

MS4 STORMWATER BYLAW / ORDINANCE AUDIT UPDATE



CENTRAL
MASSACHUSETTS
REGIONAL
STORMWATER
COALITION

**Steering Committee Meeting
September 2, 2020**

Overview of Scope

Task 1

- Identify Existing Bylaws and Ordinances
- Deliverable: Inventory / Links (Table 1)

Task 2

- Bylaw/Ordinance Components Audit
- Compliance with MS4 Permit
- Deliverable: General Components and Compliance Review (Tables 2 and 3)

Task 3

- Recommendations
- Implementation considerations
- Deliverables: Recommendations Memo and Workshop(s)



Documented Components

Bylaw/ordinance and regulation (if applicable) name and document URL

Year/date bylaw/ordinance was adopted

Year/date regulations were adopted

Year/date bylaw/ordinance and regulation were revised (if applicable)

If a local stormwater permit is required (i.e. in addition to wetlands protection act permits from Conservation, development permits from Planning Boards, or building permits)

If a local stormwater enterprise has been authorized

Approval authority for bylaw/ordinance (e.g. Town Meeting, City Council)

Applicable authority for administering bylaw/ordinance (e.g. Conservation, DPW, Board of Selectmen, Sewer Commissioners, etc.)

If the municipality has a stormwater webpage

Status of Deliverables

- ✓ Inventory of Bylaws/Ordinances Complete
- ✓ Compliance Review Complete
- ✓ Draft Recommendations Memo Submitted
- ✓ Steering Committee Meeting Update

- TBD: Workshop(s) to be Scheduled

Stormwater Permit Requirements for Bylaws/Ordinances

MCM 3: Illicit Discharge Detection & Elimination

- “adequate legal authority to: prohibit illicit discharges; investigate suspected illicit discharges; eliminate illicit discharges, including discharges from properties not owned by or controlled by the MS4 that discharge into the MS4 system; and implement appropriate enforcement procedures and actions.”

MCM 4: Construction Site Stormwater Runoff Control

- “ordinance or regulatory mechanism that requires the use of sediment and erosion control practices at construction sites. In addition to addressing sediment and erosion control, the ordinance must include controls for other wastes on construction sites such as demolition debris, litter and sanitary wastes.”

MCM 5: Stormwater Management in New Development and Redevelopment

- 1 acre disturbance
- LID
- Mass SW Standards
- Retain Volume on-Site
- Remove TSS
- Remove Phosphorus

Bylaw / Ordinance Inventory & Components

Status of Bylaw/Ordinance Development

MCM 3: No Illicit Discharge Bylaw/Ordinance	MCMs 4 & 5: No Stormwater Management Bylaw/Ordinance
Dudley	Dudley
Hopedale	Hopedale
Southbridge	Northborough
West Boylston	Rutland

Refer to Table 1: Existing Stormwater Bylaw and Ordinance Links

Range of Authorized Enforcement Agency



Director of Public Works	Town/City Engineer
Planning Board	Conservation Commission
Highway Department	Board of Health
Land Use Enforcement Officer	Stormwater Committee

Refer to Table 2: Existing Stormwater Bylaw and Ordinance General Information

Range of Land Disturbance Thresholds

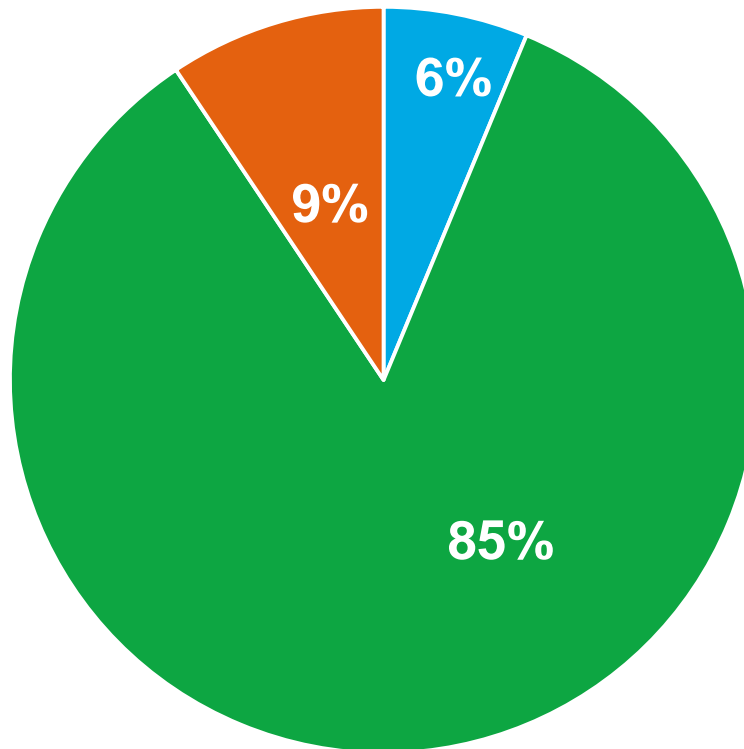
1 acre	All subdivisions, site plan review
40,000 SF	Increase imperviousness to > 50% of parcel
20,000 SF	Disturbance of volume greater than 1,500 CY
5,000 SF	Increase in floor area, vehicle traffic, persons
Project occurs in a critical area or hot spot	Projects clearing 50% of parcel (trees)
Addition of 30% impervious area	Land disturbance in sloped areas (15% slope)



Bylaw/Ordinance and Compliance Findings

Compliance Review Findings - Overall

Overall Stormwater Bylaw/Ordinance Compliance

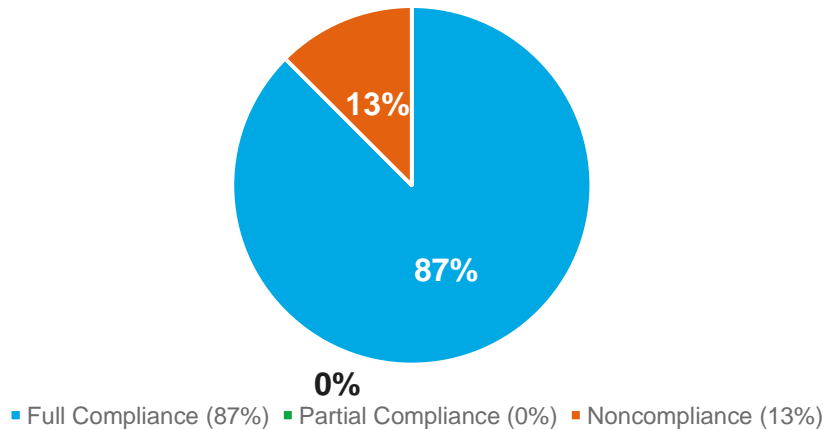


■ Full Compliance (6%) ■ Partial Compliance (85%) ■ Noncompliance (9%)

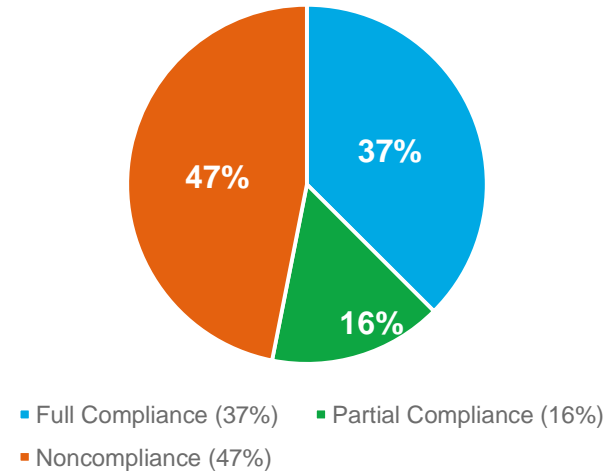
Refer to Table 3: Existing Stormwater Bylaw and Ordinance Compliance Review

Compliance Review Findings - MCMs

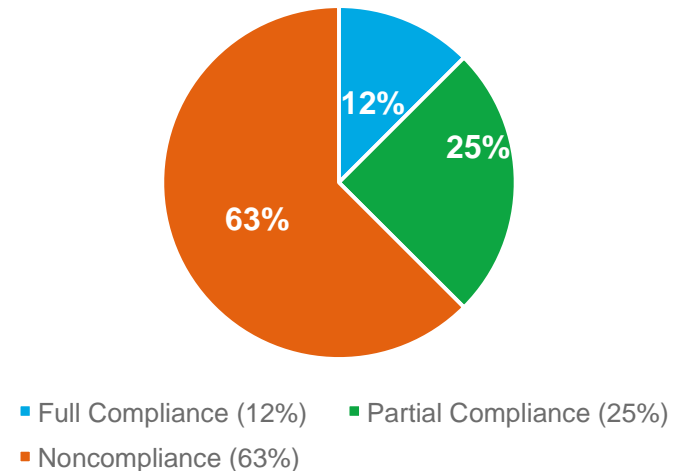
MCM 3: IDDE Compliance



MCM 4: Construction Site Stormwater Runoff Controls Compliance

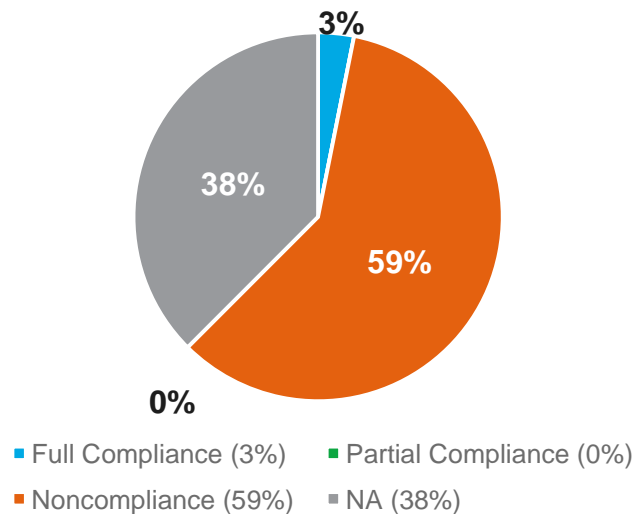


MCM 5: Stormwater Management in New & Redevelopment Compliance

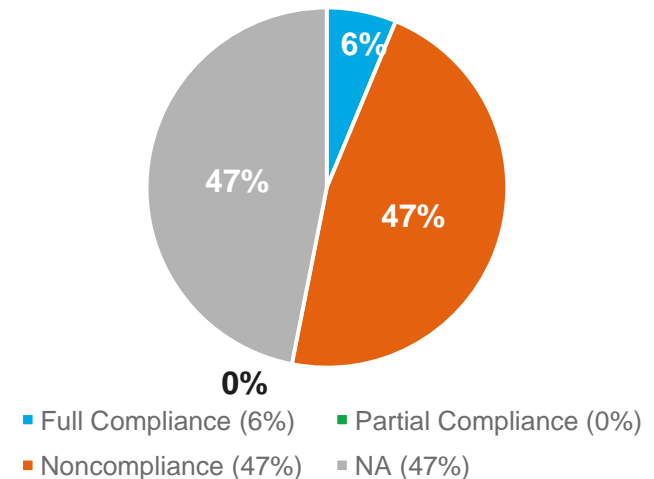


Compliance Review Findings – Impaired Waters

Appendix F: Requirements for Discharges to Impaired Waters with an Approved TMDL



Appendix H: Requirements Related to Discharges to Certain Water Quality Limited Waterbodies



Bylaw/Ordinance and Regulations Recommendations

Document Structure

Separate existing bylaws/ordinances may be combined to create one Stormwater Management Bylaw/Ordinance

Communities with Singular Comprehensive Bylaw

• Ashland	• Charlton
• Fitchburg	• Lunenburg
• Paxton	• Shrewsbury
• Spencer	• Sturbridge
• Upton	• Uxbridge

Document Structure



Bylaws/Ordinances that have procedural and/or technical language should consider moving such language to the Stormwater Regulations

Communities with Procedural/Technical Language in Bylaw or Ordinance

• Framingham	• Grafton
• Lunenburg	• Millbury
• Natick	• Oxford
• Palmer	• Upton
• Westborough	

Authorized Enforcement Agency

Consideration should be given to either naming a person with an official Town role as AEA or establishing a “Stormwater Committee” to serve as the AEA comprised of at least one person (position) with an official Town role.

Communities with a Board or Commission as the AEA

• Ashland	• Ayer
• Charlton	• Framingham
• Grafton	• Hopkinton
• Leominster	• Lunenburg
• Millbury	• Natick
• Northborough	• Palmer
• Paxton	• Rutland
• Shrewsbury	• Southborough
• Spencer	• Sterling
• Upton	• Uxbridge
• Westborough	

Additional Recommendations



Guidance documents should be referenced from Regulations



Definitions for Private vs. Public ownership of drainage systems



Review the existing thresholds for projects requiring a Stormwater Permit and update accordingly.



Urbanized Area vs. whole municipality

Implementation Considerations



Form a Stormwater Bylaw and/or Regulations Task Force



Review related bylaws and regulations for potential opportunities to streamline the site plan submittal and review process



Document findings related to the feasibility of making Green Infrastructure, infiltration practices, etc. allowable



Development of fact sheets, checklists and other educational materials

Thank You

Kathryn B. Edwards, PE
Project Manager
Kate.Edwards@arcadis.com

Evan Raffi, EIT
Water Engineer
Evan.Raffi@arcadis.com

Arcadis U.S., Inc.
500 Edgewater Drive, Suite 511
Wakefield, MA 01880