

TABLE OF CONTENTS

EXECUTIVE SUMMARY

- Background
- Update of the 1996 Comp. plan
- Statistical information: population growth, projections, urbanization, trend of rainfall intensities
- Watershed Planning
- Long term goal tracking

CHAPTER 1: AUTHORITY, PURPOSE, GOALS & OBJECTIVES

Purpose & Authority

- State legislation establishing ability to allow five collar counties to regulate stormwater
- MCSC role
- TAC role
- Creation/adoption of SMO
- Certified Communities

Organization of the Plan

- Plan development background
- Outline of the chapters

Goals & Objectives

- Provide uniform framework within the County
 - Connect existing policies and documents
- Minimize and reduce stormwater damages
 - Maintain NFIP compliance
 - Develop watershed plans
- Protect and improve water quality
 - Updates to SMO with clear regulations and standards
 - Use of Best Management Practices
 - Risks to sensitive aquifer recharge areas
 - Soil Erosion Control measures
- Protect and improve water resources
 - Establish watershed specific criteria
 - Water Resources Action Plan
- Provide ongoing education outreach
 - Water Forum and other activities

CHAPTER 2: EXISTING STORMWATER MANAGEMENT FRAMEWORK

- Layout the functional framework via:
 - Regulatory
 - Permitting, enforcement, inspections, technical assistance
 - Administration and Management
 - NFIP, CRS, Enforcement Office training for certified communities, SESC certifications, Certified Wetland Specialist
 - Planning
 - Watershed planning, regional planning coordination, flood damage reduction, Wetland Restoration Fund, FEMA BRIC Grants, GIS
 - Maintenance
 - Roadway infrastructure (bridges, culverts, etc.), waterways and waterbodies
- Participating shareholders & roles
 - Planning & Development – Stormwater Division (including water resources)
 - McHenry-Lake County Stormwater Conservation District
 - MCSC
 - TAC
 - Certified/non-certified communities
 - Communities certified in other Counties
 - MCCD
 - MCDOT
 - Drainage Districts
 - Residents/Homeowner’s Association
 - Northeastern Illinois Planning Commission (NIPC)
 - Created by the state legislature in 1957 to lead comprehensive planning for the northeastern part of Illinois. Provides information, fosters regional cooperation in the comprehensive planning process, develops policies on evolving areawide issues, and seeks maximum local participation in its deliberations.
 - Fox Waterway Agency
 - IDNR-OWR
 - USACE
 - FEMA

CHAPTER 3: TRANSITIONING TO WATERSHED PLANNING

- Why the transition?
 - The watershed planning approach will provide solutions that are unique to those areas as the County is diverse from agricultural production to urbanized areas
- What are the benefits:

- Tailored to address specific needs
- Provide an understanding of the unique characteristics
- Develop a list of projects that would benefit that watershed
- Create a framework that will help the County be better prepared for the future
- Create a watershed group to empower stakeholders to discuss issues within the watershed with technical assistance and support provided by the County
- Economic benefits to take advantage of available funding sources
- Provide education and outreach
- The watershed plans will become drivers for SMO changes and revisions that can vary for each watershed (eliminates one size fits all)
- Be able to set clearer long-term goals
- Understand flooding and water quality on a more in-depth basis
- How do we get there:
 - Establish the watershed boundaries
 - Review current and existing watershed plans and incorporate any information that is not outdated.
 - Outreach with stakeholders to identify and establish roles and responsibilities
 - Incorporate the existing and predicted future land use/land cover
 - Establish a watershed drainage system inventory (including wetlands) using GIS systems to identify connected segments and include the following information: lengths, degree of erosion, condition of the waterbodies (i.e. poor, fair, good, etc.), degree of channelization, blockages, etc.
 - Establish an inventory of stormwater facilities (BMPs such as detention, swales, infiltration, etc.) to assess their condition
 - Perform study for flood mitigation
 - Hydraulic modeling for areas that do not have base flood elevations (update flood mapping)
 - Potential solutions to reduce the risk of flooding
 - Identify vulnerable areas
 - What can be expected if rainfall and storm intensity keep increasing
 - Perform a water quality assessment
 - Identify causes and sources of water pollution, and estimates of existing pollutant loads
 - Identify causes and sources of impairments
 - 303d lists and TMDLs
 - Establish a network of rain and stream gauges
 - Collect real time data for flow characteristics
 - Collect real time data for water quality
 - Use real time data as an early warning for potential flooding to vulnerable areas

- Provide real time data to stakeholders such as water levels and water quality risks
- Establish goals and targets for water quality and flood mitigation by establishing a list of projects within each watershed
- Create a watershed group to hold meetings and discuss management, goals, expectations, progress, etc. with the County providing technical assistance

CHAPTER 4: WATERSHED PLANS

- Provide map of the County with the watershed boundaries and names
- Give each watershed its own subsection within this chapter (i.e. Chapter 4.1, 4.2, 4.3, etc.) to contain the following:
 - Individual watershed map with sub watersheds
 - Identify waterbodies, geographic boundaries, general topography, spatial relationships of waterbodies
 - Identify the hydrologic soil groups, drainage description, runoff potential, infiltration rate, etc.
 - Provide a description of the geology of the watershed
 - Incorporate elements of the Water Resources Action Plan (WRAP)
 - Identify current active watershed groups, plans, municipalities, etc.
 - Provide demographics
 - Discuss land use/land cover
 - Discuss the effects of climate on each watershed
 - Incorporate the results of the studies, outreach, research, etc. from Chapter 3

CHAPTER 5: ACTION PLAN

- Summary of this chapter to identify goals and expectations of what the watershed plans are to achieve
- SMO changes driven by the watershed plans
- Changes to other policies
- Provide an action plan for each watershed (i.e. Chapter 5.1, 5.2) to contain the following:
 - Implementation of the projects generated on the project list
 - Project funding
 - Areas that need additional studies/information
 - Watershed specific goals

CHAPTER 6: TRACKING

- Summary of this chapter to outline future updates and propose the watershed plans to be updated on a 10-year cycle
- Long term goal tracking for each watershed