



OVERVIEW

Stormwater Management Bylaw

**Ipswich Stormwater
Advisory Committee**

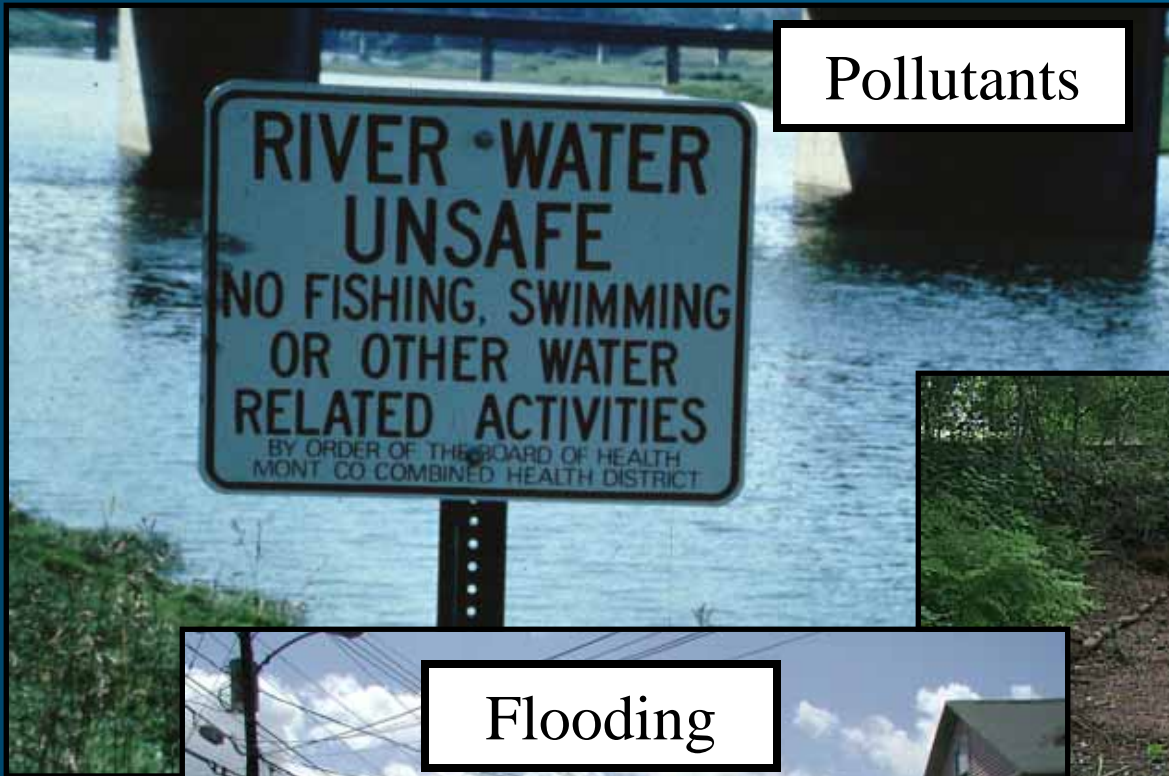
July, 2009

Photo credit: Borsari Gallery

Background – Federal Clean Water Act

- ▼ 1972: Federal Water Pollution Control Act
- ▼ Regulates all discharges to Waters of the U.S.
- ▼ Sets water quality standards for all waters
- ▼ 1980s – Efforts focused on improving municipal sewage treatment and industrial discharges
- ▼ 1990s to Today – Efforts focusing on pollution from stormwater runoff

Pollutants



Flooding



Low Flows



NPDES Phase II Program (US EPA, 2003)

- ▼ NPDES Phase II Stormwater Permit Program:
 - ◀ Federal mandate under Clean Water Act
 - ◀ Develop a stormwater management program including the six minimum control measures
 - ◀ Implement stormwater management program and develop measurable goals

- ▼ Goal is to improve water quality

Impacts of Stormwater in Ipswich

Ipswich has 144 stormwater outfalls that discharge to 28 water bodies in the Ipswich and Parker River watersheds.

- ▼ Ipswich River impaired by pathogens, nutrients, flow alteration (MA DEP biannual Clean Water Act S. 303(d) Listing, 2006)
- ▼ Ipswich River “highly stressed, endangered” (American Rivers 2003)
- ▼ Draft pathogen TMDLs* (loading limit) for Ipswich/Parker Rivers
- ▼ Ipswich River low flows partially due to stormwater not being able to infiltrate
- ▼ River flooding exacerbated by continued development, need stormwater management improvements
- ▼ DPW continues to find illicit connections and broken stormwater pipes in old infrastructure

* Total Maximum Daily Load

Ipswich NPDES* Stormwater Permit

- ▼ Issued and Accepted in 2003
- ▼ Initial compliance deadline: May 1, 2008
- ▼ Permit coverage extended until EPA releases next permit, expected winter 2009/2010

NPDES: National Pollutant Discharge Elimination System, a federal permit program under the Clean Water Act to improve water quality in surface waters nationwide.

The Ipswich Stormwater Management Bylaw

- ▼ First proposed and withdrawn in 2005
- ▼ Re-proposed and withdrawn in 2006
- ▼ Stormwater Advisory Committee formed in 2006
- ▼ Proposed and voted down in 2007
- ▼ Proposed and adopted: October 20, 2008

Purpose of the Stormwater Management Bylaw

- ▼ Prohibit non-stormwater discharges
- ▼ Regulate direct connections to the stormwater system
- ▼ Control stormwater impacts of projects for which stormwater is not otherwise reviewed
- ▼ Meet certain requirements of the Ipswich Phase II Stormwater NPDES Permit

Programmatic Structure

- ▼ No new town structure created.
- ▼ This bylaw helps to form a comprehensive approach to stormwater management.

This Bylaw Creates 2 New Permit Programs

1. Connection and Discharge Permit
2. Storm Water Management Permit

Connection and Discharge Permit

- ▼ No person may create or maintain a direct connection or discharge to the municipal storm drain system without a Connection and Discharge Permit.
- ▼ The bylaw contains a list of minor non-stormwater discharges not subject to regulation.
- ▼ Direct connections of sump pumps require a permit.

Connection and Discharge Permit: Requirements under Consideration

▼ Application Requirements:

- Narrative and Sketch Plan of connection
- Inspection and Maintenance Agreement
- Pollution Prevention Plan may be required for non-residential properties

▼ Permit expiration:

- Non-residential properties – Expires upon transfer of property. New owner must apply.
- Residential properties – No expiration, permit runs with the land. Permit must be updated if conditions change.

Storm Water Management Permit

- ▼ Regulates land disturbance activities of:
 - 10,000 square feet or more, or
 - more than 50% of a lot,
 - whichever is less

- ▼ “Minor Projects” category under consideration:
 - Less than 10,000 square feet, but more than 50% of a lot
 - Single and two-family residential projects
 - Minor projects have less stringent requirements

Stormwater Management Permit: Exemptions

- ▼ Activities for which stormwater is regulated by Conservation Commission or Planning Board
- ▼ Normal maintenance activities
- ▼ Emergency repairs or activities
- ▼ Agricultural activities

Stormwater Management Permit: Requirements under Consideration

▼ Stormwater Management Plan

- Major Projects: Must meet MA Stormwater Management Standards, plus:
 - Detain flows for 1-year, 24-hour storm event, and
 - LID techniques required to maximum extent practicable
- Minor Projects: Must meet limited set of standards, less stringent, incorporates LID

▼ Erosion and Sediment Control Plan

▼ Operation and Maintenance Plan

Stormwater Management Permit: Requirements under Consideration

▼ Inspections

- Notification of construction commencement
- Periodic construction inspections at discretion of permitting authority
- On-going inspection and maintenance by owner required, reports submitted

▼ On-Going Maintenance Requirements

- Operation and Maintenance Agreement must be signed and submitted
- Owner responsible, not Town of Ipswich

Stormwater Management Permit: Requirements under Consideration

▼ Permit Schedule

- Permit must be acted upon within 30 days of submittal to the Town

- Permit expires three years from issuance
 - 1-year extension may be requested
 - On-going conditions continue beyond 3 years

- Certificate of Completion: Record (As-Built) Drawing may be required for Major Projects