Stormwater Program Revisions

City of Topeka, KS
September 15, 2020

Goals for code revisions

➤ Comply with Topeka's Municipal Stormwater Permit and EPA audit findings

- Stormwater quality treatment at new developments and redevelopments ≥ 1 acre
- Municipal design plan review, construction, and maintenance processes

➤ "Modernize" and improve our code by aligning stormwater ***quality*** & ***quantity*** rules

➤ Use our improved understanding of Topeka streams for smarter regulation

➤ Use methods that are locally relevant, familiar, and flexible

Important Terms

Best Management Practice (BMP)

A structural facility used to manage stormwater runoff from one or more properties

Bioretention BMP on Jackson Street in Topeka

Extended Dry Detention BMP

Important Terms

Stormwater <u>Quality</u> BMP

A BMP that protects streams and properties from pollutants in stormwater

Bioretention BMP on private property in Topeka

Bioretention BMP on Jackson Street in Topeka

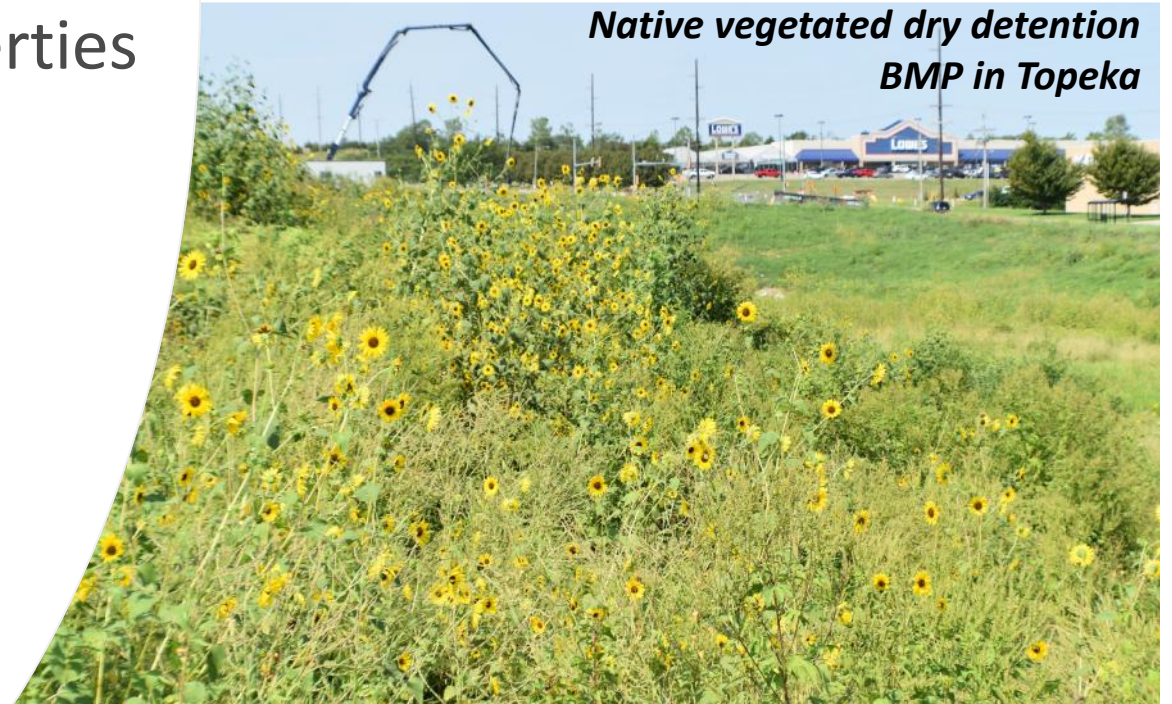# Important Terms

Stormwater <u>Quantity</u> BMP

A BMP that protects downstream properties from flooding

Wet detention BMP in Topeka

Native vegetated dry detention BMP in Topeka

TMC Chapter 13.35 Revisions

➤ Clarify rules for stormwater **_quality_** BMP design and construction

➤ **Add** rules for stormwater **_quantity_** BMP design and construction

➤ **Add** rules for stormwater design plan preparation and submittal

Design Criteria & Drafting Standards

➤ Drainage system design (i.e., inlets, pipes, channels, culverts)

➤ Detention/Retention basin design

➤ Design plan preparation and submittal requirements

➤ Erosion and sediment control practices

Stormwater BMP Design Handbook

➤ Design requirements for stormwater quality BMPs

➤ Detention/Retention basin design

➤ Design plan preparation and submittal requirements

Stormwater Management Code Revisions

TMC Chapter 13.35

Establishes core requirements for stormwater BMP design & const.

CITY OF TOPEKA
UTILITIES

CODE REVISIONS:

➢ Update and clarify stormwater *quality and quantity* requirements

➢ Insert stormwater design plan checklist

➢ Insert new construction termination rules
  • Stormwater BMP Record Drawing
  • Final Inspection

New to Topeka

DOES NOT INCLUDE:

➢ Calculation methods

➢ BMP design requirements

➢ Helpful checklists and support tools

In the new Stormwater Design Handbook

# Stormwater BMP Design Handbook

Chapters

1. Introduction

2. Design Process & Plans

3. SW Quality Design

4. SW Quantity Design

5. LID Techniques

Appendices

   A. Acronyms & Definitions

   B. SWMP checklist

   C. Required Forms

   D. BMP Record Drawing checklist

   E. BMP Certification Statement

   F. BMP Design Procedure Forms

Stormwater BMP Design Handbook
CITY OF TOPEKA

Version | August 2020
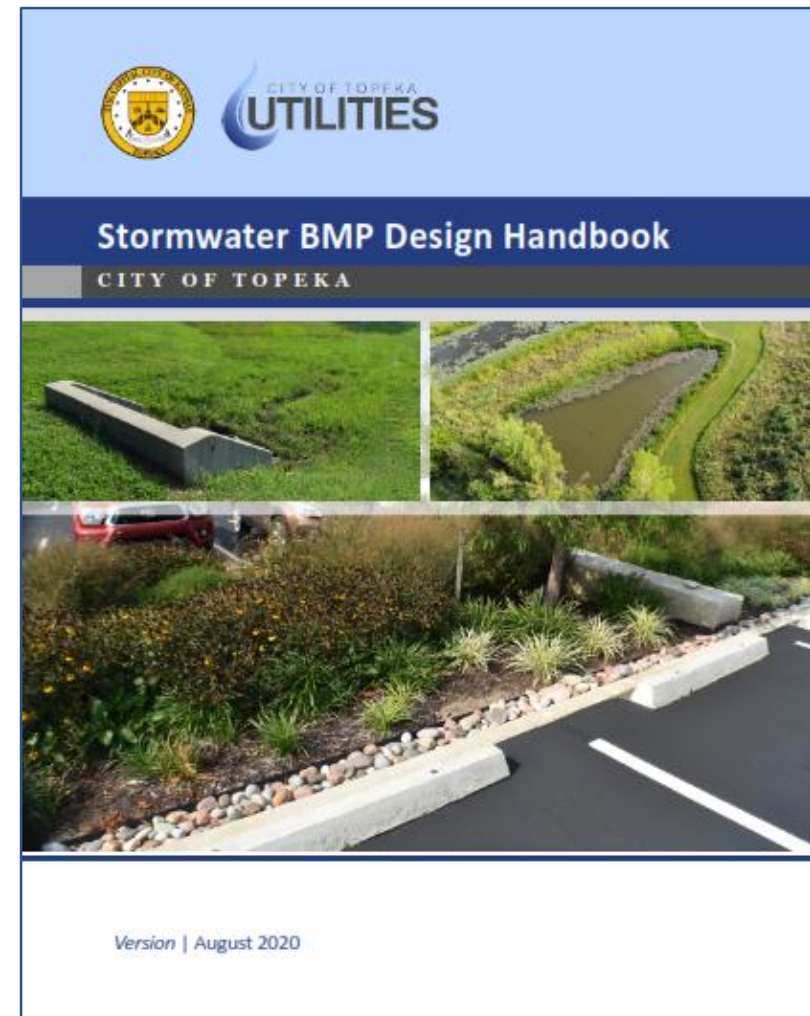
Stormwater BMP Maintenance Code Revisions

TMC Chapter 13.40

Establishes **core requirements** for inspection & maint. by property **owners.**

CITY OF TOPEKA **UTILITIES**

CONTENT:

➢ Applicability

➢ Owner responsibilities

➢ Authority for City inspections of BMPs

➢ Prohibited uses and activities

New to Topeka

DOES NOT INCLUDE:

➢ How to inspect a BMP

➢ How to maintain a BMP

Refers to the BMP Owner's Manual for all the above

BMP Maintenance Manual

CITY OF TOPEKA
PROPERTY OWNER'S GUIDE TO STORMWATER BMP MAINTENANCE

Version | August 2020

1: Introduction and Stormwater BMPs 101

2: BMP Operational and Success Criteria

3: BMP Inspection

4: BMP Maintenance

5: Individual BMP Inspection Checklists

6: Helpful Resources

Target Audience: **Property Owners**

- ✓ Uncomplicated
- ✓ Visual
- ✓ Educational
- ✓ Themed
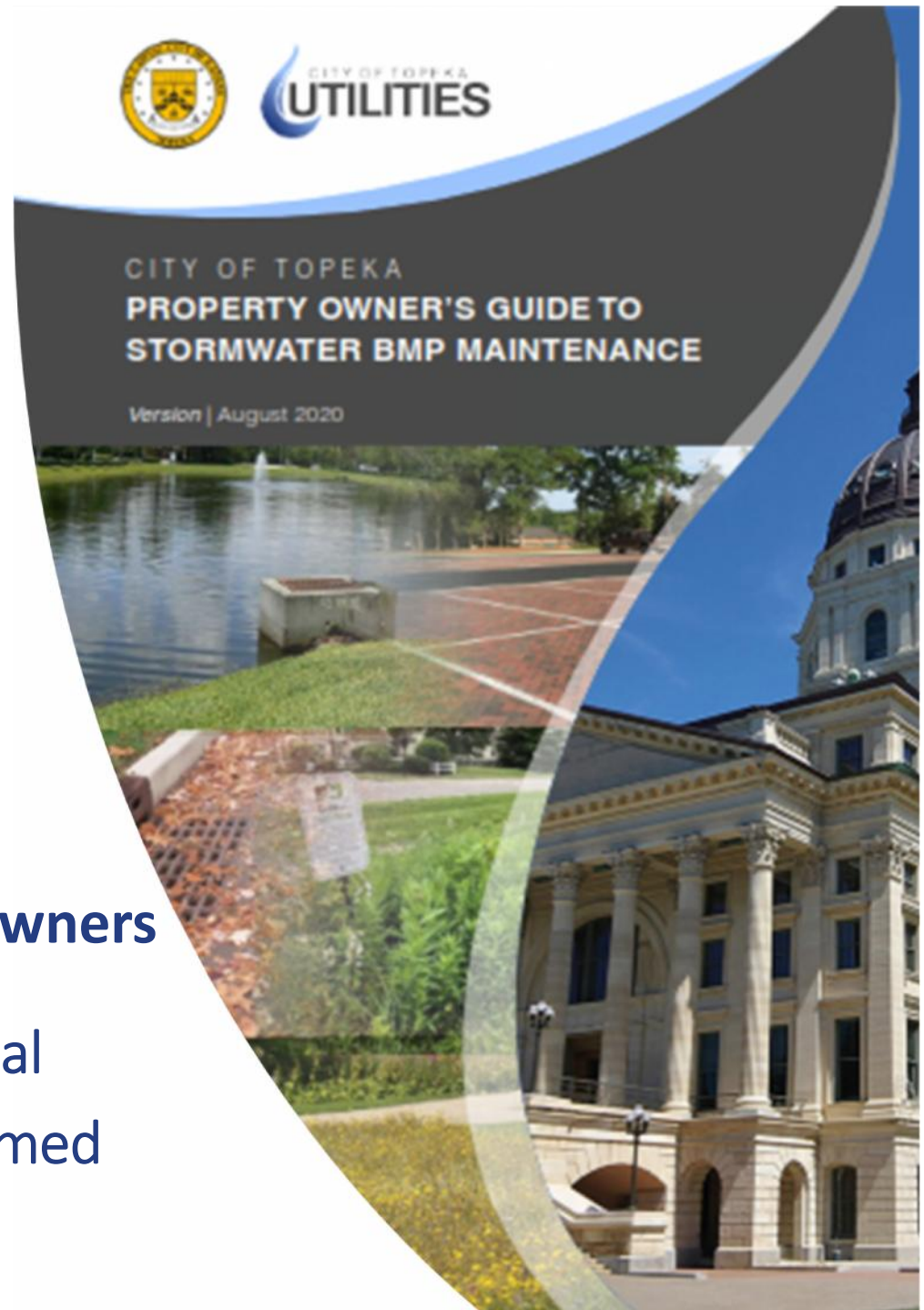
Stormwater Utility Code Revisions

TMC 13.25

Authorizes, and establishes rules for, the stormwater drainage fee

CITY OF TOPEKA UTILITIES

Reasons for Change

➢ Fix confusing fee adjustment (discount) calculations

➢ Add a fee adjustment for stormwater *quality* BMPs

| Description of Stormwater BMP Design	Fee Adjustment
The property meets Topeka's stormwater *quantity* requirements for volume control. Runoff is fully retained onsite.	30%
The property drains to a stormwater system that is not owned and operated by the City of Topeka	30%
Revised The property meets Topeka's stormwater *quantity* requirements for peak flow control.	5% for each design storm event achieved, up to a maximum of 30%
New The property meets Topeka's stormwater *quality* requirements.	10%
New The property exceeds Topeka's stormwater *quality* requirements by 5% or more.	10%

Maximum fee adjustment is 40%

Buffer Area Code Revisions

TMC 17.10

Establishes rules for stream buffer design and use

Reasons for Change

➢ Disconnect stream buffer & regulated floodplain

➢ Replace unwieldy width adjustments with a science-based outer boundary

➢ Provide development community with a GIS-based tool that conveys buffer boundary

Stream

Streamside Area Boundary

Outer Area Boundary (Provided by Topeka)
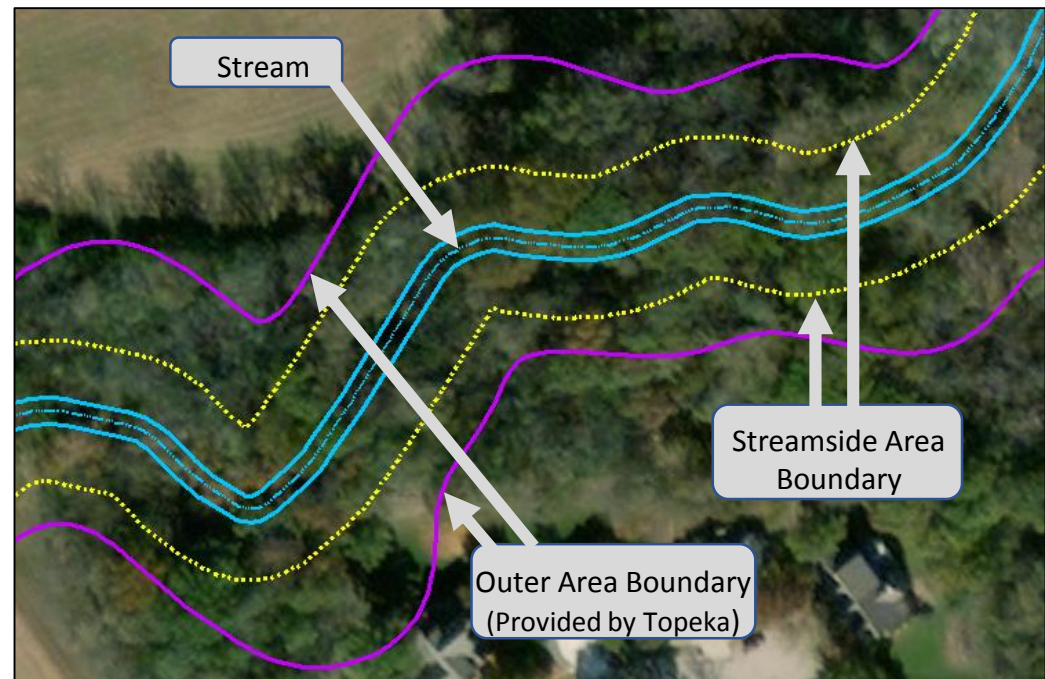
Floodplain Management Code Revisions

TMC 17.30

Establishes rules for land development in and around floodplains

Revisions

➢ Added rules for construction in Levee Ponding Areas

➢ Requires compensatory cut for fill placed in Levee Ponding Areas

➢ Requires compensatory cut for development greater than 5,000 sf in floodway fringe