

INTRODUCTION

PURPOSE OF THE TECHNICAL GUIDANCE MANUAL

The Watershed Management Ordinance (WMO) was adopted by the Metropolitan Water Reclamation District of Greater Chicago (**District**) and sets forth minimum requirements for the management of **stormwater**, floodplains, **wetlands**, and sewer construction for **developments** in **Cook County**. The WMO provides the specific regulations for **development** within **Cook County** while the **Technical Guidance Manual (TGM)** presents guidance on how to apply and meet the regulations for both project design and project implementation. The **TGM** includes the applicable references to the WMO and should be used as a companion document to the WMO for the preparation of **Watershed Management Permit** applications. The **TGM** provides the following types of information:

- Identifies when a **Watershed Management Permit** is needed
- Identifies information required in support of a **Watershed Management Permit**
- Provides clarification of WMO requirements and their applicability
- Provides guidance on how to best achieve the WMO's requirements
- Provides examples to aid in meeting the requirements of the WMO

The goal of the **TGM** is to allow applicants to correctly apply the WMO to their **developments**. The **TGM** is a useful resource intended to promote efficient and consistent permit submittals and review procedures. The technical approaches presented in the **TGM** are not mandatory in all cases; the intent is to provide guidance and examples on how to meet the standards of the WMO. Alternative methodologies that are not presented in the **TGM** may still be accepted by the **District**.

The guidance contained in the **TGM** will be a valuable resource for the following:

- Community officials and leaders
- Design engineers and municipal/county engineers
- Developers, property owners, land planners, and architects
- **Enforcement officers**, consulting engineers, and **wetland specialists**
- Other interested parties

NOTE: All bold words are defined in Appendix A of the WMO and the TGM.

The WMO provides standards for **development** that meet, or in some instances exceed, the requirements of local, state, and federal agencies. Whenever there is conflicting requirements between another ordinance and the WMO, the more restrictive regulation should be followed.

In addition, the WMO does not repeal any county or municipal ordinance or resolution passed to establish eligibility for the National Flood Insurance Program (**NFIP**). The WMO is not intended to supplement, replace, or remove any responsibility that either Cook County or a **municipality** may have to maintain eligibility and good standing in the **NFIP**. Proper administration and enforcement of the **NFIP** within participating counties and **municipalities** is a requirement of the **NFIP**. For unincorporated areas, enforcement of the **NFIP** is the responsibility of Cook County. The **floodplain** requirements that are presented in Article 6 of the WMO either meet or exceed the **NFIP** requirements. While the WMO meets, and in some instances exceeds, the minimum technical requirements of the **NFIP** for **development** in the **floodplain**, not all administrative requirements are specifically addressed.

To ensure successful enforcement of the regulations contained in the WMO, a joint effort is required from both the **District** and local **municipalities**. The **District** relies on the local **municipality** as a liaison to inform, report, and educate its constituents on the WMO. It is critical that cooperation between the **District** and the **municipality** occurs so that **Watershed Management Permits** are issued meeting the standards contained in the WMO. Additionally, it is crucial that the local **municipality** coordinates each **project** with the developer at the field level. Without proper field coordination and follow-through during construction, the WMO regulations will have little impact.

TGM ARTICLE OVERVIEW

The **TGM** is structured to provide users with a comprehensive overview of the requirements for obtaining a **Watershed Management Permit**. The information provided in the **TGM** ranges from basic information on when a **Watershed Management Permit** is required to detailed information on performance standards and design guidance. The **TGM** is organized into articles which correspond to each Article of the WMO. An overview of each **TGM** article is included in the following:

ARTICLE 2: APPLICABILITY AND GENERAL PROVISIONS

Article 2 presents an overview of the scope of regulation and applicability of the WMO to **projects** within **Cook County**. The goal of this article is to provide users with an understanding of when a **Watershed Management Permit** is required. Clarification on permitting is also provided for **special cases of development**, which includes **single-family homes**, direct connections to **District** facilities, **outfalls**, **demolition**, **projects** within the City of Chicago, and **multi-county municipalities** that have entered into an IGA with the **District**.

ARTICLE 3: WATERSHED MANAGEMENT PERMIT REQUIREMENTS AND SUBMITTALS

Article 3 outlines the various **Watershed Management Permit** types and provides **applicants** with guidance on the applicability requirements of each permit type. General permit application submittal requirements are covered, as well as requirements for specific submittal packages that may be required to accompany the permit application (i.e. **flood protection areas**, **qualified sewer**, etc.) Details on required signatures, fees, refunds, construction scheduling, and recordation are also provided.

ARTICLE 4: EROSION AND SEDIMENT CONTROL

Article 4 presents guidance on the **erosion** and **sediment** control requirements contained in the WMO, and more specifically how they relate to the requirements of the General National Pollutant Discharge Elimination System (**NPDES**) Permit for Stormwater Discharges from Construction **Site** Activities (General NPDES Permit ILR-10). The article also provides an inventory of acceptable **erosion** and **sediment control practices**, with references to the standard details from the **Illinois Urban Manual** or the US Army Corps of Engineers (**Corps**) website.

ARTICLE 5: REQUIREMENTS FOR STORMWATER MANAGEMENT

The goal of Article 5 is to provide **applicants** with a complete understanding of the **stormwater runoff**, volume control, and detention requirements of the WMO and their applicability to different types of **development** in **Cook County**. This article includes the technical design criteria

for **stormwater** management systems, including examples of calculations and computer modeling input/output.

ARTICLE 6: FLOOD PROTECTION AREAS

Article 6 provides guidance on the regulations of the WMO for **development** that involves **flood protection areas**, including **floodplains, floodways, wetlands/buffers, and riparian environments**. The goal of this article is to provide technical users with an understanding of the design and permitting requirements of the WMO and how they relate to each **municipality's NFIP** requirements, the **floodway** requirements of the Illinois Department of Natural Resources – Office of Water Resources (**OWR**), the **floodplain** requirements of the Federal Emergency Management Agency (**FEMA**), and the **wetland** requirements of the **Corps**.

ARTICLE 7: REQUIREMENTS FOR SEWER CONSTRUCTION

This article provides design criteria for **qualified sewer** in **Cook County**, which also includes the construction of pump stations and/or forcemains. Guidance provides technical users with a thorough understanding of the requirements for the construction of **sanitary sewers** in **Cook County**.

ARTICLE 8: INFILTRATION/INFLOW CONTROL PROGRAM

Article 8 provides guidance for **satellite entities** on meeting the requirements of the **District's** Infiltration/Inflow Control Program (IICP). This article contains background information and technical guidance pertaining to the IICP, and details the **satellite entities'** short-term and long-term responsibilities under the program. Sample completed forms, checklists, reporting requirements, and submittal schedules are included which should provide **satellite entities** and other technical users a clear understanding of the requirements of the IICP.

ARTICLE 9: MAINTENANCE

Article 9 provides guidance on developing both short- and long-term **maintenance** plans for **erosion** and **sediment control practices, detention facilities, volume control practices, stormwater** management system components, **qualified sewer, native planting conservation areas, and wetland** and **riparian environment** mitigation.

ARTICLE 10: INSPECTIONS

The objective of this article is to provide users with a complete understanding of the various inspections that are required during each phase of a **project**, and the responsible party for performing these inspections. The role of the developer, **authorized municipality**, and **District** is defined for each component of the **project**.

ARTICLE 14: ADMINISTRATION

This article provides guidance for the **authorized municipality** program, WMO procedures, and the expected responsibilities of the **District, authorized municipalities, enforcement officers, and wetland specialists**. Article 14 lays out the necessary steps to become an **authorized municipality**, including qualifications for becoming an **authorized municipality's enforcement officer** and **wetland specialist**.

APPENDICES

Additional useful information is provided in the appendices of this **TGM**. Appendix A contains definitions for all bold items found throughout the WMO and this **TGM**. Appendix B provides an inventory of all **Cook County** Flood Insurance Rate Map (**FIRM**) panels, organized by community. Appendix C contains the standard notes and details that will be required for **Watershed Management Permits**. Appendix D provides a variety of useful resources for **satellite entities** to meet the requirements of the **District's** Infiltration/Inflow Control Program (IICP). Appendix E contains the repealed **Sewer Permit Ordinance** and the **Manual of Procedures** for Administration of the Sewer Permit Ordinance.

It is important to note that the **TGM** is based on the WMO as amended on May 16, 2019. Future revisions may contain requirements that supersede Articles contained in this version of the **TGM**. The Article version is shown in the footer of each page, and revision tables are located at the end of each Article. Not every Article will be revised at the same time, so different version numbers will apply throughout this **TGM**. Users should always reference the most current version of the WMO, which can be found at the dedicated website, wmo.mwrd.org.

INTRODUCTION TABLE

No.	Revision Description	Date
0	Original TGM	5/1/2014
1	Article 8, Appendix D, WMO amendment date, and minor language edits	8/1/2015
2	Revision table, WMO amendment date, revised descriptions based on amendment	5/31/2019