
CHAPTER 1

AUTHORITY, PURPOSE AND GOALS

1.1 Introduction

Cook County encompasses approximately 946 square miles in northeastern Illinois (Exhibit 1-1). Highly urbanized with over 5.3 million people, it is the second largest county by population in the United States and makes up 43.3 percent of the state's population (2000 U.S. Census). Stormwater management in Cook County has been the responsibility of local, regional, state and federal agencies which have had changing and evolving roles. Recognizing the need for a countywide approach, the Illinois General Assembly enacted Public Act 93-1049 (Chapter 70 of the Illinois Compiled Statutes, Section 2605/7h) in 2004. The statute places countywide responsibility for stormwater management under the supervision of the Metropolitan Water Reclamation District of Greater Chicago (District).

1.2 Organization of the Cook County Stormwater Management Plan

Although the Act provides the District with the authority to develop a countywide stormwater management program, the statute does not specify the content of the program. The District therefore has prepared this Cook County Stormwater Management Plan (CCSMP) to serve as a high level organizational plan wherein the framework for the countywide program is presented. The CCSMP also serves to identify the parameters of the program and its goals. The program will include a spectrum of elements and emphasize implementation of capital projects which will be identified through detailed watershed planning.

The CCSMP is comprised of eight chapters. A summary of each chapter is presented below:

- Chapter 1 describes the statutory authority for the countywide stormwater management program, the purpose of the CCSMP, the program's mission and goals, the role of the Watershed Planning Councils (WPCs), and the absolute minimum requirements for capital improvement projects.
- Chapter 2 describes the existing stormwater management framework in Cook County and the resources available for developing and implementing the countywide program. It describes agencies' authorities and their roles in stormwater management. A description of various ecosystem partnerships, non-profit organizations and volunteer groups is also included.
- Chapter 3 assesses the available stormwater management framework in Cook County to address the implementation needs presented in the CCSMP. A gap analysis based on the goals of this plan is presented to identify additional stormwater management program and activity needs.

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- Chapter 4 summarizes and assesses the current stormwater conditions and stormwater related problems across Cook County.
 - Chapter 5 presents the countywide stormwater management program for Cook County. The chapter covers the functional areas of administration and management, regulation, maintenance, watershed planning, project implementation, and public information. This chapter discusses the program elements that will be prepared under each of the functional areas.
 - Chapter 6 details the watershed planning process that will identify, evaluate and present future stormwater projects. Technical requirements for the preparation of Detailed Watershed Plans (DWP) are set forth. The DWP requirements cover the use of existing or new data, hydrologic and hydraulic modeling, input from WPCs, benefit-to-cost analysis for alternative projects, and procedures for prioritizing capital improvement projects.
 - Chapter 7 focuses on the future regulatory program. The regulatory program will include the development, implementation and enforcement of a countywide Watershed Management Ordinance (WMO). This chapter presents the stormwater management concepts that will be considered when preparing the WMO. These concepts relate to floodplain management, drainage and detention, wetlands and water quality. Concepts covering design alternatives for new development or redevelopment, sensitive sites, pollutant filtering, and Best Management Practices (BMPs) are also discussed. The language of this chapter is intentionally non-committal as the District intends to solicit input from the WPCs, various agencies and other stakeholders prior to deciding what will be regulated and to what extent.
 - Chapter 8 describes the adoption of the CCSMP, the implementation phases, and the CCSMP amendment process. The chapter outlines the process and schedule for preparing the WMO and regulatory program.

1.3 Statutory Background

The Chicago metropolitan area experienced historic flooding in 1986 and 1987, which precipitated the enactment of Public Act 85-905 in 1987. Public Act 85-905 set forth responsibilities for countywide stormwater management in the five collar counties of Cook County (DuPage, Lake, Kane, McHenry, and Will). Under this statute, stormwater management planning committees could be formed and the preparation of countywide stormwater plans, programs, and projects could commence. To provide an equal balance of representation within the stormwater management planning committees, the act stipulated that the committees were to be comprised of equal numbers of municipal and county representatives. Countywide stormwater management planning committees are in place and stormwater management plans have been adopted under the authority granted in Public Act 85-905 for DuPage County in 1989, Lake County in 1990, McHenry County in 1996, Kane County in 1998, and Will County in 1998.

Public Act 86-1463, enacted in 1990, extended the stormwater planning authority into Cook County but did not provide an effective organizational framework or a funding mechanism.

In 2004, the Public Act 93-1049 (Act) consolidated stormwater management in Cook County under the District's direction and provided a funding mechanism. The Act acknowledged the large number of municipalities in Cook County and the existing capability of the District by authorizing the District to provide program leadership with advice from the WPCs through the municipal conferences.

In 2014, Public Act 98-0652 was enacted to amend the District's authority to allow the District to acquire flood-prone properties and to plan, implement, finance, and operate local stormwater management projects where previously only regional projects were authorized.

1.4 Municipal Conferences and Watershed Planning Councils

The Act called for the formation of WPCs for the following six established watersheds of the Chicago Metropolitan area:

1. North Branch Chicago River
2. Lower Des Plaines Tributaries
3. Calumet-Sag Channel
4. Little Calumet River
5. Poplar Creek
6. Upper Salt Creek

The boundaries shown on Exhibit 1-1 delineate the geographical location of the six WPCs.

In addition, the Act calls for the formation of a Combined Sewer Areas Stormwater Management Planning Council. Although the District has not yet formed the Combined Sewer Areas Stormwater Management Planning Council, a public hearing for the CCSMP was held for the Combined Sewer Areas in order to accommodate communities which are not members of the established WPCs for the aforementioned watersheds. Per the Act, municipalities with a population of 1,000,000 or more are exempt from the District's countywide program though they may opt-in through the execution of an intergovernmental agreement between the qualifying municipality and the District. The City of Chicago (City) encompasses a majority of the combined sewer area and is currently developing an intergovernmental agreement for inclusion in the District's program. The content of the intergovernmental agreement will define the City's role in the program. The formation of the Combined Sewer Areas Stormwater Management Planning Council will occur once the City's role is determined.

The WPCs were formed after the passage of the Act to communicate to the District the needs and interests of the public and local governments within Cook County. Pursuant to the requirements of the Act, the WPC membership consists of the chief elected official or designee from each municipality and township within a specific watershed, as well as the Cook County Board President or designee for unincorporated areas.

The Act specifically calls for the WPCs to serve as advisory bodies to the District for the countywide stormwater management program. The WPCs will provide information to the District on issues related to their respective watersheds during development of the DWPs. In addition, the District will give consideration to the recommendations and concerns of the WPCs during development of the WMO. Per the Act, the WPCs may recommend rules and

regulations to the District governing the location, width, course, and release rates of all stormwater runoff channels, streams, and basins in their respective watersheds. The DWP process is described in Chapter 6 and potential parameters of the future regulatory program are described in Chapter 7.

The Act makes provisions for the municipal conferences to assist the District by coordinating the various WPCs. The following relationships have been established:

Northwest Municipal Conference (NWMC) to coordinate:

- Poplar Creek Watershed
- Upper Salt Creek Watershed
- Lower Des Plaines Tributaries Watershed (in cooperation with WCMC)
- North Branch Chicago River Watershed (in cooperation with WCMC)

West Central Municipal Conference (WCMC) to coordinate:

- Lower Des Plaines Tributaries Watershed (in cooperation with NWMC)
- North Branch Chicago River Watershed (in cooperation with NWMC)

Southwest Conference of Mayors (SWCM) to coordinate:

- Calumet-Sag Channel Watershed

South Suburban Mayors and Managers Association (SSMMA) to coordinate:

- Little Calumet River Watershed

1.5 History of Cook County Stormwater Management Plan Development

During legislative deliberations in 2004, the municipalities in Cook County and the District joined efforts to develop what is now Public Act 93-1049. Through the legislative agenda of the existing municipal conferences, the municipalities helped craft the advisory structure outlined in the stormwater management legislation and were instrumental in its 2004 passage. After enactment, the District and the municipalities, primarily through their municipal conferences, initiated the preparation of this document.

The District was selected as the lead agency because of its history of involvement in regional watershed planning, the extensive technical expertise of staff, and its successful implementation of large public works projects involving multiple units and levels of government. The District has worked with federal, state and local governments in the highly successful construction and operation of the Tunnel and Reservoir Plan (TARP) which has been effective in reducing pollution and flooding in the Chicagoland combined sewer area. In addition to TARP, the District has participated in the construction of more than 30 regional reservoirs for flood control purposes, for which the District has various inspection and maintenance roles. The District regularly works with municipal governments in the administration of the District's regulatory program for sanitary sewer construction and sanitary sewer connections.

Throughout 2005, the District's Board of Commissioners, through the Committee on Flood Control, Drainage & Storm Flow, held study sessions during which the municipal conferences provided input on behalf of the WPCs. Organizational meetings for the WPCs were held in October of 2005. The six newly created WPCs each passed two resolutions formalizing the advisory relationship and appointing specific municipal conferences as the primary communication vehicle with the District, and establishing an executive committee for each WPC.

On January 19, 2006, the District's Board of Commissioners adopted a policy setting the absolute minimum requirements for capital improvement projects under the countywide stormwater management program. Prior to adoption, the absolute minimum requirements were discussed by the District's Board of Commissioners and questions were taken from representatives of the Councils of Government (COGs) and WPCs at a study session held on January 10, 2006. After the questions were answered by District staff, there were no objections to any of the proposed requirements, although one item was reworded for clarification. The requirements are listed in Section 1.9 of this chapter and document the District's intent to move quickly toward the construction of stormwater management and flood control projects.

Prepared in 2006, a draft version of the CCSMP was presented to the membership of the WPCs for review. In addition, 7 public hearings were held and a public comment period was provided from August 7, 2006 through October 13, 2006. The CCSMP was then adopted by the District's Board of Commissioners on February 15, 2007. On _____, 20__, the District's Board of Commissioners adopted amendments to the CCSMP to be consistent with P.A. 98-0652.

1.6 Stormwater Management Authority

The Act as amended prescribes requirements and procedures for the development of the countywide stormwater management program. Under the statute, the District has broad authority relating to stormwater management throughout Cook County. This authority is applicable to all of Cook County and is not limited to the District's corporate boundaries.

The Act affords the District additional new authorities and responsibilities, which include the following:

- May plan, manage, implement, and finance activities related to stormwater management in Cook County, in accordance with the adopted CCSMP.
- May use resources of other organizations and agencies, and may provide funding to those organizations on a contractual basis to perform activities related to stormwater management.
- May enter into agreements with other counties for management of stormwater runoff.
- May enter into agreements with units of local government in areas outside the District's corporate boundaries, but within Cook County, to provide stormwater management services.

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- May impose fees on areas outside the District's corporate boundaries, but within Cook County.
 - May assume responsibility for maintaining any stream within Cook County.
 - May enter upon any land or water within the county to inspect stormwater facilities or to remove obstructions to a watercourse.
 - May prescribe rules and regulations by ordinance:
 - For floodplain and stormwater management
 - For governing the location, width, course, and release rate of stormwater runoff channels, streams, and basins in Cook County

These rules and regulations at a minimum shall meet the standards for:

- Floodplain management established by the Illinois Department of Natural Resources – Office of Water Resources (IDNR-OWR)
- Federal Emergency Management Agency (FEMA) for participation in the National Flood Insurance Program (NFIP)
- May petition the circuit court to dissolve existing drainage districts with stormwater management duties if determined to be in the best interest of the taxpayers of Cook County.

District Responsibilities:

- The District shall prepare and adopt by ordinance a countywide stormwater management plan for Cook County.
- The District shall annually report to the public on its activities and expenditures.

The District has taken the following steps towards implementing the Act:

- Levied taxes upon property within its corporate boundaries beginning in 2005 for the countywide stormwater management program.
- Established WPCs for the six established watersheds of Cook County, and given consideration to the recommendations and concerns of the WPCs since their inception.
- Held public hearings on the draft CCSMP and afforded interested persons an opportunity to be heard.

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- Developed Detailed Watershed Plans for the Calumet-Sag Channel, Little Calumet River, Lower Des Plaines River, North Branch of the Chicago River, Poplar Creek, and Upper Salt Creek Watersheds in keeping with the intent of Chapter 6 of this CCSMP.
 - Adopted the Watershed Management Ordinance in keeping with the intent of Chapter 7 of this CCSMP.

1.7 Mission and Purpose

The mission of the countywide stormwater management program is to provide Cook County with effective rules, regulations, and projects that will mitigate stormwater effects on public health, safety, property and the environment. The purpose of the CCSMP is to outline the approach for achieving the mission through the consolidation of stormwater management in Cook County under the leadership and general supervision of the District. The CCSMP provides program goals and outlines a plan for watershed management. The CCSMP will be supported by detailed watershed plans, regulations, technical manuals and appendices, and a capital improvement program.

1.8 Goals

The following goals have been established to support the mission of the countywide stormwater management program:

- Goal A) Protect existing and new development by minimizing the increase of stormwater runoff volume beyond that experienced under predevelopment conditions and by reducing peak stormwater flows.
- Goal B) Identify and remedy existing regional and local flooding problems to the extent feasible.
- Goal C) Establish comprehensive basin plans within each watershed, which quantify, plan for and manage stormwater flows within and among the jurisdictions in those watersheds.
- Goal D) Promote responsible land use practices in all areas of the watersheds of Cook County, particularly within floodplains and floodways.
- Goal E) Establish uniform, minimum, countywide stormwater management regulations while recognizing and coordinating with those stormwater programs effectively operating within Cook County.
- Goal F) Require cooperation and consistency in stormwater management activities between the government entities having stormwater jurisdiction, and clearly define the roles and responsibilities of each entity.

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- Goal G) Coordinate with surrounding counties to ensure minimal negative impacts of inter-county stormwater runoff flows.
- Goal H) Coordinate with watershed councils to provide for the short and long term maintenance of natural waterways, manmade drainageways, and stormwater management facilities in new and existing developments.
- Goal I) Seek to maximize available revenue sources in undertaking comprehensive watershed planning and stormwater facility construction activities, thereby leveraging and reducing reliance on the stormwater funds raised by levy.
- Goal J) Protect existing water resources, including lakes, streams, floodplains, wetlands, and groundwater, from detrimental and unnecessary modification so that their beneficial functions are maintained and public expenditures and damages are minimized.
- Goal K) Develop and maintain a comprehensive hydrologic, hydraulic, demographic and cartographic database using the best available and most appropriate technology to manage the stormwater, flood and water quality data needs of the program.
- Goal L) Promote the awareness and understanding of stormwater management issues by the practitioner and the layperson through ongoing public information and education.
- Goal M) Reduce or mitigate the environmentally detrimental effects of existing and future runoff in order to improve and maintain water quality and protect water related environments.
- Goal N) Control sediment and erosion in and from any source, such as drainageways, developments, construction sites, and agricultural areas.
- Goal O) Consider water quality and habitat protection measures in all stormwater management activities within Cook County.
- Goal P) Preserve and enhance existing aquatic and riparian environments and encourage restoration of degraded areas.
- Goal Q) Encourage the public to consider stormwater as a resource rather than as a nuisance.
- Goal R) Manage and operate the program in an effective and cost-efficient manner.
- Goal S) Be in compliance with all applicable state and federal laws.

1.9 Project Minimum Requirements

Just as the District intends to move quickly towards projects that correct existing flood problems and safeguard against potential ones in the future, the District is equally concerned with establishing exact and consistent standards. The CCSMP therefore establishes standards necessary for the preparation of DWPs, identifying stormwater management projects and developing a capital improvement program. The preparation of DWPs is described in Chapter 6. For identifying projects and developing capital improvement programs, the District's Board of Commissioners has established the absolute minimum project requirements provided below. The requirements will be used to review stormwater management projects in advance of the DWPs as well as during preparation of the DWPs.

All proposed project funding requests must meet these absolute minimum requirements:

- A. The project is consistent with the District's Stormwater Management Goals, the Countywide Stormwater Management Plan (CCSMP), and the District's watershed management plan for the watershed in which the project will be constructed. In the event that the District's goals, CCSMP, and watershed plan do not exist yet, the proposed project must have been previously approved by a federal or state government agency for funding under their program requirements.**

The Act, as amended by P.A. 98-0652 states that the "District may plan, implement, finance, and operate regional and local stormwater management projects in accordance with the adopted countywide stormwater management plan." The above absolute criterion was necessary to allow for the District to participate in projects prior to the completion and adoption of the CCSMP and the completion of the DWPs. Previous approval by other agencies, such as the U.S. Army Corps of Engineers and IDNR-OWR, indicates that a comprehensive study of the effects of the project on the watershed has been conducted. Furthermore, studies and approvals by these agencies help to ensure that the potential project is the most appropriate and cost effective solution to the problem in question.

- B. Benefiting communities are in compliance with the terms and conditions of all existing intergovernmental agreements with respect to stormwater management issues, and the project is legally consistent with all such agreements.**

Some communities may not be living up to their responsibilities regarding stormwater management issues as outlined in existing intergovernmental agreements with various agencies. Some of these agencies may include the District, Illinois Department of Transportation (IDOT), IDNR-OWR and the Cook County Highway Department. Examples of noncompliance include non-performance of required maintenance of waterways or stormwater management infrastructure or unauthorized modifications to stormwater management facility structures.

- C. The project is for the purpose of improved stormwater and watershed management and is not being pursued as a condition of compliance with any local regulation or requirement.**

Projects undertaken by the District will not be for the purpose of providing stormwater detention for new development or redevelopment. The developer, not the taxpayers of Cook County, shall incur the costs associated with the design and construction of stormwater management projects which are necessary for compliance with local ordinances or regulations, or state or federal requirements.

- D. The project does not serve, as its primary purpose, to accelerate development of floodplain and flood fringe areas. However, development of areas removed from the floodplain as a byproduct of an approved flood-damage reduction project will not be precluded.**

One purpose of flood control projects will be to reduce flood damage to existing structures which are located within floodplain or flood fringe areas. However, flood control projects will not be undertaken to remove undeveloped areas from the floodplain solely for the purpose of new development. The cost for removal of an area from the floodplain for the purpose of new development should be the burden of the developer and not the taxpayers of Cook County.

- E. The project does not increase the risk of flooding or erosion to downstream or upstream areas.**

The basis of this criterion comes from the Act. The Act states that "recommended stormwater projects will have no significant adverse impact on the levels or flows of stormwater in the inter-county watershed." Simply put, one community cannot benefit at the expense of another community, either downstream or upstream. Finally, according to IDNR-OWR regulations (Title 17, Chapter 1, Part 3700, "Construction in Floodways of Rivers, Lakes and Streams), IDNR-OWR will not issue a permit for a project where "flood damages or potential flood damages outside the project right-of-way due to increases in flood heights or velocities" occur.

- F. The project may be a regional project or a local project, which are defined as follows:**

- 1. Regional projects** address problems related to streambank erosion or overbank flooding along regional waterways that traverse multiple jurisdictions, or problems affecting one or more jurisdictions where the source of the critical erosion or overbank flooding arises from other jurisdictions.
- 2. Local projects** address drainage problems not necessarily associated with streambank erosion or overbank flooding along regional waterways, and may include green infrastructure, detention storage, upsizing critical storm sewers and culverts, pump stations, and establishing drainage ways .
 - a. Local projects are not intended to include projects unrelated to stormwater management, projects involving maintenance or replacement of flood damaged facilities or property, or isolated nuisance flooding. Also excluded from consideration for District assistance are projects that are specifically intended to provide improved infrastructure for planned or future development, and upsizing of local storm sewer systems in their entirety.

- b. Local projects are also not intended to include projects for addressing issues associated with deficient private and public sanitary sewer systems.

G. Benefiting municipalities participating in the National Flood Insurance Program must be in good standing.

A community located in a FEMA designated special flood hazard area must be in "good standing" in order to receive funding from IDNR for any projects. Communities are audited by IDNR on behalf of FEMA to ensure compliance with the NFIP. The "good standing" status demonstrates that communities are making sincere efforts to reduce flood damages by enforcing FEMA regulations within their jurisdictions.

1.10 Summary

The District has the authority to develop and implement a countywide stormwater management program to reduce the potential for stormwater damage to life, public health, safety, property and the environment in Cook County. The CCSMP outlines the countywide stormwater management program, based on the purpose, goals, and absolute minimum project criteria presented in this chapter. The following chapters summarize the current status of stormwater management in Cook County and detail the stormwater management program elements. Major components of the CCSMP and the stormwater management program include the development of the DWPs, the countywide WMO, and the capital improvement program to address existing and potential stormwater management problems.