

Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

Watershed Management Ordinance

IAFSM

2010 Annual Conference

March 11, 2010

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Agenda

1. Draft WMO Development Background
2. Draft WMO Standards
3. Public Review Comments
4. Going forward

Watershed Management Ordinance

Authority to develop WMO from enabling legislation

- *Public Act 93-1049*
- *The District can “prescribe by ordinance reasonable rules and regulations for floodplain and stormwater management”*

WMO Objective

- *Establish uniform, reasonable, and comprehensive countywide stormwater management regulations*

WMO Stakeholder Involvement

■ Watershed Planning Councils (WPC)

- *Membership consists of municipality Mayors/Presidents or their designee*
- *District staff provided WMO status and addressed questions at WPC meetings since 2007*

■ Technical Advisory Committee (TAC)

- *11 Meetings over 2 year span*

■ Public and Private Organization Advisory Committee (PPOAC)

- *6 Meetings over 2 year span*

WMO Development Process

- **Draft WMO released on September 24, 2009**
- **Public review consisted of 6 Board of Commissioner Study Sessions aka Public Hearings**
- **Public Review concluded December 31, 2009**
- **Letters Received**
 - *Municipalities (66 letters)*
 - *Private Organizations (19 letters)*
 - *Private Citizens (24 letters)*
 - *Unsigned (415 letters)*

Draft WMO Detention Standards

	Current MWRD Regulations (SPO)	Draft WMO
Thresholds	5-Acre Nonresidential 10-Acre Residential	3-Acre Nonresidential 5-Acre Residential
Combined Sewer Areas	Detention not required	Detention required
Release Rate	3-Yr Undeveloped	0.15 cfs/acre
2-Yr Release Rate	None	0.04 cfs/acre (Discharging to Waterways)
Rainfall Data	Technical Paper 40 (1961) 100Yr, 24Hr = 6.00"	ISWS Bulletin 70 (1989) 100Yr, 24Hr = 7.58"
Detention Volume Methodology	Modified Rational	Hydrograph



Detention: How does WMO compare to collar counties?

	Draft WMO	DuPage / Kane County	Lake County	Will County
Non-Residential Threshold	3 acres	1 acre	1 acre new impervious area, or 3 acres hydrologically disturbed area, or Site more than 50% impervious with greater than 0.5 acre impervious	1 acre
Residential Threshold	5 acres	3 acres	1 acre new impervious area, or 3 acres hydrologically disturbed area, or Site more than 50% impervious with greater than 0.5 acre impervious	5 acres
Release Rate	Dual Release (0.04/0.15)	Single Release (0.10)	Dual Release (0.04/0.15)	Dual Release (0.04/0.15)
Detention Volume	Hydrograph	Hydrograph	Hydrograph	Hydrograph
Rainfall Data	Bulletin 70	Bulletin 70	Bulletin 70	Bulletin 70

WMO Proposed Standards

■ Floodplain Management

- *Flood Protection Elevation = 1-ft above Base Flood Elevation (BFE)*
- *Proposed Compensatory Storage Ratio = 1.1:1.0*



WMO Proposed Standards

■ Soil Erosion and Sediment Control

- *Based on ILR-10*

- *Thresholds*

 - *WMO (0.5 acres)*

 - *ILR-10 (1.0 acre)*

■ Water Quality

- *Discharge to waterways*

- *1" Capture (Impervious)*

- *Thresholds*

 - *Non-Residential (> 1/2 acre parcel)*

 - *Residential (> 1 acre parcel)*

 - *Roadway (> 1 acre new development where practicable)*

WMO Proposed Standards

■ Wetlands

- *Regulation of Isolated Wetlands*
 - *Mitigation for impacts > 0.1 acres*
- *Mitigation Ratios*
 - *High Quality (3.0 to 1.0)*
 - *Low Quality (1.5 to 1.0)*

■ Riparian Areas

- *Determined by Setbacks*
 - *IDNR Rating “A” or “B” (100 feet)*
 - *Jurisdictional Water of US (50 feet)*
- *Mitigation for impacts to existing functional values*

DRAFT WMO > Administration / Enforcement

- **MWRD to administer / enforce WMO**
 - *Follow same process SPO*
 - *Retention of outside consultants to assist if necessary*
- **Grandfathering only for permits issued or in process**
 - *No exempt list*
- **Communities REMAIN Responsible for NFIP Compliance**

DRAFT WMO > Administration / Enforcement

- **WMO permit required**
- *for all development meeting thresholds*
- *for all development in Resource Protection Areas affecting stormwater management*

DRAFT WMO > Administration / Enforcement

Relationship of SPO and WMO

Option 1

- *Drainage and Detention requirements of WMO supersede SPO stormwater requirements*
- *Separate permit under SPO required if a connection to a sanitary sewer is proposed*

Option 2

- *Add SPO requirements related to sanitary sewers to WMO*
 - *One ordinance, one permit*

WMO Public Review Comments

- **Economic Impact Study**
- **Delegation of WMO enforcement**
- **Inundation maps**
- **Volume control in combined sewer areas**
- **Co-applicant (municipality)
responsibilities concerning maintenance**
- **Multi-county municipalities**
- **Fee-in-lieu of detention**
- **Grandfathering**

Economic Impact Study (EIS)

- Requested by Municipalities / Municipal Conferences
- Comparison of detention storage (footprint) based on issued permits
 - *Current SPO detention methodology*
 - *SPO detention methodology with Bulletin-70 rainfall data*
 - *Draft WMO standards*
- Comparison of DWP inundation maps with SCS floodplain maps
- Detailed detention analysis of small watershed
- 6-8 months

WMO Implementation

- **EIS to be completed by fall 2010**
- **Determine modifications to WMO & TGM if necessary**
- **Present to MWRD Board of Commissioners for consideration**
- **Training**
 - *MWRD Staff*
 - *Consultants*
- **Permitting Website**
 - *Detention calculation tool*
 - *Interactive forms*

Questions??

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