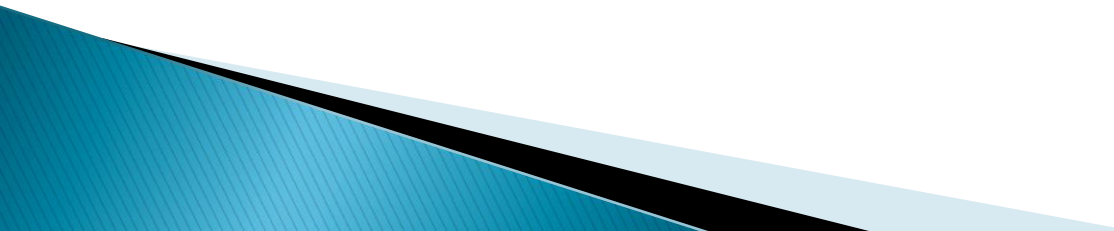


City of Wichita NPDES Stormwater Permit and Compliance

Presentation to City Council
November 22, 2011

Introductions

- ▶ Alan King, Director of Public Works & Utilities
 - Opening remarks
 - ▶ Chris Bohm, Stormwater Advisory Board Chair
 - Greetings from the Wichita SWAB
 - ▶ Scott Lindebak, Stormwater Engineer
 - Stormwater Permit Update
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Regulatory Background

▶ Clean Water Act

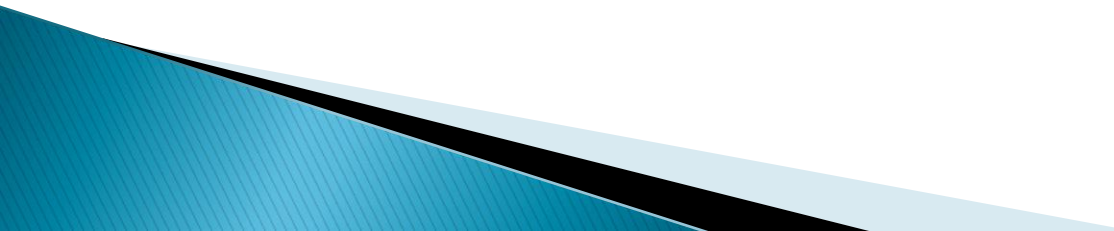
- 1972 Clean Water Act – Swimmable, Fishable
- 1987 Amendments – National Discharge Elimination System (NPDES) regulations for waste water treatment and discharge
- NPDES (Federal) Program – Responsibility of EPA
 - Point Source (Direct Pipe Waste Water) Permitting
 - Non Point Source (Indirect Stormwater) Permitting
 - Authorized to delegate authority to states for NPDES implementation

Regulatory Background

cont'd

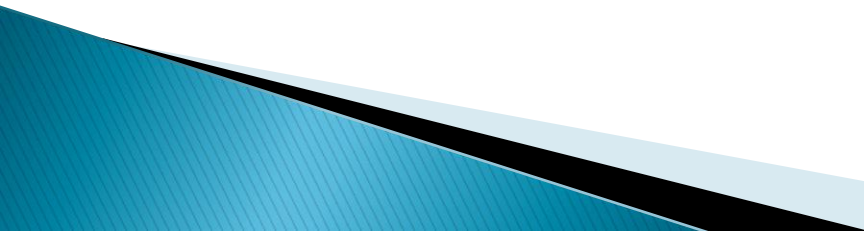
- ▶ EPA delegated KDHE the authority for NPDES (State) Program
 - KDHE responsible for NPDES Stormwater Program
 - Wichita identified as a Phase I – Large/Medium Municipality
 - Phase I Municipalities required to conduct stormwater testing and submit a permit application along with a Stormwater Management Program (SWMP) – 1992

1998 NPDES Stormwater Permit

- ▶ Wichita's first NPDES stormwater permit (effective January 1, 1998) was extensive and detailed in requirements:
 - All areas within the corporate boundaries of Wichita
 - Authorized all existing or new stormwater discharges from the municipal storm sewer system (MS4)
 - Required implementation of the initial SWMP
 - New requirements for implementation of pollution prevention measures (PPMs):
- 

1998 NPDES Stormwater Permit

cont'd

- Develop legal authority (ordinances, plans, programs, contracts, etc.) and requirements for compliance for all required programs provided by the permit;
 - Carry out all inspections, surveillance and monitoring required by permit;
- 

1998 NPDES Stormwater Permit

cont'd

- Duty to comply along with heavy stipulated penalties including civil, administrative, and/or criminal including up to \$50,000 per day per violation or up to \$250,000 for endangerment and not more than 15 years in jail.

Reissued Permit With New Requirements October 1, 2007

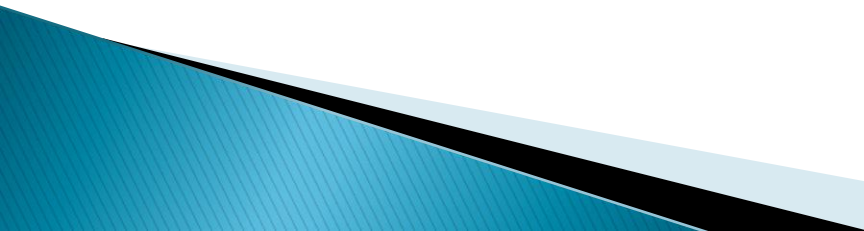
- ▶ Part V. 5. Post-Construction Stormwater Management in New Development and Redevelopment Projects
 - ▶ a. BMP's to prevent or minimize adverse water quality impacts; and
 - ▶ b. strategies which include a combination of structural and/or non-structural BMP's appropriate for the municipality; and

Reissued Permit With New Requirements October 1, 2007

cont'd

- ▶ c. enact an ordinance to address post-construction runoff from new development and redevelopment projects to the extent allowable under State and local law; and
- ▶ d. ensure adequate long-term operation and maintenance of BMP's.

Timeline To Meet New Requirements

- ▶ December 2007 RFP to hire consultant to develop a Stormwater Manual
 - ▶ August 2008 Stormwater Technical Advisory Board began meeting to review portions of new Manual and to develop policy
 - ▶ July 28, 2009 Council Workshop held on “Stormwater Technical Guidance Manual”
 - ▶ September 15, 2009 1st reading of new Ordinance. Action deferred.
- 

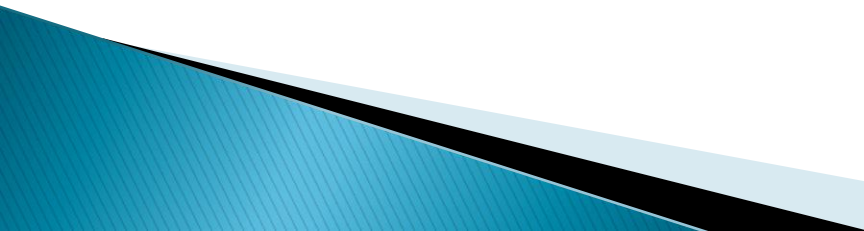
Timeline To Meet New Requirements

cont'd

- ▶ October 1, 2009 Permit mandated deadline to implement Post-Construction BMP program/ordinance for new development and redevelopment
- ▶ October 27, 2009 Council Workshop held on “Stormwater Pollution Ordinance”
- ▶ November 3, 2009 2nd reading of Ordinance. Action deferred.

Timeline To Meet New Requirements

cont'd

- ▶ January 28, 2010 Stormwater Charette, organized by the Hugo Wall School of Urban & Public Affairs
 - ▶ May 25, 2010 Letter of Non-Compliance received from EPA advising that the City is out of Compliance with Phase II Permit requirements
- 

Timeline To Meet New Requirements

cont'd

- ▶ November 16, 2010 City Council adopted new Stormwater Ordinance and Stormwater Advisory Board Ordinance on 2nd reading. 1st reading on November 2, 2010.
- ▶ December 7–8, 2010 Stormwater Management hosted a 2–day conference to train local development industry on new stormwater requirements

Timeline To Meet New Requirements

cont'd

- ▶ January 1, 2011 Implemented new Stormwater Permit Ordinance for development that disturbs one acre or more, no permit fee. Permit is used to track and enforce watershed improvements, to be in compliance with our Stormwater Permit.

What Pollutants Are Targeted?

- ▶ The pollutants these efforts aim to reduce:
 - Biological Oxygen Demand (BOD)
 - Bacteria (E. coli)
 - Sediment
 - Metals (copper, zinc, cadmium)
 - Nutrients (phosphorous, nitrogen)

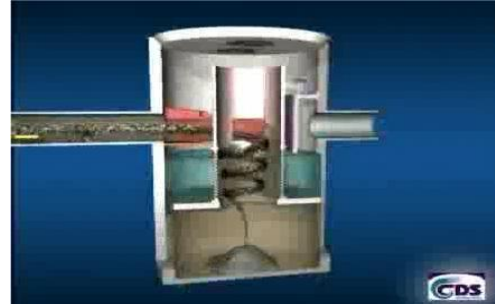
Activities Since Implementation

- ▶ 52 Stormwater Permits for Development/Redevelopment issued
- ▶ 15 Permits pending
- ▶ BMP's Selected by Developers:
 - 24 detention/retention ponds, swales
 - 1 pervious pavers
 -



Activities Since Implementation

- 15 Proprietary devices

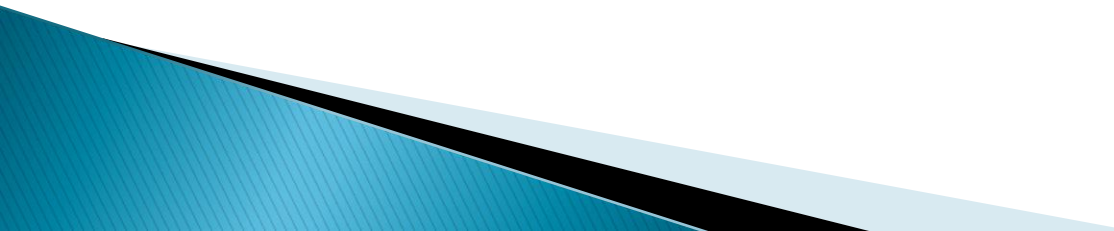


- 1 Underground storage



- 11 combination of BMP's

12 Month Tune Up

- ▶ What needs to change or adapt to improve Requirements and/or Policies?
 - ▶ Listen to feedback from Development Industry
 - ▶ Internal review processes have been streamlined, and waiting time is reduced
 - ▶ Establishment of the Stormwater Advisory Board
- 

Stormwater Advisory Board

- ▶ Consists of 10 Members from throughout the Development Industry.
- ▶ First meeting, November 2, 2011
 - Chris Bohm appointed Chair
- ▶ Second meeting November 16, 2011
 - Review Ordinance applicability with the Permit

Stormwater Advisory Board

cont'd

- ▶ Future SWAB Meetings:
 - Stormwater Covenants
 - Stormwater Management Facility Operation and Maintenance Plans
 - Channel protection
 - Onsite/Shared/Regional Stormwater BMP's
 - Discussion of upcoming Permit renewal and opportunities to influence requirements

Stormwater Permit Program Questions?

