as they become effective.

Milestones:

Year 1-2: Attend County presentations and seminars that would educate and guide staff on how to regulate the BMP Manual. This would ensure the BMP Manual would be regulated consistently countywide.

Year 2-3: Ensure staff has professional ability and appropriate certifications (when necessary) to review and inspect the guidelines of the BMP Manual.

Year 3-5: Continue to educate staff on the evolving regulations by attending training programs and seminars.

BMP No. D.4 Site Plan and Review Procedures

Brief Description of BMP:

The Storm Water Ordinance requires a storm water permit for all developments of 5,000 square feet or greater or developments in or effecting special management areas (SMAs): wetlands and wetland buffer areas, floodplains, floodways or riparian areas. This is to ensure that there are no adverse impacts as a result of the development. Carol Stream administers all provisions of the Storm Water Ordinance which must be met before a storm water permit will be issued for a development.

Measurable Goal(s), including frequencies:

DuPage County has developed and maintained a successful regulatory permitting program and will continue to implement and update the program as necessary. Monthly meetings with a group of Countywide Storm Water Administrators (Municipal Engineers Advisory Group) to discuss ordinance related issues ensures the Storm Water Ordinance is implemented consistently, fairly and effectively throughout the County. The Municipal Engineers group will continue to meet during the next permit period.

(Past)

- Performed 252 storm water permit reviews over the five-year period.
- Staff was trained in storm sewer design, detention basin design, soil and erosion control and best management practices.

(Future)

- Continue reviewing storm water permit applications in conformance with Storm Water Ordinance.
- Aid DuPage County with the adoption of the BMP Manual.
- Adopt new Storm Water Ordinances as they are updated.
- Offer training opportunities to staff.

Milestones:

Year 1: Assist DuPage County with adopting the DuPage County Water Quality Best Management Practices Technical Manual (BMP Manual) into Appendix E by participating in the Municipal Engineers Advisory Group meetings.

Year 2: Adopt updated Storm Water Ordinance to implement changes that incorporate the DuPage County Water Quality Best Management Practices Technical Manual (BMP Manual).

Years 3-5: Carol Stream will offer staff the ability to attend training seminars or workshops where they will be able to review and learn new methods of their evolving fields.

BMP No. D.5 Public Information Handling Procedures.

Brief Description of BMP:

Carol Stream offers numerous opportunities for the public to review and comment on storm water issues related to a development. Staff is available to answer questions or concerns and frequently arranges meetings to discuss issues. Different public meetings give the public the opportunity to hear testimony, view plans, raise concerns and make comments. Those meetings include: Plan Commission and Zoning Board of Appeals meetings, Village Board meetings, committee meetings or our Listening Post. For those instances where staff can not answer their questions they can utilize the Freedom of Information Act process.

Carol Stream has a Citizen Service Request (CSR) process where individual can file complaints or seek staff assistance on drainage and other storm water issues. As CSRs are received they are assigned to an employee, investigated and responded to the citizen. Sometimes enforcement action is necessary. The Village also has a database to track the status of the CSR.

Measurable Goal(s), including frequencies:

(Past)

- Received, investigated and resolved drainage and storm water issues through the Village's CSR process.
- Held numerous meetings with the public to allow for the review and comment on storm water issues.

(Future)

- Continue handling all complaints and requests through the Village's CSR process.
- Continue to hold public meetings where they can view plans and comment on storm water issues.
- Continue to offer meetings where development or the public can comment and get on storm water concerns.

Milestones:

Years 1-5: Continue to field public complaints and requests utilizing the Village's CSR process. Conduct open public meetings where the public can comment on storm water issues. Continue to offer meetings for developers as well as the public to obtain information and comment on storm water concerns.

BMP No. D.6 Site Inspection/ Enforcement Procedures

Brief Description of BMP:

Staff periodically conducts site inspections to ensure the project has complied with the requirements of the storm water permit. The contractor must maintain the proper sediment and erosion control throughout the construction period. If sediment and erosion control measures are not being maintained Carol Stream will notify the contractor/developer of the infraction and issue a date when they must come into compliance. If the infraction is not resolved within the specified time period a warning will be issued. If the violation is not corrected within 24 hours a Stop Work Order will be issued and a fine can be levied. At that time all work must stop until the issue has been satisfactorily resolved and the Village has lifted the Stop Work Order.

Measurable Goal(s), including frequencies:

(Past)

- Performed at least 6 inspections of all sites requiring soil and erosion control measures throughout the construction season.

(Future)

- Continue performing site inspections on all developments that have been issued a storm water permit for soil and erosion control.
- Offer staff training opportunities on site inspections of storm water management facilities.

Milestones:

Years 1-5: Ensure staff has proper qualifications to conduct site inspections with respect to sediment and erosion control. Continue to offer employees the ability to attend training on site inspections of storm water management facilities.

Post Construction Runoff Control

BMP No.E.2 Regulatory Control Program

Brief Description of BMP:

Post construction runoff is limited through the Stormwater Ordinance which requires all developments over 25,000 square feet of development area to detain storm water and runoff with a restricted release rate. The Stormwater Ordinance requires that all storm water management facilities be designed with BMPs. The Village has set a policy that BMPs for storm water storage facilities are designed and constructed with wetland shelves and native prairie buffer plantings.

The Storm Water Ordinance also addresses site redevelopment through a program called SERZ. SERZ is "storm water economic redevelopment zone". The purpose of SERZ is to assist highly impervious sites when redevelopment is proposed, where providing the full amount of detention is not practicable and the Detention Variance Fees discourage redevelopment. Also, SERZ is a standard used when applying for a variance under Section 15-114, effectively leveling the playing field by providing a minimum standard for approving variances for these developments, where there were no minimum standards under the previous ordinance.

Measurable Goal(s), including frequencies:

(Past)

- Established a Village policy that all storm water storage facilities be designed with wetland shelves and native prairie buffers to promote storm water runoff treatment where possible. In situations where this isn't possible (underground detention), a substitute BMP must be incorporated into the design.
- Staff received training on different best management practices.

(Future)

- Aid DuPage County with the adoption of the BMP Manual.
- Adopt new Storm Water Ordinances as they are updated.
- Offer training opportunities to staff.

Milestones:

Year 1: Assist DuPage County with adopting the DuPage County Water Quality Best Management Practices Technical Manual (BMP Manual) into Appendix E by participating in the Municipal Engineers Advisory Group meetings.

Year 2: Adopt updated Storm Water Ordinance to implement changes that incorporate the DuPage County Water Quality Best Management Practices Technical Manual (BMP Manual).

Years 3-5: Carol Stream will offer staff the ability to attend training seminars or workshops where they will be able to review and learn new methods of their evolving fields.

BMP No. E.3 Long Term O&M Procedures

Brief Description of BMP:

The BMP Manual provides guidance on the design and implementation of development practices that prevent storm water quality degradation and enhance the overall quality of storm water. The methods outlined in the manual will be required to be in an easement that will be monitored over a three-year period to ensure the easement is maintained.

Measurable Goal(s), including frequencies:

Currently, the Stormwater Ordinance requires all major and minor storm water facilities be put into an easement that has a three to five year maintenance and monitoring period. The revision and update to the Stormwater Ordinance to include the BMP updates will require all BMPs be put into an easement. All permanent BMPs on a proposed plan will have to include maintenance and monitoring plan for the BMPs.

(Past)

- All major and minor storm water management facilities are required to be put into an easement. The Village has accepted numerous storm water management and conveyance easements over the five-year period.
- Carol Stream has also placed conservation easements on all wetlands.

(Future)

- Continue to accept storm water management and conveyance easements and wetland conservation easements.

Milestones:

Year 1: Assist DuPage County with adopting the DuPage County Water Quality Best Management Practices Technical Manual (BMP Manual) into Appendix E by participating in the Municipal Engineers Advisory Group meetings.

Year 2: Adopt updated Storm Water Ordinance to implement changes that incorporate the DuPage County Water Quality Best Management Practices Technical Manual (BMP Manual).

Years 1-5: Continue to enforce the Storm Water Ordinance and accept storm water management and conveyance easements and wetland conservation easements.

BMP No. E.4 Pre-construction Review of BMP Designs

Brief Description of BMP:

The Storm Water Ordinance was revised in February 2006 to reflect changes to the sediment and erosion control provisions. The Stormwater Ordinance also requires that all storm water management facilities be designed with BMPs. Carol Stream has established a policy that BMPs for storm water storage facilities are designed and constructed with wetland shelves and native prairie buffer plantings where practical. Staff reviews the BMP designs during the permit process to ensure conformance with these requirements and policies.

Measurable Goal(s), including frequencies:

The DuPage County Water Quality Best Management Practices Technical Manual (BMP Manual) provides guidance on the design and implementation of development practices that prevent storm water quality degradation and enhance the overall quality of storm water. The BMP manual promotes and gives guidelines on the installation of vegetated filter strips, vegetated swales, infiltration systems, permeable pavers, manufactured structures, and storm water detention BMPs such as dry detention basins, wet detention basins, constructed wetland detention basins and underground detention basins.

(Past)

- Performed plan reviews on all storm water storage facilities for compliance with an established policy on BMP designs.

(Future)

- Aid DuPage County with the adoption of the BMP Manual.
- Perform plan reviews in conformance with the new BMP Manual requirements.
- Adopt new Storm Water Ordinances as they are updated.
- Offer training opportunities to staff.

Milestones:

Year 1: Assist DuPage County with adopting the DuPage County Water Quality Best Management Practices Technical Manual (BMP Manual) into Appendix E by participating in the Municipal Engineers Advisory Group meetings.

Year 2: Adopt updated Storm Water Ordinance to implement changes that incorporate the DuPage County Water Quality Best Management Practices Technical Manual (BMP Manual).

Years 1-5: Perform plan reviews in conformance with the new BMP Manual requirements.

Years 3-5: Carol Stream will offer staff the ability to attend training seminars or workshops where they will be able to review and learn new methods of their evolving fields.

BMP No. E.5 Site Inspections During Construction

Brief Description of BMP:

Carol Stream inspectors continually inspect sites under construction to ensure sediment and erosion control is maintained throughout the site. Any sediment discharge leaving the site is immediately addressed by staff and may result in a Stop Work Order.

Measurable Goal(s), including frequencies:

(Past)

- Performed at least 6 inspections of all sites requiring soil and erosion control measures or post construction BMPs throughout the construction season.

(Future)

- Aid DuPage County with the adoption of the BMP Manual.
- Adopt new Storm Water Ordinances as they are updated.
- Continue performing site inspections on all developments that have been issued a storm water permit for soil and erosion control and post construction BMPs.
- Offer staff training opportunities on site inspections of BMPs.

Milestones:

Year 1: Assist DuPage County with adopting the DuPage County Water Quality Best Management Practices Technical Manual (BMP Manual) into Appendix E by participating in the Municipal Engineers Advisory Group meetings.

Year 2: Adopt updated Storm Water Ordinance to implement changes that incorporate the DuPage County Water Quality Best Management Practices Technical Manual (BMP Manual).

Years 1-5: Continue performing site inspections on all developments that have been issued a storm water permit for soil and erosion control and post construction BMPs.

Year 3-5: Continue to offer employees the ability to attend training on site inspections of BMPs.

BMP No. E.6 Post Construction Inspections

Brief Description of BMP:

Post Construction sites are required to submit as-built drawings and calculations documenting the project constructed in conformance with all the requirements of the original permit. The as-built certification must be signed off before the corresponding storm water management security is released. Engineering Staff and SMA consultants are utilized to ensure the site meets full compliance through inspections and as-built reviews. SMA consultants will also continue inspections to ensure native planting areas and wetland mitigation areas are maintained for up to five years beyond the time of construction completion.

Measurable Goal(s), including frequencies:

Update the Storm Water Ordinance to include the BMP Manual. The BMP manual will require all BMPs to be put into a Natural Area Easement that will be monitored for three years after construction is completed.

(Past)

- Performed “punch list” inspections for final acceptance of all sites requiring soil and erosion control measures post construction BMPs throughout the construction season.
- Reviewed as-built drawings for compliance with the original storm water management permit.

(Future)

- Aid DuPage County with the adoption of the BMP Manual.
- Adopt new Storm Water Ordinances as they are updated.
- Continue performing “punch list” inspections for final acceptance of all sites requiring soil and erosion control measures post construction BMPs.
- Continue reviewing as-built drawings and calculations for permit compliance.
- Offer staff training opportunities on site inspections of BMPs.

Milestones:

Year 1: Assist DuPage County with adopting the DuPage County Water Quality Best Management Practices Technical Manual (BMP Manual) into Appendix E by participating in the Municipal Engineers Advisory Group meetings.

Year 2: Adopt updated Storm Water Ordinance to implement changes that incorporate the DuPage County Water Quality Best Management Practices Technical Manual (BMP Manual).

Years 1-5: Continue performing “punch list” inspections for final acceptance of all sites requiring soil and erosion control measures post construction BMPs. Continue reviewing as-built drawings and calculations for permit compliance.

Years 3-5: Continue to offer employees the ability to attend training on site inspections.

Pollution Prevention/Good Housekeeping

BMP No. F.1 Employee Training Program

Brief Description of BMP :

The permit requires employee training on good housekeeping and pollution prevention procedures to prevent and reduce pollutant discharges into storm water from maintenance and operation activities of open spaces, buildings, and storm water systems as well as storage yards, snow disposal, new construction and land disturbances. Training topics can be on regular street sweeping, reduction in the use of pesticides or street salt, or catch basin cleaning practices. The MS4 permit holder can use training materials that are available from the EPA, their State or Tribe, or relevant organizations.

Carol Stream staff at Public Works has been trained in areas of good housekeeping and pollution prevention through in-house staff training and the attendance at various seminars and classes.

The Water Quality Stakeholders Meetings will continue to hold discussions and offer training opportunities related to pollution prevention and good housekeeping practices. The Water Quality Stakeholders Group will have discussions on the most appropriate methods for training employees at municipal facilities in areas of good housekeeping and pollution prevention procedures to prevent and reduce pollutant discharges into storm water from maintenance and operation activities of open spaces, buildings, construction and land disturbances, waste disposal and storm water systems. Topics discussed at the meetings will be shared with the Department of Public Works and Administration.

Measurable Goal(s), including frequencies (review of first permit):

The pollution prevention good housekeeping training workshop was not completed in the previous permit due to staffing issues and time constraints, but will be completed in Year 1 of the new permit. However, the Department of Public Works and Engineering staff received various training on topics such as street sweeping operations, good housekeeping measures, de-icing and anti-icing programs, storm sewer system design, detention basin design, storm water management funding, bridge inspection, storm water management facility design and proprietary BMPs.

The Water Quality Stakeholders group will continue to meet to discuss proper training procedures and implementation on good housekeeping and pollution prevention for appropriate supervisory and/or management employees on: building and open space maintenance, vehicle/fleet maintenance, materials storage and disposal, infrastructure inspection and maintenance, construction and land disturbances and waste disposal. The water quality discussions will aim to assist supervisors and/or managers with providing guidance to their employees with the appropriate training/information based on their needs. The pollution prevention Water Quality Stakeholder discussions will be shared with Public Works and other maintenance staff for collaborative efforts with the on-going pollution prevention training of County staff.

(Past)

- Prepared two request for proposals from the West Branch Project Committee to the DRSCW for the following projects:
 - Prepare a program for educating Public Works employees on how they can help in reducing chloride usage. The program could include operator training, storage and maintenance procedures, anti-icing (pre-wetting) programs, alternative deicers as well as obtaining commitments from municipalities to purchase and utilize digitally calibrated salt spreaders.
 - Perform a non-point source phosphorus reduction study that identifies various projects and source control measures that could include: programs, designs, processes and procedures, regulations or legislation. The study would identify costs; provide a schedule of implementation, effectiveness ratings for phosphorus reduction and final recommendations.
- Two Carol Stream Engineering employees attended a seminar on “TR20 Basics for the Municipal Engineer”.
- Two employees attended a “Storm Water Management Funding” seminar that addressed operating and maintenance issues.
- One employee attended two training seminars: “Storm Sewer System Design” and “Detention Basin Design”.
- Three employees attended two training sessions that included Street Sweeping Operations and Municipal Good Housekeeping Measures.
- Two employees attended a Deicing / Chloride Seminar as part of the Chloride Usage Education & Reduction Study.

(Future)

- Provide training sessions for Public Works employees on pre-wetting and anti-icing methods to reduce salt usage.
- Train Public Works and Administration maintenance staff on good housekeeping pollution prevention.

Milestones:

Year 1: Public Works and Administration maintenance staff will attend the good housekeeping pollution prevention workshop to be conducted by The Conservation Foundation for DuPage County or will view the power point presentation from this good housekeeping training seminar.

Years 2-3: Improve communications between Village Departments including Public Works, Administration and Engineering in order to run the good housekeeping pollution prevention program more effectively. Assess other personnel that should attend the training session.

Year 4: Attend a second pollution prevention employee training session, targeting those that were unable able to attend the previous session and new hires. Viewing a power point presentation of the training session is an option to attending the seminar. Record attendees and ask them to complete a session evaluation as well as submit suggestions for program improvements.

Year 5: Evaluate the procedures for effectiveness and improve training as necessary based on completed session surveys and suggestions.

Years 1-5: Collect records of employee training conducted in-house and encourage them to document any other methods of on-going training within their facility.

BMP No. F.2 Inspection and Maintenance Program

Brief Description of BMP:

The ILR40 NPDES permit requires that an operation and maintenance program be developed and implemented with the goal in mind of preventing or reducing pollutant runoff from municipal operations in the storm sewer system. Public Works has developed an inspection and maintenance program for routine catch basin cleaning and vacuum street sweeping.

Measurable Goal(s), including frequencies (review of first permit):

The Public Works Department currently inspects and maintains the MS4 systems on an as needed complaint basis, which is tracked through our citizen service request (CSR) database. Public Works has implemented a routine preventive maintenance program for long-term maintenance of catch basins. They also have a street sweeping program. Carol Stream catch basins are cleaned approximately once every ten years. Its roadways are swept approximately nine times per year and the Village owns two vacuum sweepers. Carol Stream maintains approximately one hundred and seven miles of roadway. In addition, Carol Stream has a wastewater treatment plants which treats the Village's sewage and the remnants of sludge from the sewage. The Water Reclamation Center located on Kuhn Road has a capacity of 6.5 MGD (million gallons per day).

Carol Stream has 61 biodiesel and 9 E85 vehicles in its fleet. Carol Stream has incorporated environmental enhancements when reconstructing and improving roadways as evidenced by the wetland/native prairie swale used for detention and conveyance on the Fair Oaks Road Improvement Project.

Carol Stream is currently employing both pre-wetting and anti-icing measures in its annual Snow Removal Plan. Pre-wetting salt and using an anti-icing mixture of salt brine, beet juice and calcium chloride reduces the amount of salt used thereby protecting the land and aquatic plants, animal life, ground water and eventually the surface water. The salt used for deicing is kept in a salt dome and the areas surrounding the salt storage are routinely kept clean.

Engineering has developed and implemented a Wetland & Pond Shoreline Monitoring & Management Program after performing a \$1.5M Pond & Stream Bank Rehabilitation Project on nine wetlands, ponds and stream banks. Stabilizing these areas reduces soil erosion thereby reducing runoff pollution to the streams and creates a more natural habitat for fish, plants and wildlife. The stabilization methods most commonly used are bioengineering practices such as the installation of A-Jacks, coconut fiber rolls, vegetated geogrids, willow stakes, constructed wetlands and native prairie buffers. This Program monitors the condition of the restored and stabilized pond shorelines, mitigated and constructed wetlands, stream banks and native prairie buffers. An annual maintenance plan is formulated every three years where projects are identified, prioritized and scheduled for appropriate management strategies. These management strategies include prescribed burns, selective cutting, mowing, trash removal, herbicide application, weeding, reseeding and replanting. Maintaining these valuable areas by removing invasive vegetation, trash blockages and other debris will allow the waters from the wetlands, ponds and streams to flow less polluted and without obstructions downstream. Stream bank stabilization projects are additionally funded through the Water Quality Improvement Grant Program.

(Past)

- Researched funding alternatives for a storm water management program.
- Completed a final functional requirements and needs assessment study.
- Conducted a training session for our management team on funding alternatives for a storm water management program.
- Developed a long-range capital improvements program (CIP) and an operations and maintenance (O&M) program.
- Completed the Village's Storm Water Management Program Development and Funding Study where a storm water management program evaluation was performed that included:
 - Existing Level of Service Analysis
 - Formation of a Storm Water Advisory Committee (SWAC)
 - Benchmark of Comparable Maintenance Programs
 - Evaluation of Programs
 - Revised Functional Requirements and Needs Assessments
 - Recommendations
- Prepared a Storm Water Management Program.
- Updated our 20-Year Capital Improvements Program (CIP).
- Conducted training sessions for our SWAC.
- Completed the design of our Klein Creek Phase I Stream Bank Stabilization Project.
- Conducted meetings with our Storm Water Committee consisting of representatives from both the Village and the Park District to deal with storm water management issues.
- Designed an inlet/catch basin cleaning, inspection and assessment program.
- Cleaned and inspected 1,273 inlets and catch basins.
- Swept 12,851 curb miles of local roads using vacuum sweepers.
- Performed wetland and pond shoreline monitoring and management on Village own ponds, wetlands and stream banks throughout the five-year permit cycle.
- Applied for DuPage County and Illinois Department of Natural Resources funding for the Jay Stream Shoreline Enhancement Project and the Stream Bank & Shoreline Education Program. Received funding from DuPage County. Enhanced an acre of pond shoreline wetland/native prairie buffer utilizing citizen volunteers as part of the Jay Stream Shoreline Enhancement Project.
- Continued ongoing rehabilitation of pond shorelines utilizing bioengineering techniques.
- Continued our anti-icing program to reduce the Village's salt usage.
- Continued tracking sanitary sewer overflows (SSOs) and basement backups.
- Sealed 44 sanitary sewer manholes.
- Began digitally televising sanitary sewer lines to identify sections for maintenance, repair or replacement.
- Assessed the use of phosphate free organic fertilizers on Village owned right of ways.

(Future)

- Develop maintenance procedures that incorporate pollution control measures.
- Continue the Catch Basin Cleaning, Inspection and Assessment Program.
- Continue the Street Sweeping Program using vacuum sweepers.
- Continue the Wetland & Pond Shoreline Monitoring & Management Program.
- Continue the Sanitary Sewer Inspection Program using digital televising methods.
- Continue the Sanitary Sewer Manhole Sealing Program.
- Discontinue the use of fertilizers containing phosphates on Village maintained right of ways and utilize organic options when fertilization is required.

Milestones:

Year 1: Improve communications between Village Departments including Public Works, Administration and Engineering in order to run the good housekeeping pollution prevention program more effectively. Develop maintenance procedures that incorporate pollution control measures.

Years 1-5: Continue the Catch Basin Cleaning, Inspection and Assessment Program, the Street Sweeping Program, the Wetland & Pond Shoreline Monitoring & Management Program, Sanitary Sewer Inspection Program and Sanitary Sewer Manhole Sealing Program. Discontinue the use of fertilizers containing phosphates and utilize organic options when fertilization is necessary.

BMP No. F.4 Municipal Operations and Waste Disposal

Brief Description of BMP :

The ILR40 permit requires that procedures be developed for properly disposing of waste removed from the separate storm sewers and areas such as dredge spoil, accumulated sediments, floatables, and other debris.

Measurable Goal(s), including frequencies (review of first permit):

Public Works properly disposes all wastes collected from storm sewers, streets, ponds and streams. In addition, Carol Stream has a streets and vehicle maintenance section that controls the amount of pollutants, which runoff from the construction of roadways, storage yards and deicing practices as well as runoff produced by vehicle washing and repairs. Carol Stream regularly recycles used oil, oil filters, batteries and tires and has the remains of the dead animals found on Village roadways properly disposed.

Carol Stream advertises different yearly hazardous waste collection events held by DuPage County and IEPA to collect items such as cleaning solvents, oil based paints, fertilizers/pesticides, car batteries, automotive fluids, asbestos, and pool chemicals for proper waste disposal. We distribute the County's Recycling Resource Guide, and provide information about other resources and companies that recycle or take hazardous waste.

Milestones:

Year 1: Improve communications between Village Departments including Public Works, Administration and Engineering in order to run the good housekeeping pollution prevention program more effectively. Develop maintenance procedures that incorporate pollution control measures.

Years 1-5: Continue the recycling of used oil, oil filters, batteries and tires. Carol Stream will submit record keeping of pollution prevention and good housekeeping activities for annual reporting.

BMP No. F.5 Flood Management/Assess Guidelines

BMP: DPC Stormwater and Flood Plain Ordinance Updates

Brief Description of BMP:

The DuPage County Countywide Stormwater and Flood Plain Ordinance (Appendix F) was adopted in 1991 and became effective in February of 1992 as part of the DuPage County Storm Water Management Plan that affects all development within the County of DuPage. This is the fundamental regulatory program that requires all development within the County of DuPage to not "Unreasonably or unnecessarily degrade surface or ground water quality."

Appendix F contains provisions for flood management and assessment guidelines.

The Storm Water Management Plan: Restricts future development in the flood plain to facilities that will not adversely affect flood damage potential or wetland environments. Within the floodway, development will be prohibited unless it involves facilities that enhance flood protection or pollution control; Requires preservation of wetlands to maintain their natural flood control and environmental benefits; Incorporates water quality and habitat protection measures in all storm water management activities within DuPage County; and Requires regular, planned maintenance of storm water management facilities.

The intent of Appendix F is to reduce current and future flood damages by requiring: no permitting of any development that would negatively impact the hydrology or hydraulics of either the flood plain or the floodway; any proposed structure to be at least one foot above the adjacent Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Base Flood Elevation (BFE); any development or redevelopment to provide for storm water detention depending on size and use as described in Appendix F; and no permitting of any development or redevelopment that will increase flood elevations by compensating at the volume of 1.5 to 1 to offset the loss of existing storage, increase flood velocities, or decrease flood conveyance capacity to upstream or downstream properties.

Measurable Goals:

(Past)

- The DuPage County Countywide Stormwater and Floodplain Ordinance was revised and adopted by the Village five times over the last five years.
 - March, 2003 (Year 1)
 - January, 2004 (Year 1)
 - July, 2004 (Year 2)
 - March, 2005 (Year 3)
 - February, 2006 (Year 3)

(Future)

- Continue to adopt any revisions to the DuPage County Countywide Storm Water and Flood Plain Ordinance.

Milestones:

Year 1: Assist DuPage County with adopting the DuPage County Water Quality Best Management Practices Technical Manual (BMP Manual) into Appendix E by participating in the Municipal Engineers Advisory Group meetings.

Years 1-5: Adopt any revisions to the DuPage County Countywide Storm Water and Flood Plain Ordinance.

BMP: FIRM Updates

Brief Description of BMP:

DuPage County, a Cooperating Technical Partner with FEMA, updated the Flood Insurance Rate Maps (FIRM) on a countywide basis. These maps became effective on December 16, 2004 and are known as the DFIRM. The DFIRM maps will continue to be updated as the County completes floodplain mapping for other watersheds in DuPage County using its HSPF/FEQ/PVSTATS methodology.

Measurable Goals

(Past)

- Reviewed new Flood Insurance Rate Maps (FIRMS) and provided documentation to improve the accuracy of these maps.
- Countywide DFIRM maps were approved and became effective for DuPage County on December 16, 2004 and Carol Stream began using the flood hazard information shown on these maps.

(Future)

- As DuPage County and FEMA corrects, updates and adopts the DFIRM maps Carol Stream will begin utilizing them.

Milestones:

Years 1-5: The Village will begin utilizing the corrected and updated DFIRM maps once they have been approved and adopted by FEMA and DuPage County.

Copy and complete this page if additional pages are necessary:

Part IV. Measurable Goals (include shared responsibilities) implemented in the past 5 years by the MS4. Also describe new goals proposed to be implemented by the MS4.

(BMP No. should match that checked in Part II of this NOI. The applicant may repeat the same BMP No. where more than one BMP of similar type is to be implemented. Where necessary, attach additional sheets to provide more detail on each specific BMP.)

BMP No. _____

Brief Description of BMP: _____

Measurable Goal(s), including frequencies: _____

Milestones: **Year 1:** _____
Year 2: _____
Year 3: _____
Year 4: _____
Year 5: _____

BMP No. _____

Brief Description of BMP: _____

Measurable Goal(s), including frequencies: _____

Milestones: **Year 1:** _____
Year 2: _____
Year 3: _____
Year 4: _____
Year 5: _____

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

Mail completed form to:

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

Copy and complete this page if additional pages are necessary:

**Attachment 1
Receiving Streams Continued**

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Attachment 2
Part III. (Continued) Qualifying Local Programs

Public Education and Outreach

BMP No. A.1 Distribution of Paper Material

Brief Description of BMP:

Paper materials assist in providing information for programs, procedures, and research to residents and non-residents of DuPage County. DuPage County has partnered with both the Conservation Foundation of DuPage County and S.C.A.R.C.E. (School and Community Assistance for Recycling and Composting Education) to develop and distribute various water quality related brochures and fact sheets. These paper materials provide information about various countywide programs, including stream bank stabilization; the promotion of best management practices; and provide general guidance on how to improve water quality throughout the County.

Measurable Goal(s), including frequencies:

(Past)

Distributed informational material on:

- Native Plants
- Conservation Options for Private Landowners
- Stream Bank Stabilization in DuPage County
- DuPage County Wetlands and Streams
- Maintenance and Management of Naturalized Areas
- Prevention of Stormwater Runoff Pollution
- Clean Water: We Can't Live Without It
- Trail Maps for all of DuPage County

Organizational newsletters produced:

- County sponsored storm water newsletter, Currents
- S.C.A.R.C.E produced and distributes environmental newsletter, Ripples.
- S.C.A.R.C.E distributed issues of the Green Bulletin electronically to thousands of county citizens. The Green Bulletin announces watershed exhibits and community events. The Green Bulletin is similar to the *RIPPLES* newsletter but is distributed solely in an electronic format.

(Future)

- Continue to distribute brochures previously developed by the County
- Update and re-implement Adopt-a-Stream brochures
- Distribute additional recreational brochures developed by the Forest Preserve District of DuPage County (FPDDC) that inform the public about using the natural resources in DuPage County for activities like hiking, fishing, and water activities
- Update Stream Maintenance Program brochure
- Create additional Water Quality brochures (e.g. IDDE)
- Create a DuPage County fact sheet that emphasizes storm water management information.
- Continue production of quarterly storm water newsletter, Currents.
- Distribute brochures on local water quality and conservation initiatives developed by others.

Milestones:

Year 1: Obtain and distribute “Conservation @ Home” brochures (developed by The Conservation Foundation and sponsored by DuPage County), the “How to” brochures, and develop a series of water quality brochures (IDDE), handouts, and informational material. Provide information and resources,

including brochures, an informational DVD, and newsletters for planting and maintaining certified properties.

Years 2-5: Develop water quality information to fit the needs of the Stormwater Management Program. Update stream maintenance program brochure. Create County fact sheet and produce quarterly issues of *Currents*.

Years 3-5: Continue to update and review water quality information as necessary.

BMP No. A.2 Speaking Engagement

Brief Description of BMP:

Speaking engagements provide DuPage County an additional outlet to inform the public about storm water issues, procedures, and information. Staffs from the DuPage County Stormwater Management Division as well as members of The Conservation Foundation and S.C.A.R.C.E. have spoken at a number of engagements meant to promote water quality and recycling.

Measurable Goal(s), including frequencies;

(Past)

- The Stormwater Management Director spoke at the DuPage Environmental Summit, which is held each year to inform the public about conservation practices within DuPage County.
- S.C.A.R.C.E spoke to several community groups on topics such as watershed models, and the 3R's of Reduce, Reuse, Recycle.
- The Stormwater Management Director gave a presentation on DuPage County's Storm Water Management and Water Quality Improvement Programs at a World
- Water Monitoring Day event that was sponsored by the DuPage River Salt Creek Workgroup, The Conservation Foundation, and the US EPA Region 5.
- Public Works managerial staff gave a presentation about the DuPage County Drainage Program at the Illinois Association for Floodplain and Stormwater Management (IAFSM) Annual Conference in Tinley Park.
- DuPage County staff made a presentation at the Soil Erosion and Sediment Control Workshop Series sponsored by the Kane DuPage Soil and Water Conservation District.
- DuPage County staff gave a presentation at a permitting workshop for developments in northeastern Illinois that was sponsored by The Urban Planning and Development Group of the American Society of Civil Engineers.

(Future)

- Continue to participate and present relevant issues at the Environmental Summit.
- Continue to fund support for groups like S.C.A.R.C.E, The Conservation Foundation, and other organizations that sponsor conservation friendly activities.
- Continue to present at permitting workshops and other speaking engagements to educate the public.
- Continue to provide internal and external training opportunities.
- Continue to be a partner in other conservation activities.

Milestones:

Year 1: Develop material for public information such as PowerPoint presentations. Contract with The Conservation Foundation to provide community education (in addition to Conservation @ Home) on water quality topics and programs such as "When it Rains, It Drains" and "Don't Muddy the Waters." TMDL workgroup connections to contract water quality activities, and other topics related to contract activities through the speaker's bureau, exhibit tables, and presentations at community or professional events.

Year 2: Hire a Public Information Manager (PIM) who will seek speaking opportunities with local interest groups (such as local Rotary Clubs, Lyons Club, Homeowner's Associations, etc.)

Years 3-5: Continue support of County funded groups. Encourage staff participation in speaking engagement opportunities.

BMP No. A.3 Public Service Announcement

Brief Description of BMP:

Public service announcements are utilized to reach large groups of people and inform them of issues regarding storm water management and water quality.

Measurable Goal(s), including frequencies:

(Past)

- During the past five years DuPage County has not issued public service announcements in the traditional sense.

(Future)

- Create a 30 second PSA that will inform residents about issues of disposing or dumping of waste into storm sewers.

Milestones:

Year 1: DuPage County working through The Conservation Foundation we will promote and expand the Storm Drain Stenciling program. DuPage County will continue to encourage and increase local coordination in communities. Continue outreach to scout organizations and ecology clubs, homeowner associations. Maintain records and generate reports, purchase and distribute supplies. Intern/assistant to coordinate program with staff support.

Year 2: Create and air a 30 second public service announcement.

Years 3-5: Continue to update and air County public service announcements.

BMP No. A.4 Community Event

Brief Description of BMP:

Community events allow the Stormwater Management Division personnel to provide information to the general public about a variety of storm water management and water quality issues in a relaxed setting. Through a variety of community events DuPage County is able to reach a broad group of people comprised of residents, non-residents, and business leaders. Participation in these events is helpful to supplementing the flow of information from the County to the public.

Measurable Goal(s), including frequencies:

(Past)

- During their 3Rs educational program, S.C.A.R.C.E discussed reducing the use of water in a practical manner to extend the supply of fresh water and to reduce pollutants from energy supplies that are used to create the flow of water into homes.
- The DuPage River Sweep, a yearly event, enlists the help of volunteers to remove debris from the stream channel and along the banks makes our streams more attractive, improves water quality and the stream ecosystem, helps to improve water flow during heavy rains, removes potential hazards for fish and wildlife, and provides a constructive activity for youth and adult groups.
- DuPage County hosted and helped fund S.C.A.R.C.E's High School Green Building Design Challenge event in April 2007. Local high school students displayed their models, power point presentations, and

poster boards on green building design and best management practices for storm water management. The green building design models were showcased outside of the County Board office, which gave DuPage County Board members and staff as well as the general public the opportunity to discuss the displays with students.

- S.C.A.R.C.E discussed the topic of utilizing native plants. Native plants have deep root systems that require less water, do not need fertilizer, and reduce storm water pollution runoff.
- S.C.A.R.C.E educated the general public about the dangers and the proper household hazardous wastes including fertilizer, pesticides, disposal for medicine, and oil paint.
- S.C.A.R.C.E made presentations to 82 youth leadership/scout group presentations on Watersheds/Watershed Models & the 3Rs of Reduce, Reuse, Recycle.
- S.C.A.R.C.E made presentations to 99 committee/club/agency meeting presentations on Watersheds/Watershed Models & the 3Rs of Reduce, Reuse, Recycle.
- Additional S.C.A.R.C.E Events include:
 - Student competition for design of Green Building
 - Green Building Design Workshop
 - Waste Audit/S.C.A.R.C.E information
 - Household Hazardous Waste/Energy
 - Train the Trainer
 - Conservation Practices
 - Earth Summit

(Future)

- Continue support of an informational booth at The DuPage County Fair
- Continue support of County supported events hosted by organizations like S.C.A.R.C.E, The Conservation Foundation, and groups that present a positive environmental message.

Milestones:

Year 1: The Conservation Foundation will create a Community Watershed Outreach Program that will develop and distribute a Watershed Program Outreach brochure/flyer, assemble and update a database. An Intern/assistant will be hired to carry out tasks. Continue Participation in the DuPage County Fair and at other County funded organization events.

Year 2: Participation by the Public Information Manager at local community events.

Years 3-5: Continue community events, review and update materials and events as needed.

BMP No. A.5 Classroom Education Material

Brief Description of BMP:

Classroom education materials assist in the teaching of topics related to stormwater management, the environment, and water quality. “Hands on” demonstrations, and physical models help facilitate understanding of a topic beyond what is written in a textbook.

Measurable Goal(s), including frequencies:

(Past)

- 27 teacher In-Service/Modeling on:
 - Watershed Model; Energy
 - Conservation; Waste Audit
 - Ecology Flag; Recycled Paper
 - Earth Flag/Zero Waste Grant
 - Zero Waste/Tap & Stack
- 19 teacher workshops on:

- Groundwater
- Watersheds
- Energy and Conservation
- Environmental Natural Resources
- 5 Educational Junior High and High School District 204 Workshops on:
 - Watershed Model, Natural Resources
 - Life Cycle Analysis

(Future)

- Continue County support of teacher education programs utilizing a group like S.C.A.R.C.E.
- Continue to produce education materials for public and private uses.

Milestones:

Year 1-5: Continue the development of education materials, and sponsorship of environmental clubs. Review and update classroom education materials as necessary.

BMP No. A.6 Other Public Education

Brief Description of BMP:

Other public education initiatives allow further opportunities to promote storm water management and water quality issues.

Measurable Goal(s), including frequencies:

(Past)

- S.C.A.R.C.E conducted a waste audit describing the benefits related to water preservation and purity.
- S.C.A.R.C.E conducted Energy/Energy Conservation workshop discussing water usage and water pollution associated with water production of nuclear power and other energy sources. Most energy sources that are utilized today incorporate water usage in the production and or causes water pollution as an unintended consequence.
- The Storm Drain Stenciling Program (SDS) has evolved over the past years and we are now seeing greater involvement on the part of municipalities. A storm drain stenciling project consists of stenciling a message next to the street drain reminding people "**Dump No Waste- Drains to River**" with the image of a fish. Stencils are also available for lake, stream, bay, groundwater, ocean or simply "protect your water" with the image of a glass and faucet. Downers Grove, Villa Park and Naperville continue to distribute supplies to local groups such as the Eagle Boy Scouts. Troop 9 of the Eagle Boy Scouts stenciled 93 drains, Troop 95 stenciled 706 drains and Boy Scouts 888- Eagle stenciled 316 drains promoted by the Village of Downers Grove. The Village of Naperville continues to promote stenciling in 2006 and sponsored the Boy Scouts Troop 888, Elmwood School, Ellsworth School and the Illinois Small mouth Alliance. The Villa Park Environmental Concerns Commission began a regular program of stenciling that continued in the spring of 2006. The Eagle Scout Project volunteers stenciled approximately 514 drains in the spring sponsored by Villa Park.
- Mighty Acorns is a stewardship-based environmental education program, which reaches 450 4th to 6th graders in three schools in West Chicago. The program focuses on key concepts of biodiversity and environmental health. Students help restore McKee Meadow in Blackwell Forest Preserve, Pioneer Park and Prestonfield Park in West Chicago. All of the sites include a river, pond or wetland in them, and our program incorporates watershed concepts. We also hope to add a 5th grade level at Wegner School in West Chicago. As a Mighty Acorn Partner, The Conservation Foundation staff also sits on the Board and task forces of the larger Mighty Acorns Partnership, chairs of the Communications Task Force, and mentors new partners in DuPage County as the need arises. The Conservation Foundation full and part-time staff train teachers and volunteers, and lead classroom and field sessions. The Conservation

Foundation provides and maintains equipment for restoration activities by the students and educational/training materials for teachers and volunteers. Volunteers continue to assist with field sessions.

- The Envirothon is a national competition in which high school students' study about ecology and land management in 5 areas; aquatics, forestry, wildlife, soils, and a current topic that changes each year. The winner of the regional competition advances to the state level, and the state winner to the national level where scholarships are awarded to the winning team members. The Conservation Foundation recruits DuPage County teams, helps plan the regional event, writes the aquatics test, and conducts the teacher training workshops on the day of the competition.

- **Watershed Program Intern/Part-time Assistant**

Many of our watershed programs are well established and can be carried out by an intern or part-time assistant, leaving staff free to expand and refine programs within the county. The intern/assistant can carry out administrative tasks, logistics, database management, and program coordination required for the watershed education programs and workshops (municipal/technical workshops, Sweep, Stenciling, CARE, Conservation @ Home, watershed website, and Mighty Acorns, etc.); compile information for reports, and develop and write promotional materials and program newsletters.

- The DuPage River Coalition is a group whose mission is:
 - To improve the community's understanding of what a watershed is, why a healthy watershed is important, and how their actions affect the watershed.
 - To improve the water quality through the reduction and elimination of non-point and point sources of pollution.
 - To integrate watershed protection issues into land use planning and development practices.
 - To protect, restore and link natural areas throughout the watershed.
 - To promote the recreational opportunities of the watershed.The Coalitions mission is to increase awareness of the DuPage River watershed in those who live in it and improve the river's water quality through the active involvement of the community.

(Future)

- Creation of a Public Information Manager position, which will handle all public relations matters for Stormwater Management Division.

Milestones:

Year 1: Continue to support to programs like those listed above and promote other educational opportunities.

Year 2: Create a Public Information Manager position in 2009.

Years 3-5: Continue to review and update public education information.

Public Information/Involvement

BMP No. B.1 Public Panel

Brief Description of BMP:

The knowledge gained from public opinion can assist in creating programs that address concerns and situations effectively.

Measurable Goal(s), including frequencies:

(Past)

- The DuPage County Environmental Commission, a citizen advisory board, has created a long-range, well-reasoned environmental policy for all of DuPage County.

- The DuPage County Board adopted the Environmental Policy on April 26, 1993, Resolution CB-003-93. The commission provides guidelines for improving air, streams, and land.

(Future)

- Continue support of Environmental Summit.
- Continue support of Environmental Commission.

Milestones:

Year 1: Continue support of groups like the Environmental Commission that provide opportunities for increasing public knowledge regarding environmental issues.

Years 2-5: Review and update public panel information.

BMP No. B.3 Stakeholder Meeting

Brief Description of BMP:

Stakeholder meetings provide the opportunity for individuals and groups of people with a vested interest in storm water management and water quality to exchange ideas and goals.

Measurable Goal(s), including frequencies:

(Past)

- The Municipal Engineers Advisory Group meets on a monthly basis to discuss issues related to the DuPage County Stormwater and Floodplain Ordinance, Best Management Practices, water quality, and overall storm water program issues.
- The DuPage County Water Quality Stakeholder Committee meets on a regular basis to discuss issues related NPDES II and TMDL's. The committee has been evaluating various methods on how to best meet the six minimum control measures of the NPDES II through qualifying programs.

(Future)

- Continued support of the Municipal Engineers Advisory Group and the DuPage County Water Quality Stakeholder Committee.
- Continued implementation of BMPs

Milestones:

Years 1-5: Continue support of the Municipal Engineers and Water Quality Stakeholders Groups

BMP No. B.4 Public Hearing

Brief Description of BMP:

Public hearings allow for community members, both public and private, to gain insight into different storm water programs and initiatives. Public information meetings allow for an open forum giving citizens first hand knowledge of various programs, policies, and projects while giving citizens the opportunity to discuss their viewpoints and provide input concerning appropriate storm water management, water quality policies, and best management practices.

Measurable Goal(s), including frequencies:

As updates to the appendices of the DuPage County Storm Water Management Plan are developed there will continue to be public hearings in which the public will have an opportunity to voice their comments.

(Past)

- During the past five years public hearings have been held for all proposed ordinance changes, watershed plans, and variances to certain provisions in the DuPage County Storm Water and Floodplain Ordinance.

(Future)

- Hold Public hearings as necessary for any ordinance change, watershed plan, or variance to a given provision in the ordinance.

Milestones:

Years 1-5: Continue to implement updates and review all amendments to appendices of the Stormwater Management Plan. Hold Public hearings as necessary for any ordinance change, watershed plan, or variance.

BMP No. B.5 Volunteer Monitoring

Brief Description of BMP:

Volunteer monitoring provides an opportunity for an interested person to become involved in the collection of water quality data throughout DuPage County. The collected data can be used to identify impairments to a water body and help develop proposed water quality improvement projects.

Measurable Goal(s), including frequencies:

(Past)

- C.A.R.E. Volunteer Monitoring Program

The CARE monitoring program awaits further direction as RiverWatch is again training and coordinating citizen scientist monitors, and the DuPage River Watershed Plan is being revised. In the meantime, The Conservation Foundation staff trained RiverWatch/CARE volunteers as citizen scientist monitors. The Conservation Foundation distributed monitoring kits and supported volunteer monitoring DuPage River sites.

- DuPage River Salt Creek Workgroup

Workgroup developed opportunities for volunteer monitors to conduct sub-watershed assignments, locate and evaluate problems, investigate restoration opportunities and perform supplemental monitoring for the DuPage River and Salt Creek.

(Future)

- The C.A.R.E group will select appropriate sites in all impaired watersheds throughout DuPage County and conduct training through The Conservation Foundation and Chicago Wilderness to make data available through the IDNR INRIN database. This database will hopefully be used to draw correlations and trends on the improvements to the impaired watersheds in DuPage.

Milestones:

Years 1-5: Continue support for volunteer monitoring opportunities.

BMP No. B.6 Program Coordination

Brief Description of BMP:

Program Coordination is imperative to ensure that programs sponsored by DuPage County are reaching their desired objectives.

Measurable Goal(s), including frequencies:

Creation of a Public Information Manager position (PIM). This position will be responsible for program coordination as well as lead contact for public education and outreach opportunities.

Milestones:

Year 1: Review storm water programs and determine where updates are necessary.

Year 2: Creation of Public Information Manager position.

Years 3-5: review and update programs as necessary.

BMP No. B.7 Other Public Involvement**Brief Description of BMP:**

The Stream Bank Stabilization Program was formed in 1993 as an offshoot of DuPage County's Stream Maintenance Program. The Stream Maintenance Program financially supplemented County approved stream bank stabilization projects, with potentially 100% of costs for Design Solution Reports and up to 20% of construction costs being recouped. This program has had great success using bioengineering techniques to restore severely eroded stream banks back to healthy, vegetated side slopes.

Measurable Goal(s), including frequencies:

Within the last few years, DuPage County has received several requests to participate in projects where the goal was to improve water quality, but stream bank stabilization was not necessarily the desired solution. Such projects include wetland creation, storm sewer day lighting, and in-stream animal habitat enhancement. In order to encourage the implementation of similar projects in the future, the County found it necessary to expand the only program that addressed water quality concerns, the Stream Bank Stabilization Program, into the Water Quality Improvement Program.

Additional Public Involvement:

- DuPage River Summit provides information on issues pertaining to waterways in DuPage County, sponsored by The Conservation Foundation.
- Wetland plant identification course, taught by Dr. Robert Mohlenbrock sponsored by DuPage County.
- IWEER- Wetland Delineation Training Course. IWEER stands for Institute of Wetland & Environmental Education & Research.
- Winter Plant identification course.
- Installation of signage surrounding County owned properties. These signs serve as information in the field to inform people regarding the dangers of illegal dumping and mowing of County owned property.
- Participation in Household Hazardous Waste Program. Mobile events provide materials that inform residents regarding proper disposal of these materials. Household hazardous waste drop off events enable residents to safely dispose of common household waste such as oil, paint, and batteries in an environmentally safe manner.
- DuPage County Adopt-A-Stream Program is a volunteer program available to citizens and volunteer groups to keep our streams clean by removing debris and trash in and along our waterways, planting vegetation, and/ or monitoring the quality of water. Volunteer groups select a section of the stream and go out twice a year to remove debris from the stream and along the over banks.
- The DuPage River Coalition aims to increase awareness of the DuPage River Watershed in those who live in it and improve the river water's quality through the active involvement of the community. The DuPage River Coalition goals are:
 - Improve the community's understanding of what a watershed is, why a healthy watershed is important, and how their actions affect the watershed.

- Improve the water quality through the reduction and elimination of non-point and point sources of pollution.
- Integrate watershed protection issues into land use planning and development practices.
- Protect, restore and link natural areas throughout the watershed.
- Promote the recreational opportunities of the watershed.

Milestones:

Year 1: Continue to provide funding to the water quality and stream maintenance programs. In addition to programs which incorporate public involvement. Continue sponsorship of Wetland Identification Class and continued maintenance of signage at County owned properties. Continue funding for Household Hazardous Waste Program.

Years 2-5: Continue support for programs while also reviewing potential public involvement programs and their feasibility.

Illicit Discharge Detection and Elimination

BMP No. C.1 Storm Sewer Map Preparation

Brief Description of BMP:

DuPage County is required to produce a map showing the locations of all MS4 outfalls and the location of all waters of the United States that receive discharges from those outfalls.

Over the last five year, DuPage County utilized a number of different methods to create a countywide outfall map. Beginning in the summer of 2005, DuPage County had interns map the known storm sewer systems managed and maintained by DuPage County. At this time, the County also requested outfall information from all the cooperating permit holders. The locations of all known MS4 outfalls were input into a GIS database. This was done throughout DuPage County. DuPage County acquired this information in a number of ways. An outfall reconnaissance was done on the three main rivers within DuPage County: West Branch DuPage River, East Branch DuPage River, and Salt Creek. DuPage County staff used GPS units to denote all outfalls encountered along the rivers. All outfalls were identified, even non MS4 outfalls. DuPage County believes all outfalls are possible contributors and felt more data would only enhance the program. The field crews also recorded information about the outfall and took pictures of each outfall. The other 56 watersheds within DuPage County were mapped a number of different ways. Parts of some were physically visited. DuPage County requested outfall data from all the municipalities within the county. This information was reviewed and the municipal outfalls were added to the master outfall database using GIS. Old storm sewer information DuPage County had developed was also used to locate and map outfalls. Staff from DuPage County also located some outfalls after talking with private consultants. DuPage County is currently scheduling meetings with all cooperating permit holders to review the outfalls in the countywide database. The result of this process will be a comprehensive countywide outfall database.

DuPage County has written procedures as to how new outfall and storm sewer information will be incorporated into the GIS database. DuPage County will manage the countywide outfall database. The storm sewer network information for each cooperating permit holder will be housed in a geodatabase, with each cooperating permit holder being responsible for giving DuPage County their storm sewer information. The individual storm sewer networks will be housed separately.

Measurable Goal(s), including frequencies:

As the monitoring portion of the illicit discharge detection and elimination program begins DuPage County staff will verify the accuracy of the outfall database created during the first five years. A measurable goal for this

BMP will be how many updates are received from the cooperating permit holders. The success of the original outfall mapping effort will be measured by how many outfalls were incorrectly included in the database and how many others are found that were not identified during the first permit cycle.

Milestones:

Year 1: Coordinate the exchange of outfall and storm sewer network information. Field inspectors will verify the locations of the outfalls identified during the first permit cycle as they monitor the outfalls for illicit discharge.

Year 2: Incorporate new outfall and storm sewer information into the GIS database. Field inspectors will continue to verify the locations and attribute information of the outfalls within the GIS database.

Year 3: Incorporate new outfall and storm sewer information into the GIS database. Field inspectors will continue to verify the locations and attribute information of the outfalls within the GIS database.

Year 4: Incorporate new outfall and storm sewer information into the GIS database. Field inspectors will continue to verify the locations and attribute information of the outfalls within the GIS database.

Year 5: Incorporate new outfall and storm sewer information into the GIS database. Field inspectors will continue to verify the locations and attribute information of the outfalls within the GIS database.

BMP No.C.2 Regulatory Control Program

Brief Description of BMP:

As part of the original notice of intent DuPage County indicated it would coordinate stakeholder meetings to evaluate the procedures and methods for completing the regulatory component of the IDDE control measure. DuPage County did indeed create a water quality stakeholder group that met monthly throughout the first five years of the permit. This workgroup addressed the issues necessary to move forward with an IDDE program. The topics discussed at this smaller workgroup were presented to the municipal engineers group periodically. The group discussed the overall structure of the program, i.e. countywide versus individual IDDE programs throughout the County. The group also discussed the outfall mapping process, how to coordinate the efforts of the cooperating permit holders, how to establish monitoring protocols and investigative procedures, and the structure of the countywide ordinance.

DuPage County has developed an IDDE ordinance. The adoption of the ordinance will coincide with the adoption of the overall countywide IDDE program. DuPage County anticipates submitting the IDDE ordinance to the Stormwater committee at the April meeting. There will be a 30 day public review period. DuPage County anticipates the ordinance being adopted by July, 2008. At that point, the cooperating permit holders will have until the end of 2008 to adopt the DuPage County ordinance or submit their own ordinance to the IEPA.

Measurable Goal(s), including frequencies:

The success of this BMP will be measured by the number of outfalls that are identified and fixed, the success of the collaboration efforts between DuPage County and the cooperating permit holders, and the IDDE ordinance withstanding any legal challenges. DuPage County will revise the ordinance as needed.

Milestones:

Year 1: Adopt the Countywide Illicit Discharge Detection and Elimination ordinance. Begin coordinating administrative duties each cooperating permit holder is responsible for.

Year 2: Review the effectiveness of the program by evaluating how well the cooperating permit holders have communicated and exchanged information.

Year 3: Review the effectiveness of the program by evaluating how well the cooperating permit holders have communicated and exchanged information. Review the IDDE ordinance and make any changes deemed necessary.

Year 4: Review the effectiveness of the program by evaluating how well the cooperating permit holders have communicated and exchanged information.

Year 5: Review the effectiveness of the program by evaluating how well the cooperating permit holders have communicated and exchanged information.

BMP No.C.3 Detection/Elimination Prioritization Plan

Brief Description of BMP:

DuPage County has begun developing a detection and elimination prioritization plan. The underpinnings of this plan are the locations of the MS4 outfalls. The location of all the MS4 outfalls within DuPage County is being finalized. The parameters that will be used to develop the prioritization plan are being developed by DuPage County and their IDDE consultant. DuPage County did not develop a prioritization plan during the first permit cycle. The process of collecting outfalls was given priority as those locations and numbers are essential to creating a prioritization plan. Now that the outfall map is almost complete, the prioritization plan will be the next step.

DuPage County will implement the procedures for creating the prioritization plan. Once the prioritization plan has been developed, DuPage County will use that plan to coordinate the monitoring of MS4 outfalls.

Measurable Goal(s), including frequencies:

The success of the prioritization plan will be measured by the number of illicit discharges that are detected. The point of the prioritization plan is to anticipate the areas in which one would expect to see the highest number of illicit discharges. The detection plan should help locate the major illicit discharges present within the system. The number of outfalls screened will be recorded and all information obtained during the screening process will be documented in the GIS database.

Milestones:

Year 1: The prioritization plan will be applied to the existing MS4 outfall database. The results of this plan will be used to set which outfalls will be monitored and when. DuPage County will begin monitoring outfalls that have been identified during the prioritization process.

Year 2: Priority outfalls will continue to be monitored.

Year 3: Priority outfalls will continue to be monitored.

Year 4: A review of the results from the first three years of monitoring will be done. The procedures that were laid out for prioritization will be repeated on all outfalls that have been added to the outfall database since the last prioritization plan was developed.

Year 5: Priority outfalls will continue to be monitored.

BMP No.C.4 Illicit Discharge Tracing Procedures

Brief Description of BMP:

DuPage County has contracted with a consultant to write a technical guidance portion of the IDDE program. The technical guidance chapter will outline the procedures for monitoring outfalls and guidance on how best to trace any illicit discharges through the storm sewer system. During the first permit cycle DuPage County staff did not develop a document outlining the tracing procedure protocols but will have this task accomplished by the time the IDDE ordinance is adopted. The tracing procedures will address the most common types of investigations that would be done to locate an illicit discharge. DuPage County staff realizes the difficulties that have arisen throughout the country when trying to locate an illicit discharge. Therefore, the tracing techniques detailed in the technical guidance chapter are only some of the ways in which illicit discharges can be traced.

Measurable Goal(s), including frequencies:

The effectiveness of the tracing procedures developed by DuPage County will be reviewed throughout the permit cycle. As illicit discharges are discovered, County staff will perform an annual review on all the illicit discharges located and determine what methods have been the most successful. The tracing procedures will be subject to modification if one procedure shows to be a substantially more effective means of locating a discharge. DuPage County will record the number of discharges traced and the methods used to locate each discharge. These records will be reviewed so efforts can be made to use the most effective tracing methods when a discharge is discovered.

Milestones:

- Year 1:** Begin monitoring MS4 outfalls. Once illicit discharges are detected, the protocols set forth in the technical guidance chapter will be followed. Review the status of all illicit discharges discovered.
- Year 2:** Continue tracing any illicit discharges detected. Make recommendations as to which tracing methods have proven to be the most effective.
- Year 3:** Continue tracing any illicit discharges detected. Review the outcome of the illicit discharges that were detected the previous year.
- Year 4:** Continue tracing any illicit discharges detected. Review the outcome of the illicit discharges that were detected the previous year.
- Year 5:** Continue tracing any illicit discharges detected. Review the outcome of the illicit discharges that were detected the previous year.

BMP No.C.5 Illicit Source Removal Procedures

Brief Description of BMP:

The DuPage County IDDE ordinance will provide the necessary legal structure to provide the permit holder the authority to remove the source of an illicit discharge. This measure is being written into the DuPage County IDDE ordinance and will be tested when an illicit discharge has been detected. The goal of this BMP is to ensure that the permittee has the authority to remove discharges when discovered. In addition, DuPage County will review the methods utilized by the cooperating permit holders and itself to determine what measures have been most successful at removing illicit discharges.

Measurable Goal(s), including frequencies:

DuPage County staff will measure the success of this BMP by reviewing how many illicit discharges were detected, discovered, and subsequently removed. If there are instances where an illicit discharge was detected but the permit holder was not legally able to remove that discharge the removal procedure process will have to be modified. DuPage County will continually review the most effective removal procedures and convey this information to the cooperating permit holders.

Milestones:

- Year 1:** Begin monitoring MS4 outfalls. Once illicit discharges are detected, the protocols set forth in the technical guidance chapter will be followed. Review the status of all illicit discharges discovered.
- Year 2:** Continue tracing any illicit discharges detected. Make recommendations as to which tracing methods have proved the most effective.
- Year 3:** Continue tracing any illicit discharges detected. Review the outcome of the illicit discharges that were detected the previous year.
- Year 4:** Continue tracing any illicit discharges detected. Review the outcome of the illicit discharges that were detected the previous year.

Year 5: Continue tracing any illicit discharges detected. Review the outcome of the illicit discharges that were detected the previous year.

BMP No.C.6 Program Evaluation and Assessment

Brief Description of BMP:

DuPage County staff will review the IDDE program on an annual basis. The review will focus on the effectiveness of the program and recommendations will be made to the Storm Water Management Committee when staff believes changes should be made to the program. A review of the program is an essential step that will allow DuPage County to modify the IDDE program as it is needed.

Measurable Goal(s), including frequencies:

The success of this BMP will be measured by the number of reviews performed. If the program is successful, and there are no recommendations calling for any changes to the program, this step will have afforded staff the opportunity to learn from the successes of the program. The IEPA will include a synopsis of the program changes recommended as part of the annual review.

Milestones:

Year 1: Develop a procedure for evaluating the IDDE program.

Year 2: Review year one of the IDDE program and report the results to the Storm Water Management Committee.

Year 3: Review the IDDE program from the previous year and report the results to the Storm Water Management Committee.

Year 4: Review the IDDE program from the previous year and report the results to the Storm Water Management Committee.

Year 5: Review the IDDE program from the previous year and report the results to the Storm Water Management Committee.

BMP No.C.7 Visual Dry Weather Screening

Brief Description of BMP:

DuPage County will begin dry weather screening in the summer of 2008. The MS4 outfall database that DuPage County developed with the cooperating permit holders will be the basis for the monitoring program. The prioritization plan DuPage County developed will be used to create a screening schedule. The outfalls that have the greatest potential for illicit discharges will be the first to be screened. DuPage County staff will perform dry weather screening throughout DuPage County. The protocols that will be adhered to while performing the dry weather screening will be part of the technical guidance chapter of the IDDE program. DuPage County plans on providing training for its employees and employees of the cooperating permit holders. These training sessions will provide the training necessary for all field staff to detect, report, and remove discharges.

Measurable Goal(s), including frequencies:

DuPage County will keep track of all MS4 outfalls that have been monitored during dry weather. The dry weather screening program will evolve as problem areas are discovered. The eventual goal is to visit all MS4 outfalls within DuPage County.

Milestones:

Year 1: Begin dry weather screening in the summer of 2008. The screening will begin with the outfalls that have the most potential for illicit discharge.

Year 2: Continue to dry weather screen throughout the year.

Year 3: Continue to dry weather screen throughout the year.

Year 4: Continue to dry weather screen throughout the year.

Year 5: Continue to dry weather screen throughout the year.

BMP No.C.8 Pollutant Field Testing

Brief Description of BMP:

The technical guidance document that DuPage County is developing will address the pollutants that will be tested for when a dry weather flow is detected. The list of tests that may be done when a discharge is detected will not be exhaustive but only provide guidance as to what tests, at a minimum, should be done at each site. The protocols for taking each sample and handling the samples will be outlined in detail. The consultant working on the technical guidance portion of the IDDE program will be making recommendations as to when dry weather flow should be tested and when it shouldn't. We will be setting trigger levels for the pollutants being tested for. These trigger levels will be the basis for when tracing up the system is warranted.

Measurable Goal(s), including frequencies:

Once dry weather flow has been tested for pollutants a decision will be made as to what further action should be taken. The pollutant field testing portion of the program will be set up so that tracing efforts are undertaken only when certain trigger levels are met. The trigger levels will be open to change as the program develops. This BMP will be measured by the number of illicit discharges that are located after testing has been done. If field testing continually results in DuPage County staff investigating the storm sewer system but never finding the source of the discharge, the levels will have to be modified.

Milestones:

Year 1: Begin dry weather screening in the summer of 2008. Pollutant field testing will be done when warranted.

Year 2: Continue to test for pollutants during the dry weather survey.

Year 3: Review the results of the pollutant field tests and make recommendations as to what chemicals seem to pose the greatest threat within DuPage County.

Year 4: Continue to test for pollutants during the dry weather survey. Test for additional chemicals if the program review warrants such action.

Year 5: Continue to test for pollutants during the dry weather survey.

Construction Site Runoff Control

BMP No.D.1 Regulatory Control Program

Brief Description of BMP:

DuPage County adopted and implemented a Countywide Storm Water and Floodplain Ordinance (Storm Water Ordinance) in 1991, which has been updated five times since the last NOI was issued in February 2002, most recently in February 2006. The Storm Water Ordinance promotes effective, equitable, acceptable and legal Storm Water management measures. In addition to the regulations set forth in the Storm Water Ordinance, the DuPage County Building Code (Article I, Section 8-128 and Section 8-129 Grade Regulations and Landscape Regulations) also sets forth guidelines and regulations for all developments, large or small within the County of DuPage. All communities within DuPage County (except two which have opted out to other counties) have adopted and are required to enforce the minimum requirements in the Storm Water Ordinance. Communities

may enforce the regulations themselves or opt to have DuPage County regulate and enforce them on their behalf.

Measurable Goal(s), including frequencies:

The Storm Water Ordinance was revised in February '06 to reflect changes to the sediment and erosion control provisions. However, updating Technical Guidance Appendix E was not completed due to lack of staffing and lack of funds. Updating Appendix E will resume in the new permit, beginning with the inclusion of the DuPage County Water Quality Best Management Practices Technical Manual (BMP Manual).

Milestones:

Year 1: Adopting the DuPage County Water Quality Best Management Practices Technical Manual (BMP Manual) into Appendix E.

Year 2: Adopt updated Stormwater Ordinance to implement changes that incorporate the DuPage County Water Quality Best Management Practices Technical Manual (BMP Manual).

Year 3-5: DuPage County will continue to update the Storm Water Ordinance on a regular basis in order to keep up local and national regulations while implementing appropriate best management practices to lower quantities of pollutants from ending up in out waterways and drinking water.

Year 1-5: The County would also like to increase education and training for staff and municipalities in order to promote consistent and effective regulations throughout the county.

BMP No. D.2 Erosion and Sediment Control BMPs

Brief Description of BMP:

The DuPage County Water Quality Best Management Practices Technical Manual (BMP Manual) provides guidance on the design and implementation of development practices that prevent storm water quality degradation and enhance the overall quality of storm water. The BMP manual promotes and gives guidelines on the installation of vegetated filter strips, vegetated swales, infiltration systems, permeable pavers, manufactured structures, and storm water detention BMPs such as dry detention basins, wet detention basins, constructed wetland detention basins and underground detention basins. DuPage County also requires the sediment and erosion control plan for all developments to be designed using the standards of the "Procedures and Standards for Urban Soil Erosion and Sedimentation Control in Illinois" (Blue Book), unless the Storm Water Ordinance is more restrictive, before a building permit will be issued for the proposed work.

Measurable Goal(s), including frequencies:

Updating Appendix E to include the BMP Manual was not completed during the previous permit; however the BMP Manual will be completed and adopted into Appendix E during this permit period.

Milestones:

Year 1-2: The County would like to conduct a series of presentations and seminars that would educate and guide the municipalities within DuPage County on how to regulate the BMP Manual. This would ensure the BMP Manual would be regulated consistently countywide.

Year 2-3: Ensure staff has professional ability and appropriate certifications (when necessary) to review and inspect the guidelines of the BMP Manual.

Year 3-5: Continue to educate staff on the evolving regulations by offering and attending training programs and seminars.

BMP No. D.4 Site Plan and Review Procedures

Brief Description of BMP:

The DuPage County Department of Economic Development (EDP) requires a storm water permit for all developments of 5,000 square feet or greater, developments that affect a wetland or wetland buffer area, or developments within a floodplain to ensure that there are no adverse impacts as a result of the development. Permits that meet the above mentioned thresholds are reviewed by three separate groups within EDP: Engineering, Wetland, and Drainage to ensure that the proposed development meets all of the requirements specified in the Storm Water Ordinance. A central administrator distributes the permits for review and logs the application into a tracking system (Govern *see Annual Report*). The administrator combines all staff reviews and forwards all comments to the applicant. All staff comments must be resolved before a Stormwater permit will be issued for a development. All information regarding the permit is stored within Govern, including all reviews, inspections, and complaints.

Measurable Goal(s), including frequencies:

DuPage County has developed and maintained a successful regulatory permitting program and will continue to implement and update the program as necessary. Monthly meetings with a group of Countywide Storm Water Administrators (Municipal Engineers) to discuss ordinance related issues ensures the Storm Water Ordinance is implemented consistently, fairly and effectively throughout the County. The Municipal Engineers group will continue to meet during the next permit period.

Milestones:

Year 1: Adopting the DuPage County Water Quality Best Management Practices Technical Manual (BMP Manual) into Appendix E.

Year 2: Adopt updated Storm Water Ordinance to implement changes that incorporate the DuPage County Water Quality Best Management Practices Technical Manual (BMP Manual).

Year 3-5: DuPage County will offer staff training opportunities where they will be able to review and learn new methods of their evolving fields.

BMP No. D.5 Public Information Handling Procedures.

Brief Description of BMP:

DuPage County maintains an “open” relationship with the public. The County frequently publishes informational brochures and other documents to educate the general public on the importance of the preservation of our natural resources. Questions and/or complaints about proposed and existing developments in DuPage County are received, by Staff is available to field questions and concerns about developments. If staff is unable to answer the public concerns about proposed development, there opportunity to file a FOIA is also available to the public.

There is the opportunity for the public to schedule and attend pre-application meetings with county staff to review any concerns about a proposed development. DuPage County has also established a database to track drainage complaints from the public and generates work orders through its CityWorks software in order to begin to resolve those issues.

Measurable Goal(s), including frequencies:

Continue to improve and update the Public Outreach Program by integrating new programs and tools to aide the public with knowledge and understanding County Policy and services.

Milestones:

Year 1: Adopting the DuPage County Water Quality Best Management Practices Technical Manual (BMP Manual) into Appendix E.

Year 2: Adopt updated Stormwater Ordinance to implement changes that incorporate the DuPage County Water Quality Best Management Practices Technical Manual (BMP Manual).

Year 3: Implementation of an interactive informational Kiosk for public usage.

Year 1-5: Continue to field public concerns about proposed developments and implement their concerns in the Stormwater Permit review of the proposed development. Continue to update County website with ongoing activities and policies.

BMP No. D.6 Site Inspection/ Enforcement Procedures**Brief Description of BMP:**

After a Stormwater permit has been issued for a proposed development in DuPage County, staff conducts site inspections to ensure the project has complied with the issued permit. The site must maintain the proper sediment and erosion control throughout the construction period. If sediment and erosion control has not been maintained on a site, the County will issue a "Red Tag", which is a warning to the developer that the issue must be resolved within ten working days and pay a \$75 fine. At the end of the ten-day period, if the complaint has not been resolved, the development is issued a Stop Work Order. All work must cease until resolution has been achieved. EDP inspection staff are issued laptop computers that are equipped with the Govern program, and allows inspectors to verify that on-going work has acquired the necessary permits. Work completed with out a permit will be issued a "Red Tag" and must be brought into compliance with the most current Stormwater Ordinance standards.

Measurable Goal(s), including frequencies:

DuPage County has implemented the Govern program to ensure all development and projects have acquired the necessary permits.

Milestones:

Year 1-5: Ensure staff has proper qualifications to conduct site inspections with respect to sediment and erosion control.

Year 1-5: Continue to offer employee training on site inspections.

Year 3: Issue more laptop computers to more staff members to ensure developed sites have obtained the proper permits to ensure the site is in compliance with the Storm Water Ordinance.

Post Construction Runoff Control**BMP No.E.2 Regulatory Control Program****Brief Description of BMP:**

Post construction runoff is limited through the Stormwater Ordinance which requires all developments over 25,000 square feet of development area to detain storm water and runoff with a restricted release rate. The Stormwater Ordinance requires that all basins are planted with native plantings, which have a three year monitoring period, inspected annually (minimum) by County staff.

The Storm Water Ordinance also addresses site redevelopment through a program called SERZ. SERZ is "storm water economic redevelopment zone".

The purpose of SERZ is to assist highly impervious sites when redevelopment is proposed, where providing the full amount of detention is not practicable and the Detention Variance Fees discourage redevelopment. Also, SERZ is a standard used when applying for a variance under Section 15-114, effectively leveling the playing field by providing a minimum standard for approving variances for these developments, where there were no minimum standards under the previous ordinance.

Measurable Goal(s), including frequencies:

Continuing to regulate the Stormwater Ordinance will reduce post construction runoff pollutants. Implementing and regulating the BMP Manual will reduce post construction runoff pollutants and will ensure discharge from developed sites will be treated.

Milestones:

Year 1: Adopting the DuPage County Water Quality Best Management Practices Technical Manual (BMP Manual) into Appendix E.

Year 2: Adopt updated Storm Water Ordinance to implement changes that incorporate the DuPage County Water Quality Best Management Practices Technical Manual (BMP Manual).

Year 3-5: DuPage County will offer staff training opportunities where they will be able to review and learn new methods of their evolving fields.

BMP No. E.3 Long Term O&M Procedures

Brief Description of BMP:

The DuPage County Water Quality Best Management Practices Technical Manual (BMP Manual) provides guidance on the design and implementation of development practices that prevent storm water quality degradation and enhance the overall quality of storm water. The methods outlined in the manual will be required to be in an easement that will be monitored over a three-year period to ensure the easement is maintained.

Measurable Goal(s), including frequencies:

Currently, the Stormwater Ordinance requires all major and minor storm water facilities be put into an Easement that has a three to five year maintenance and monitoring period. The revision and update to the Stormwater Ordinance to include the BMP updates will require all BMPs be put into an easement. All permanent BMPs on a proposed plan will have to include maintenance and monitoring plan for the BMPs.

Milestones:

Year 1: Adopting the DuPage County Water Quality Best Management Practices Technical Manual (BMP Manual) into Appendix E.

Year 2: Adopt updated Storm Water Ordinance to implement changes that incorporate the DuPage County Water Quality Best Management Practices Technical Manual (BMP Manual).

Year 3-5: Continue to enforce the Storm Water Ordinance.

BMP No. E.4 Pre-construction Review of BMP Designs

Brief Description of BMP:

DuPage County currently requires the sediment and erosion control plan for all developments to be designed using the standards of the “Procedures and Standards for Urban Soil Erosion and Sedimentation Control in Illinois” (Blue Book), unless the Stormwater Ordinance specifies more restrictive controls. Staff reviews the BMP designs during the permit process.

Measurable Goal(s), including frequencies:

The DuPage County Water Quality Best Management Practices Technical Manual (BMP Manual) provides guidance on the design and implementation of development practices that prevent storm water quality degradation and enhance the overall quality of storm water. The BMP manual promotes and gives guidelines on the installation of vegetated filter strips, vegetated swales, infiltration systems, permeable pavers, manufactured structures, and storm water detention BMPs such as dry detention basins, wet detention basins, constructed wetland detention basins and underground detention basins.

Milestones:

Year 1: Adopting the DuPage County Water Quality Best Management Practices Technical Manual (BMP Manual) into Appendix E.

Year 2: Adopt updated Storm Water Ordinance to implement changes that incorporate the DuPage County Water Quality Best Management Practices Technical Manual (BMP Manual).

Year 3-5: DuPage County will offer staff training opportunities where they will be able to review and learn new methods of their evolving fields.

BMP No. E.5 Site Inspections During Construction

Brief Description of BMP:

EDP continually inspects sites under construction to ensure sediment and erosion control is maintained throughout the site. Any sediment discharge leaving the site is immediately addressed by EDP staff and may result in a “Red Tag”. If the discharge issue is not resolved in a timely manner, a STOP WORK ORDER will be issued until resolution.

Measurable Goal(s), including frequencies:

During this five-year permit phase, EDP intends on all inspection staff on recognizing inappropriate construction site discharge and proper regulatory procedures for amending the violation. Incidents of Non-Compliance may be issued for a site if the infraction is serious enough.

Milestones:

Year 1: Adopting the DuPage County Water Quality Best Management Practices Technical Manual (BMP Manual) into Appendix E.

Year 2: Adopt updated Storm Water Ordinance to implement changes that incorporate the DuPage County Water Quality Best Management Practices Technical Manual (BMP Manual).

Year 3-5: Staff Training on recognizing inappropriate discharge from a construction site.

Year 2: Increase the frequency of site inspections during construction to a biweekly frequency.

BMP No. E.6 Post Construction Inspections

Brief Description of BMP:

Post Construction sites are required to submit As-built permit applications to ensure the project has met all requirements of the original permit. The As-built certification must be signed off before occupancy of a site may take place. Engineering Staff, Wetland Staff and Drainage Staff to ensure the site meets full compliance complete inspections. Wetland Staff will also continue inspections to ensure native planting areas and wetland mitigation areas are maintained for up to five years beyond the time of construction completion.

Measurable Goal(s), including frequencies:

Update the Storm Water Ordinance to include the BMP Manual. The BMP manual will require all BMPs to be put into a Natural Area Easement that will be monitored for three years after construction is completed.

Milestones:

Year 1: Adopting the DuPage County Water Quality Best Management Practices Technical Manual (BMP Manual) into Appendix E.

Year 2: Adopt updated Storm Water Ordinance to implement changes that incorporate the DuPage County Water Quality Best Management Practices Technical Manual (BMP Manual).

Year 3-5: Continue to offer employee training on site inspections.

Pollution Prevention/Good Housekeeping

BMP No. F.1 Employee Training Program

Brief Description of BMP :

The permit requires employee training to prevent and reduce storm water pollution from activities such as park and open space maintenance, fleet and building maintenance, operation of storage yards, snow disposal, new construction, land disturbances, and storm water system maintenance. Training topics can be on regular street sweeping, reduction in the use of pesticides or street salt, or catch basin cleaning practices. The MS4 permit holder can use training materials that are available from the EPA, their State or Tribe, or relevant organizations.

Staff at DuPage County's Divisions of Transportation (DuDOT) and Public Works have been trained in areas of good housekeeping and pollution prevention through in-house staff training and the attendance at various seminars and classes

Discussions related to pollution prevention and good housekeeping practices training will continue to take place at the Water Quality Stakeholders Meetings. The Water Quality Stakeholders Group will have discussions on the most appropriate methods for training employees at the County and its municipal facilities in areas of good housekeeping and pollution prevention procedures to prevent and reduce pollutant discharges into storm water to the maximum extent practicable from maintenance and operation activities of open spaces, buildings, construction and land disturbances, waste disposal and storm water systems. Topics discussed at the meetings will be shared with the Department of Public Works, DuPage Division of Transportation and Municipal Engineers.

Measurable Goal(s), including frequencies (review of first permit):

The Department of Public Works staff attended various training seminars on topics such as appropriate concrete pipe installation and inspection and an Annual Illinois Association of Flood Plain Managers seminar where NPDES and best management topics were discussed. In addition, staff at the Public Works waste water treatment facilities have attend various training seminars at the Environmental Resource Training Seminar (ERTC) at Southern Illinois University on the topics of preliminary, secondary, and tertiary water treatment procedures, activated sludge, and biosolids for continuing education. The staff at the waste water treatment plants also takes semester classes at the College of DuPage and the Joliet Junior College on design operation and maintenance, biosolid disposal and application, chemistry, biology, waste water treatment and collection systems to become licensed and receive state certification on waste water treatment. There is also safety training at the plants and on-going in-house training performed by senior operators for new operators.

DuDOT staff has attended Association of Public Works (APWA) training classes focusing on street sweeping and storm water runoff issues, vegetation, as well as transportation topics such as Winter Maintenance courses.

DuDOT staff is also trained in-house by more experienced staff on appropriate catch basin cleaning and street sweeping procedures. On occasion, businesses and vendors train the DuDOT staff on the proper usage of new equipment when a new product comes on the market such as the Stormceptors. DuDOT Maintenance managerial staff attended a training workshop at the University of Wisconsin for Managing Snow and Ice Control Operations. DuDOT staff also participates in a training program through the Illinois Technology Transfer Center funded by the Federal Highway Administration and individual state departments of transportation. The purpose of the training program is to transfer the latest technology in the areas of roads and bridges to transportation personnel. Some of the courses offered through this transfer-training program are Bridge Construction Inspection, Construction Material Inspection Documentation, Culvert Hydraulics, Pavement Construction Inspection, Reclaimed Asphalt Pavement (RAP) for Local Agencies, OSHA 10-Hour Construction, and Safety Inspection of In-Service Bridges.

The pollution prevention good housekeeping training workshop was not completed in the previous permit due to staffing issues and time constraints, but will be completed in Year 1 of the new permit. The Water Quality Stakeholders group will continue to meet to discuss proper training procedures and implementation on good housekeeping and pollution prevention for appropriate supervisory and/or management employees on: building and open space maintenance, vehicle/fleet maintenance, materials storage and disposal, infrastructure inspection and maintenance, construction and land disturbances and waste disposal. The water quality discussions will aim to assist supervisors and/or managers with providing guidance to their employees with the appropriate training/information based on their needs. The pollution prevention Water Quality Stakeholder discussions will be shared with Public Works, DuDOT and the Municipal Engineers for collaborative efforts with the on-going pollution prevention training of County staff.

Milestones:

Year 1: A good housekeeping pollution prevention workshop will be conducted by The Conservation Foundation for staff, municipal employees, grounds maintenance and landscaping field staff, and field staff managers that target Public Works and Transportation Departments. Copies of the power point presentation from this good housekeeping training seminar will be distributed through our County website to continue educating staff that does not attend the seminar. It will also provide information to the general public on pollution prevention best management practices. Attendees will be asked to complete a session evaluation as well as submit suggestions for improvements.

Year 2: Improve communications between County agencies including Storm Water Management, Public Works, and Division of Transportation in order to run the good housekeeping pollution prevention program more effectively.

Year 3: Continue organizing training sessions, develop procedures and decide appropriate personnel to attend. Notify appropriate personnel of training sessions as well as posting information in other visible locations such as the County intranet site and facilities' bulletin boards.

Year 4: Conduct another pollution prevention employee training session, targeting those that were unable able to attend the previous session and new hires. Post a power point presentation of the training on the County's website. Record attendees and ask them to complete a session evaluation as well as submit suggestions for program improvements. Collect records of employee training conducted in-house and encourage them to document any other methods of on-going training within their facility.

Year 5: Evaluate the procedures for effectiveness and improve training as necessary based on completed session surveys and suggestions. Offer a refresher training session to previous attendees that include updates. Make arrangements for regular training sessions.

BMP No. F.2 Inspection and Maintenance Program

Brief Description of BMP:

The ILR40 NPDES permit requires that an operation and maintenance program be developed and implemented with the goal in mind of preventing or reducing pollutant runoff from municipal operations in the storm sewer system. DuDOT has developed an inspection and maintenance program that includes routine catch basin cleaning and vacuum street sweeping. Public Works has developed a preliminary inspection and maintenance program for inspecting, maintaining and cleaning components of the (MS4) Municipal Separate Storm Sewer. The MS4 system is inspected at least once a year and maintenance is performed as appropriate.

Measurable Goal(s), including frequencies (review of first permit):

The Public Works Department currently inspects and maintains the MS4 systems on an as needed complaint basis, which is tracked by a database program called CityWorks. Public Works will implement a routine preventive maintenance program for long-term maintenance of the MS4 storm sewer system in the future. In addition, Public Works currently has four wastewater treatment plants, which treat the county's sewage and the remnants of sludge from the sewage. The four waste water treatment plants are the Woodridge Green Valley facility at 12 MGD (million gallons per day), Knollwood facility 10 MGD, Nordic facility 0.5 MGD, and a smaller facility near North Avenue and the West Branch DuPage River called the Cascade facility.

The DuPage County Division of Transportation (DuDOT's) maintenance fleet vehicles qualify for an IEPA green fleet status due to their consumption of a biodiesel fuel, which is eighty percent diesel and twenty percent corn. DuDOT also uses the Environmental Roadway Design Practice Manuals as a guideline when constructing and improving roadways to incorporate environmental enhancements and promote good stewardship on a case-by-case basis. DuDOT's catch basins are cleaned approximately once every two years and an outside company cleans the Stormceptors once every two years. DuDOT's highways are swept approximately three times per year and DuDOT owns three vacuum sweepers. DuDOT maintains approximately two hundred and twenty miles of roadway in the County.

DuDOT is currently using, testing and studying the use of an organic deicing super mix of eighty-five percent salt brine, ten percent beet juice and five percent liquid calcium chloride for deicing low-traffic roads, curbs, culverts, bridges, and county parking lots. This super mix of salt brine, beet juice and calcium chloride reduces the amount of salt used thereby protecting the land and aquatic plants, animal life, ground water and eventually the surface water. DuDOT's highway maintenance trucks are also calibrated to reduce the amount of salt sprayed when deicing. The salt used for deicing is kept in an insulated salt dome and the areas surrounding the salt storage are routinely kept clean.

The Storm Water Management Division developed a Stream Maintenance Program to minimize the flooding concerns and maintain the health of the streams within DuPage County. There is currently \$200,000 allocated for funding in the Stream Maintenance Program. As part of the program, stream crews remove sediment, invasive vegetation, trash blockages and other debris to allow the waters from the rivers to flow less polluted and without obstructions downstream during heavy rainfall. Stream bank stabilization projects are additionally funded through the Water Quality Improvement Grant Program. Stabilizing the streams reduces soil erosion thereby reducing runoff pollution to the streams and creates a more natural habitat for fish, plants and wildlife. The stabilization methods most commonly used are bioengineering practices such as the installation of A-Jacks, coconut fiber rolls, vegetated geogrids, and gabions.

Milestones:

Year 1: Improve communications between the DuPage County's Storm Water Management, Public Works Department and Division of Transportation in order to run the good housekeeping pollution prevention program more effectively.

Year 2-5: (milestones are being review and discussed with DuPage County's Public Works Department and Division of Transportation).

Year 1-5: Continue Stream Maintenance program.

BMP No. F.4 Municipal Operations and Waste Disposal

Brief Description of BMP :

The ILR40 permit requires that procedures be developed for properly disposing of waste removed from the separate storm sewers and areas such as dredge spoil, accumulated sediments, floatables, and other debris.

Measurable Goal(s), including frequencies (review of first permit):

The Public Works Department has entered into a design contract with Trotter & Associates to design a Vactor Dump Station for the Woodridge Greene Valley Waste Water Treatment facility and complete engineering plans for the preliminary and final design phases and the bidding of the negotiation phase. The Vactor dump station will be utilized for the proper disposal of Vactor waste.

In addition, the DuPage Division of Transportation (DuDOT) has a highway and vehicle maintenance section that controls the amount of pollutants, which runoff from the construction of roadways, storage yards and deicing practices as well as runoff produced by vehicle washing and repairs. DuDOT regularly recycles their car oil filters and batteries and cremates the remains of the animals found on the roadways.

The County co-hosts a yearly hazardous waste collection event with the IEPA to collect items such as cleaning solvents, oil based paints, fertilizers/pesticides, car batteries, automotive fluids, asbestos, and pool chemicals for proper waste disposal. The County has also compiled a Recycling Resource Guide, and other information about household, landscape and solid waste, which is accessible for viewing through the County website at the following link:

http://www.dupageco.org/building/generic.cfm?doc_id=514.

Milestones:

Year 1: Improve communications between the DuPage County's Storm Water Management, Public Works Department, and DuPage Division of Transportation to run the good housekeeping pollution prevention program more effectively.

Year 2: (milestones are being review and discussed with DuPage County's Public Works Department and Division of Transportation).

Year 3: Complete the construction of a Vactor waste receiving dump station at the Woodridge Greene Valley Waste Water Treatment Facility to treat suspended solids and collect the leachate from the waste by-products to prevent the polluted runoff from going into the streams pending any engineering limitations and delays. The silt and the dried suspended solids from the dump station will be transported to a landfill. County facilities will submit record keeping of pollution prevention and good housekeeping activities for annual reporting.

Year 4-5: (milestones are being review and discussed with DuPage County's Public Works Department and Division of Transportation).

BMP No. F.5 Flood Management/Assess Guidelines

BMP: Watershed Plans/Hydraulic Modeling

Brief Description of BMP:

The DuPage County Stormwater Management Plan assesses and recommends specific corrective actions of localized flooding and water quality degradation through Watershed Plans. A particular watershed plan uses hydrologic and hydraulic models to recommend specific flood control projects as well as identify flood-damaged structures eligible for buyout so that the land can be restored to its natural state. Watershed plans also address water quality enhancements and wetland, wildlife, and environment protection. The County has utilized on-line reservoirs to temporarily hold floodwaters, which have proven successful in reducing downstream flood damages. The County owns and operates reservoirs and related structures to ease flooding during large precipitation events. Standard operating procedures for reservoirs address security concerns such as dumping or inappropriate use through lighting, fences, and limited access roads and trails. Water Quality Enhancements (Appendix J to the Stormwater Management Plan) encourage the creation of buffer zones surrounding storm water basins to prevent contamination from off-site. The County is developing hydrologic and hydraulic models for all watersheds and tributary watersheds for the purpose of: analysis of impacts of proposed development or redevelopment in order to issue storm water management permits; real-time analyses of flood stages for flood control operations; and updates to Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) to reflect current conditions.

Measurable Goals

(Past)

- During the past five years several Watershed Plans were approved by the DuPage County Stormwater Management Committee adopted by the DuPage County Board. Details regarding any of these plans can be found in the annual reports. A summary of those plans follows:
 - Addison Creek Watershed Plan, 2003 (Year 1)
 - River Dumoulin Flood Control Plan, 2004 (Year 2)
 - Rt. 53 North Flood Control Plan, 2004 (Year 2)
 - Upper Des Plaines River Tributaries Watershed Plan, 2004 (Year 2)
 - Kress Creek Watershed Plan, 2005 (Year 3)
 - West Branch DuPage River Watershed Plan, 2006 (Year 4)
 - Spring Brook Creek Watershed Plan, 2006 (Year 4)

(Future)

- Continue to adopt watershed plans for watersheds in DuPage County. Update existing hydraulic models for use in future planning and floodplain mapping efforts.

Milestones:

Years 1 through 5:

- Adoption of the Spring Brook No. 1 Watershed Plan
- Adoption of the St. Joseph Creek Watershed Plan

BMP: DPC Stormwater and Flood Plain Ordinance Updates

Brief Description of BMP:

The DuPage County Countywide Stormwater and Flood Plain Ordinance (Appendix F) was adopted in 1991 and became effective in February of 1992 as part of the DuPage County Storm Water Management Plan that affects all development within the County of DuPage. This is the fundamental regulatory program that requires

all development within the County of DuPage to not "Unreasonably or unnecessarily degrade surface or ground water quality."

Appendix F contains provisions for flood management and assessment guidelines.

The Storm Water Management Plan: Restricts future development in the flood plain to facilities that will not adversely affect flood damage potential or wetland environments. Within the floodway, development will be prohibited unless it involves facilities that enhance flood protection or pollution control; Requires preservation of wetlands to maintain their natural flood control and environmental benefits; Incorporates water quality and habitat protection measures in all storm water management activities within DuPage County; and Requires regular, planned maintenance of storm water management facilities.

The intent of Appendix F is to reduce current and future flood damages by requiring: no permitting of any development that would negatively impact the hydrology or hydraulics of either the flood plain or the floodway; any proposed structure to be at least one foot above the adjacent Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Base Flood Elevation (BFE); any development or redevelopment to provide for storm water detention depending on size and use as described in Appendix F; and no permitting of any development or redevelopment that will increase flood elevations by compensating at the volume of 1.5 to 1 to offset the loss of existing storage, increase flood velocities, or decrease flood conveyance capacity to upstream or downstream properties.

Measurable Goals:

(Past)

- The DuPage County Countywide Stormwater and Floodplain Ordinance was revised five times over the last five years. Details regarding these revisions can be found in the annual reports. A summary follows:
 - March, 2003 (Year 1)
 - January, 2004 (Year 1)
 - July, 2004 (Year 2)
 - March, 2005 (Year 3)
 - February, 2006 (Year 3)

(Future)

- Continue to make revisions to the DuPage County Countywide Storm Water and Flood Plain Ordinance as necessary.

Milestones:

Years 1 through 5: Adoption of the Best Management Practices Guidance Manual along with the ordinance revisions that are associated with this document. Review and revise, as needed, Appendix F and other related appendices.

BMP: Flood Control Projects

Brief Description of BMP:

The construction and operation of flood control projects that incorporate reservoirs help reduce the risk of and often prevent flooding. These reservoirs prevent floodwaters from inundating residential, industrial and business areas where additional pollutants are picked up and distributed to environmentally sensitive areas elsewhere. The storage of floodwaters in reservoirs also provides water quality benefits by promoting the settling of sediments. These areas are often planted with native vegetation that acts as a buffer to the runoff as it enters the reservoir and encourages wildlife habitat. In addition, a couple of our pump-evacuated reservoirs have aeration facilities that aerate the storm water before re-entering the stream system. The Elmhurst Quarry and the Wood

Dale- Itasca Flood Control Facilities are two such facilities along Salt Creek. These aeration sites are very important since the Environmental Protection Agency has listed dissolved oxygen as an impairment in the Salt Creek TMDL report.

Measurable Goals

(Past)

- Several projects were constructed over the past five years, many with water quality features incorporated into them. Details regarding these projects can be found in the annual reports. A list of projects follows:
 - Wood-Dale Itasca Reservoir Construction completed (Year 1). The side slopes and bottom of the reservoir are planted with native vegetation in order to promote enhancements to water quality.
 - Eldridge Park weir modification, 2003 (Year 1). This offline reservoir promotes the settling of sediments.
 - Marion Hills/Dale Road basins constructed, 2003 (Year 1). Both basins are planted with native plantings that enhance the vegetative quality of the area.
 - Marion Hills/Crest Road Basin constructed, 2005 (Year 3). The basin is planted with native vegetation and promotes the settling of sediments from flood waters.
 - Wood-Dale Itasca Operation and Maintenance Improvements contract, 2006 (Year 4)
 - Country Lakes Storm Sewer Improvements, 2007 (Year 5)
 - Deep Over-Wintering Pool, 2007 (Year 5)
 - Vernal Pools, 2007 (Year 5)
 - River Dumoulin Project Phase I pump station construction, 2007 (Year 5). This project is intended to protect residential areas from flooding. This benefits water quality by preventing floodwaters from entering buildings, especially garages, where pollutants like fertilizers and motor oil are stored that could be released during a flood event.

(Future)

- Continue on-going efforts to ease flooding and flood damages to the maximum extent practical.

Milestones:

Years 1 through 5:

- Complete Phase II of the River Dumoulin Project
- Construct the Marion Hills/75th Street Basin Project
- Complete the installation of the Country Lakes Golf Course storm inlet to the new storm sewer system.
- Implement the recommendations in the Springbrook Creek Watershed Plan
- Execute contract that will provide for vegetative maintenance and enhancements at many of the County's existing flood control facilities.
- Construct the Busse Woods Dam Modifications Project.
- Construct the other NOAA projects.
- Construct the Huffman Street project in the Steeple Run Watershed.

BMP: Community Audits for compliance with the DPC Countywide Stormwater and Flood Plain Ordinance

Brief Description of BMP:

Non-waiver, partial-waiver and complete waiver communities are randomly audited over a five-year period by DuPage County regulatory staff in order to check for compliance with the Storm Water Ordinance.

Measurable Goals

(Past)

- Audits were not conducted during the past five years due to budget and personnel cuts in the Department.

(Future)

- Begin to audit non-waiver, partial-waiver and complete waiver communities again in DuPage County for compliance with Appendix F.

Milestones:

Years 1 through 5:

- Randomly audit non-waiver, partial-waiver and complete waiver communities again in DuPage County for compliance with Appendix F.

BMP: Floodplain Mapping using HSPF/FEQ/PVSTATS Methodology

Brief Description of BMP:

Floodplain mapping defines areas that are at risk to flooding. Knowing the boundaries of the floodplain helps to limit the construction of structures in flood risk areas. Limiting such construction can reduce the risk of debris and pollutants, such as fertilizers, gasoline and motor oil from contaminating floodplain areas during flood events.

Measurable Goals

(Past)

- The floodplain mapping of Tributary No. 2 to the East Branch DuPage River and Ginger Creek, a tributary to Salt Creek, was incorporated into the DFIRM map that became effective December 16, 2004. The floodplain maps for these two tributaries were developed using the County's HSPF/FEQ/PVSTATS methodology (Year 2).

(Future)

- Submit floodplain maps using the County's HSPF/FEQ/PVSTATS methodology are to be submitted to FEMA for review and approval. Mandatory review and comment periods will be established by FEMA.

Milestones:

Years 1 through 5:

- Salt Creek main stem and its tributaries including Ginger, Sugar, Oak Brook Tributary, Bronswood Cemetery Tributary, Westwood Creek and Spring Brook.
- Steeple Run Tributary.
- Sawmill Creek Tributary.
- Kress Creek Tributary.
- Spring Brook No. 1 Tributary.
- Armitage Creek Tributary.

BMP: FIRM Updates

Brief Description of BMP:

DuPage County, a Cooperating Technical Partner with FEMA, updated the Flood Insurance Rate Maps (FIRM) on a countywide basis. These maps became effective on December 16, 2004 and are known as the DFIRM. The DFIRM maps will continue to be updated as the County completes floodplain mapping for other watersheds in DuPage County using its HSPF/FEQ/PVSTATS methodology.

Measurable Goals

(Past)

- A Countywide DFIRM map was approved and became effective for DuPage County on December 16, 2004. Dual-county communities can use the flood hazard information shown on these maps for “information purposes only” and cannot use them for flood insurance purposes.

(Future)

- Corrections and updates will be made to the DFIRM maps and the dual-county issues will be resolved.

Milestones:

Years 1 through 5:

- Corrected and updated DFIRM maps will be approved and adopted by FEMA