



NPDES Phase II Small MS4 Permit Program – Massachusetts

Annual reports summary Permit Year 8 (April 2010 - March 2011)

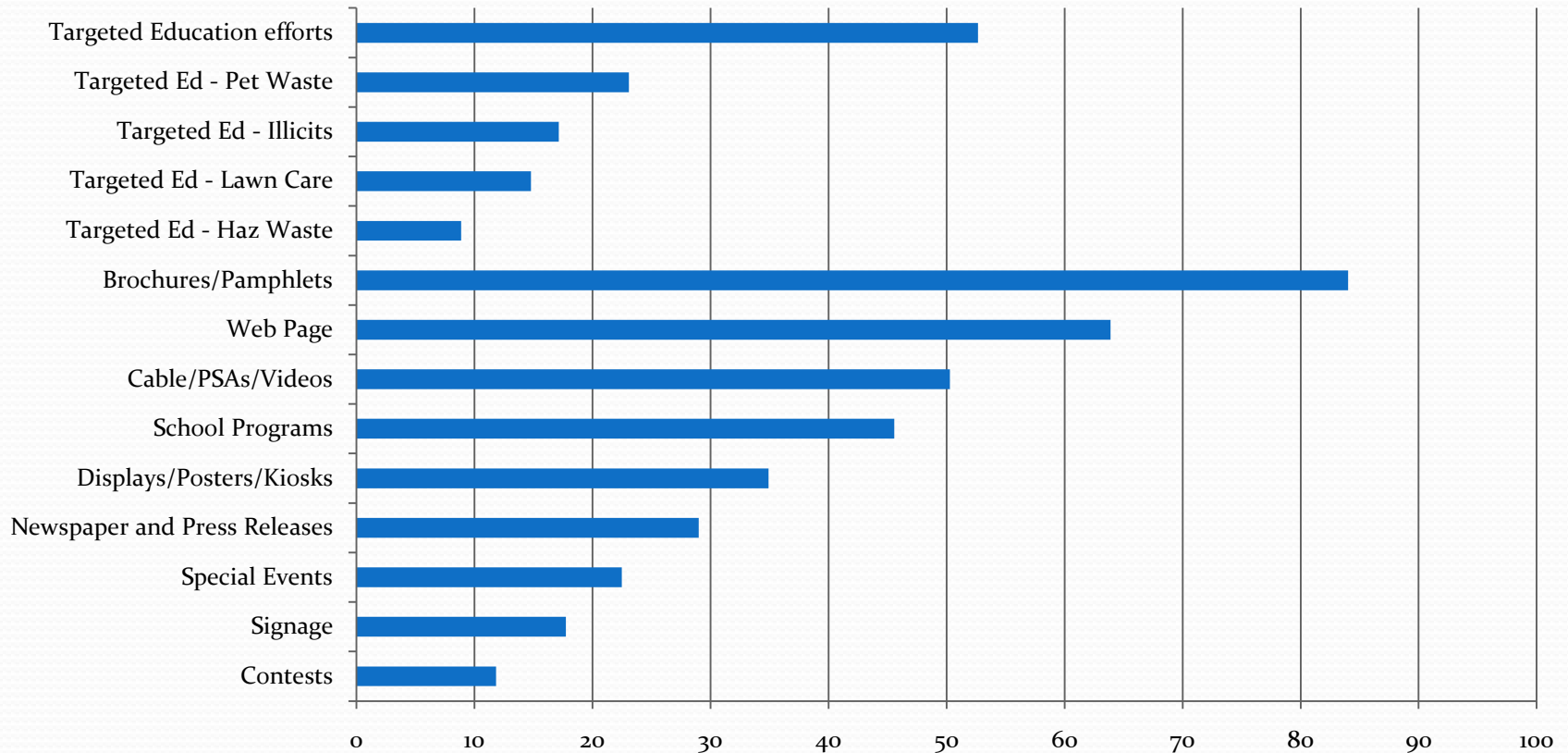
August 4, 2011

71% of Municipalities Reporting

Year 8 Annual Reports Summary

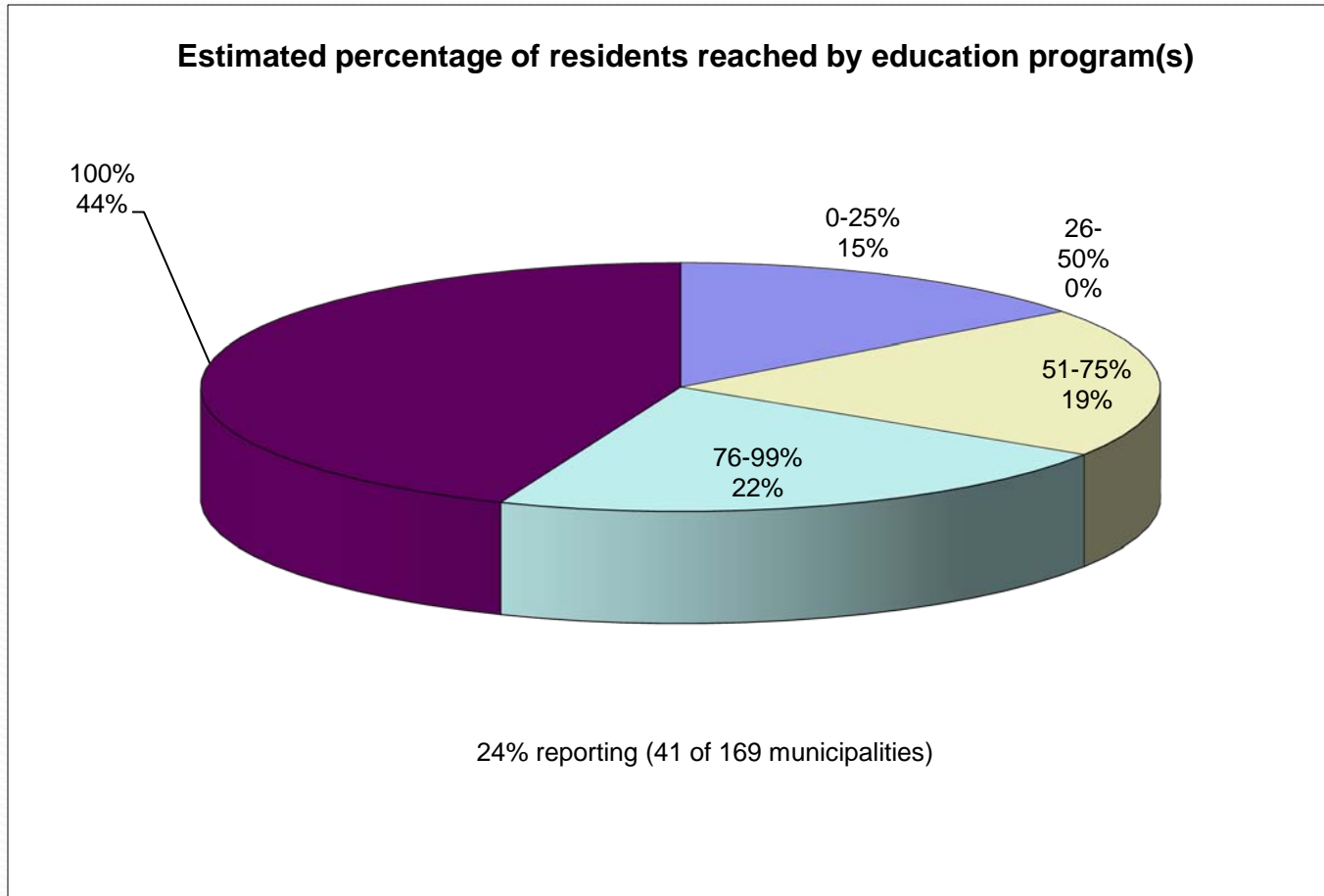
- Review of reports provides:
 - Best Management Practices (BMPs) reportedly employed by Massachusetts municipalities through Permit Year 8 to implement the six Minimum Control Measures (MCMs) required by the Small Municipal Separate Storm Sewer System (MS4) Permit
 - Progress toward implementing select BMPs as determined by voluntarily reported metrics
- Data provided in reports facilitate benchmarking, technical assistance, program evaluation and compliance
- Of 238 permitted municipalities
 - **169** municipalities (71%) submitted annual reports
 - **85** municipalities (36%) voluntarily provided performance metrics

Public Education and Outreach BMPs (MCM 1)

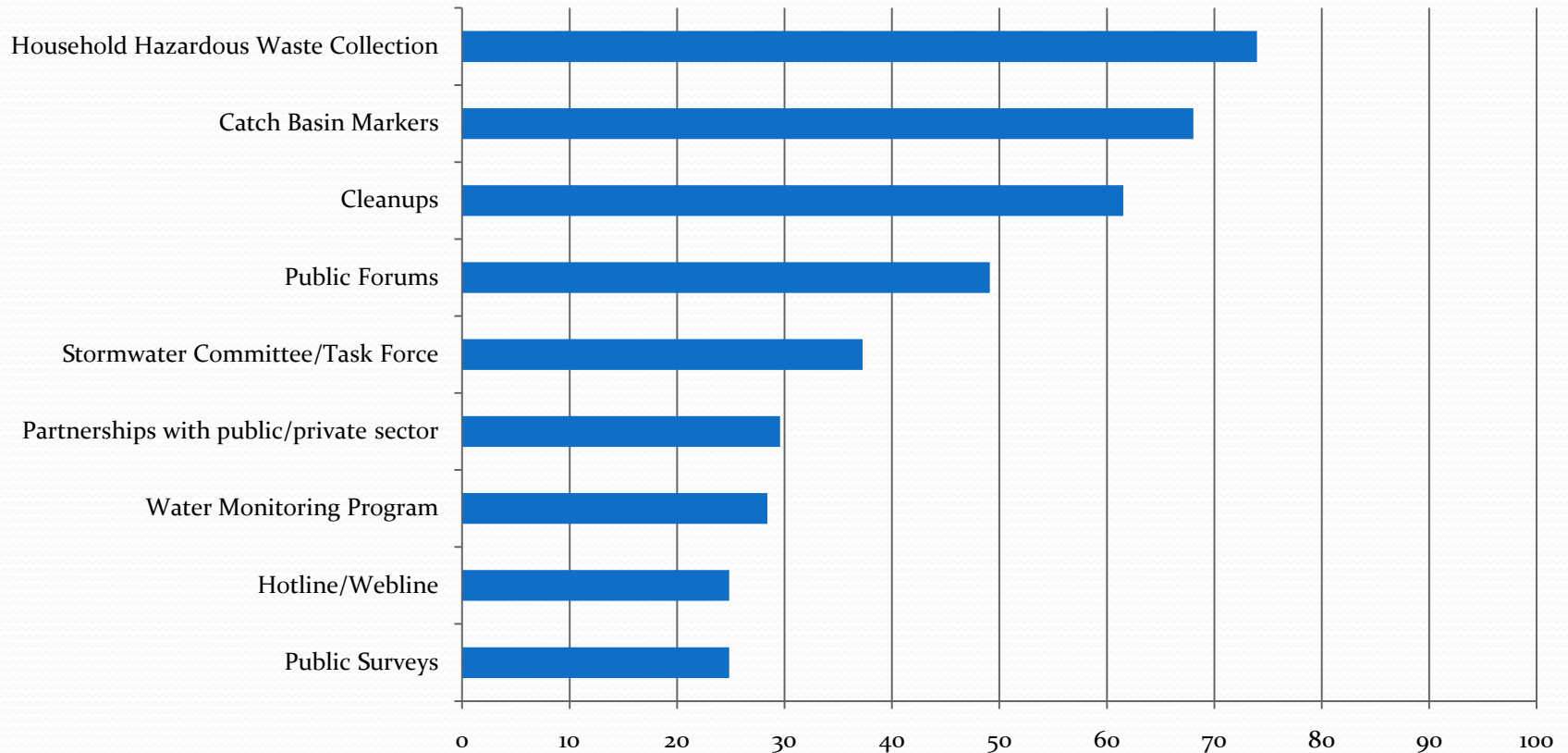


Percent using practice among the 71% of MA municipalities reporting

Public Education and Outreach Metric (MCM1)



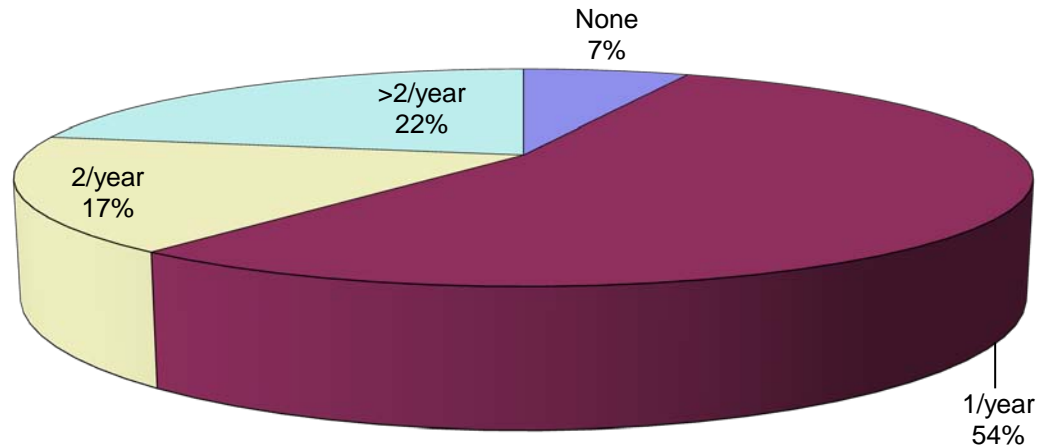
Public Involvement and Participation BMPs (MCM 2)



Percent using practice among the 71% of MA municipalities reporting

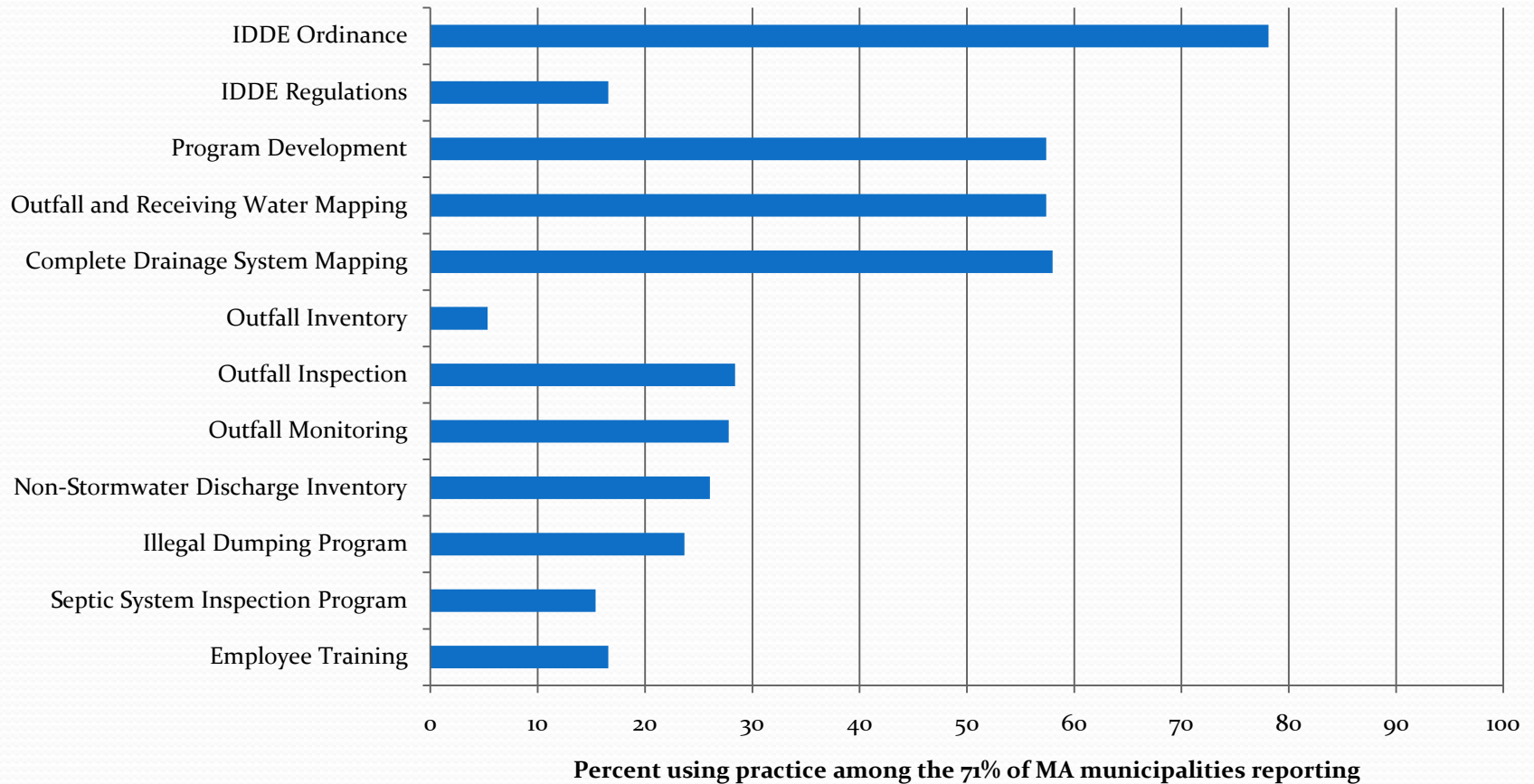
Public Involvement and Participation Metric (MCM 2)

Household hazardous waste collection events/days sponsored



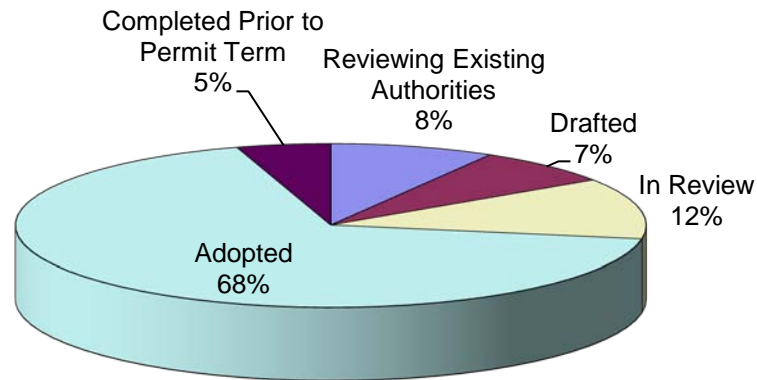
83% reporting (140 of 169 municipalities)*
*combined reporting from metrics and BMPs

Illicit Discharge Detection and Elimination (IDDE) BMPs (MCM 3)



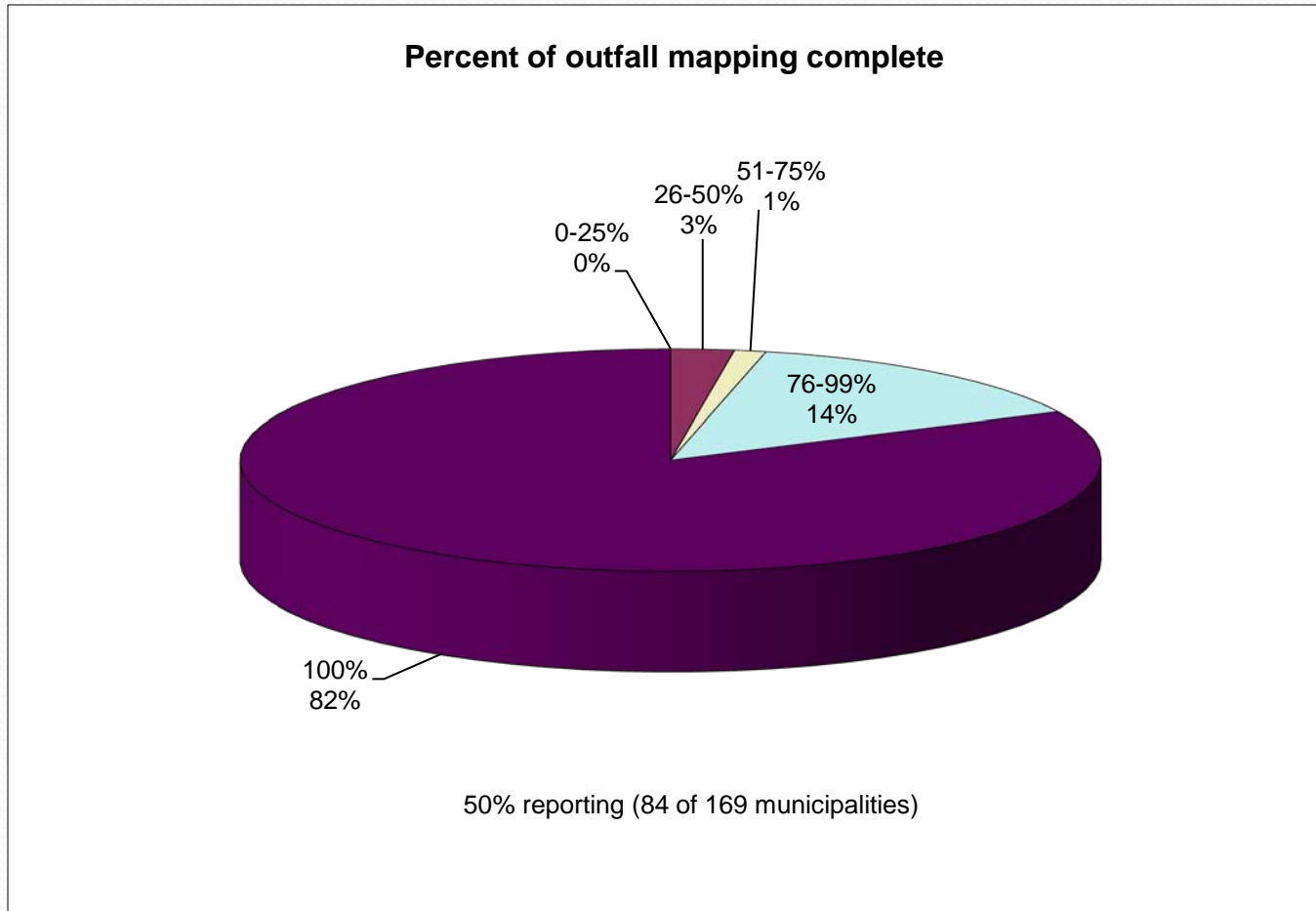
Illicit Discharge Detection and Elimination Metric (MCM 3)

IDDE Regulatory Mechanism Status

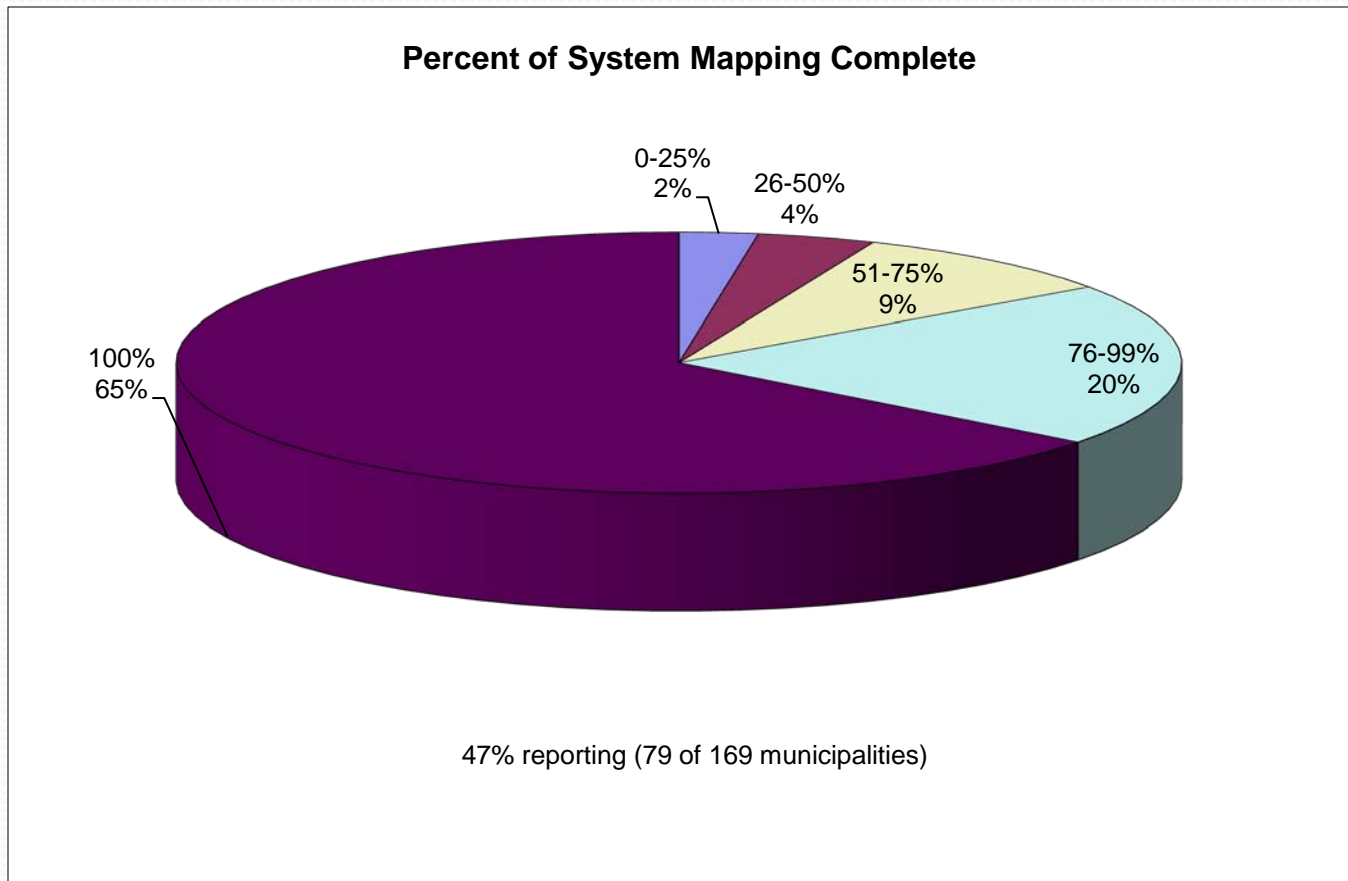


49% reporting (83 of 169 municipalities)

Illicit Discharge Detection and Elimination Metric (MCM 3)

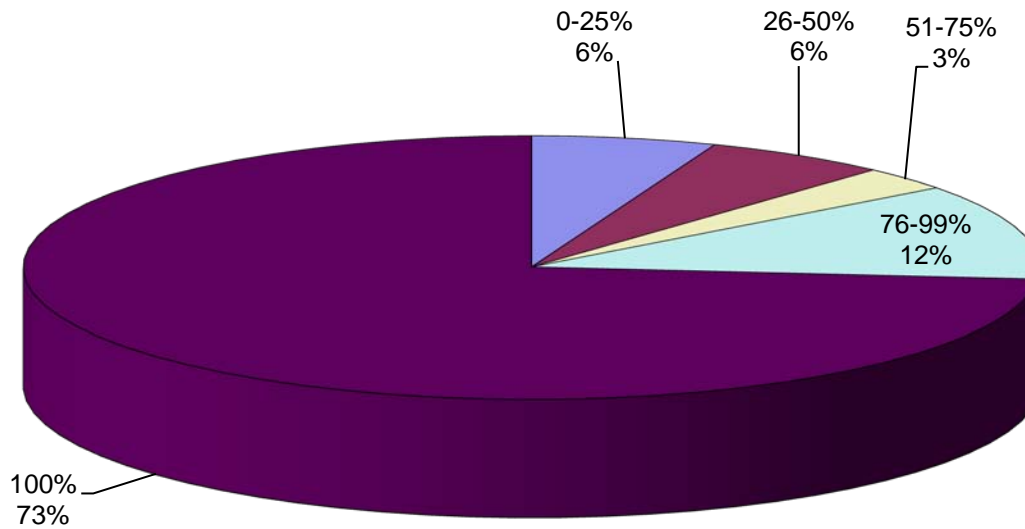


Illicit Discharge Detection and Elimination Metric (MCM 3)



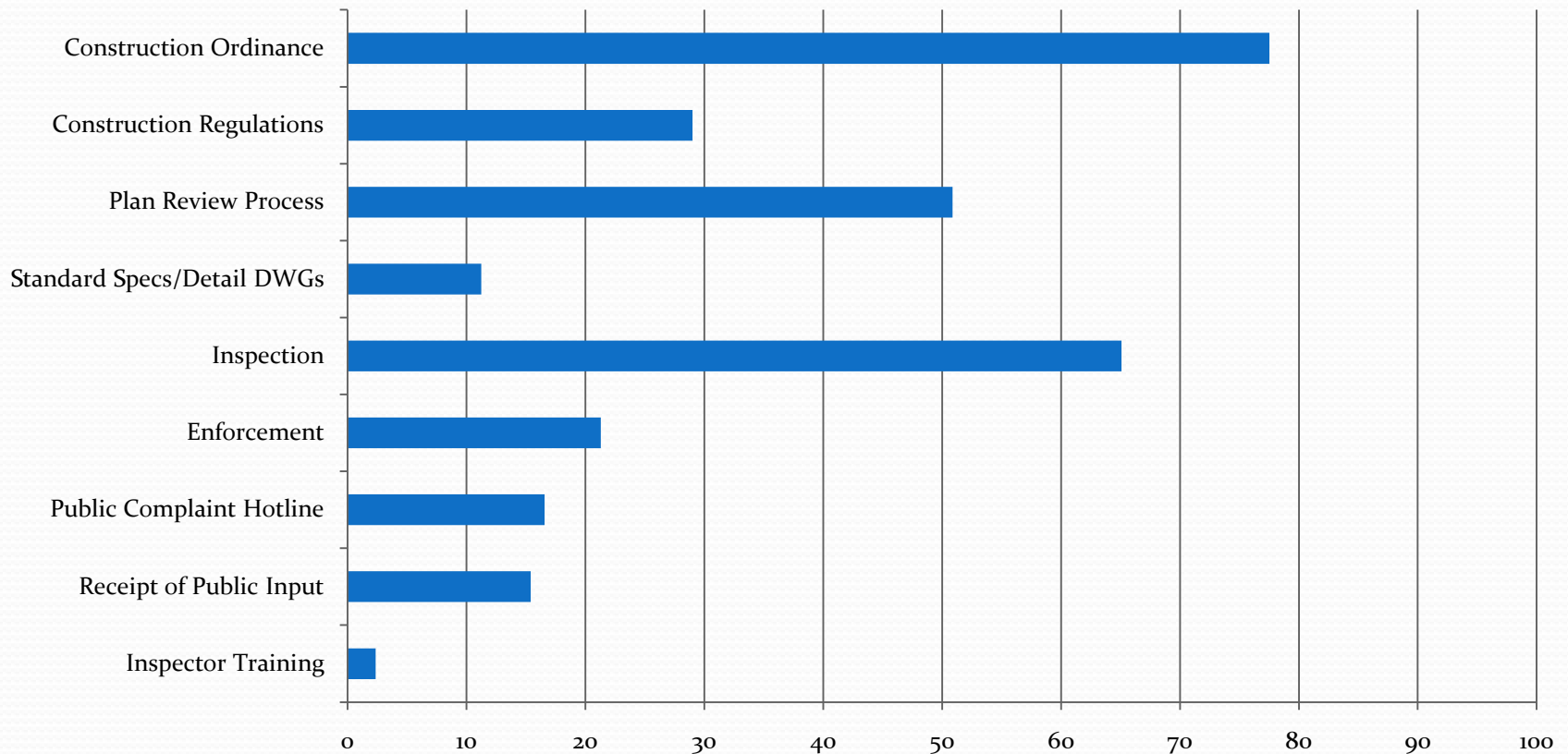
Illicit Discharge Detection and Elimination Metric (MCM 3)

Percent of outfalls inspected/screened since the beginning of permit coverage



20% reporting (34 of 169 municipalities)

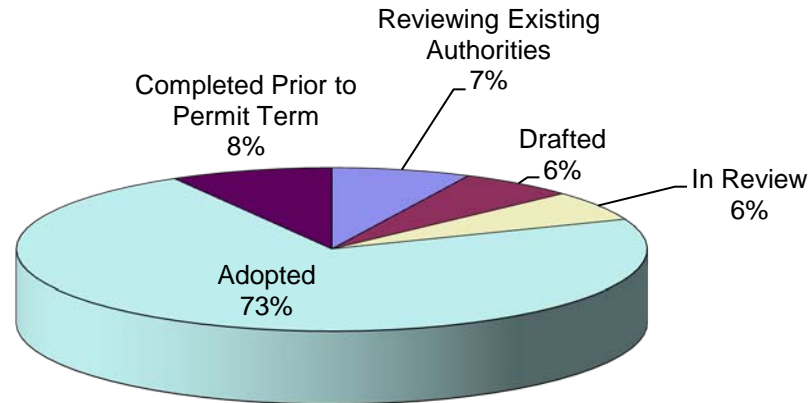
Construction Site Stormwater Runoff Control BMPs (MCM 4)



Percent using practice among the 71% of MA municipalities reporting

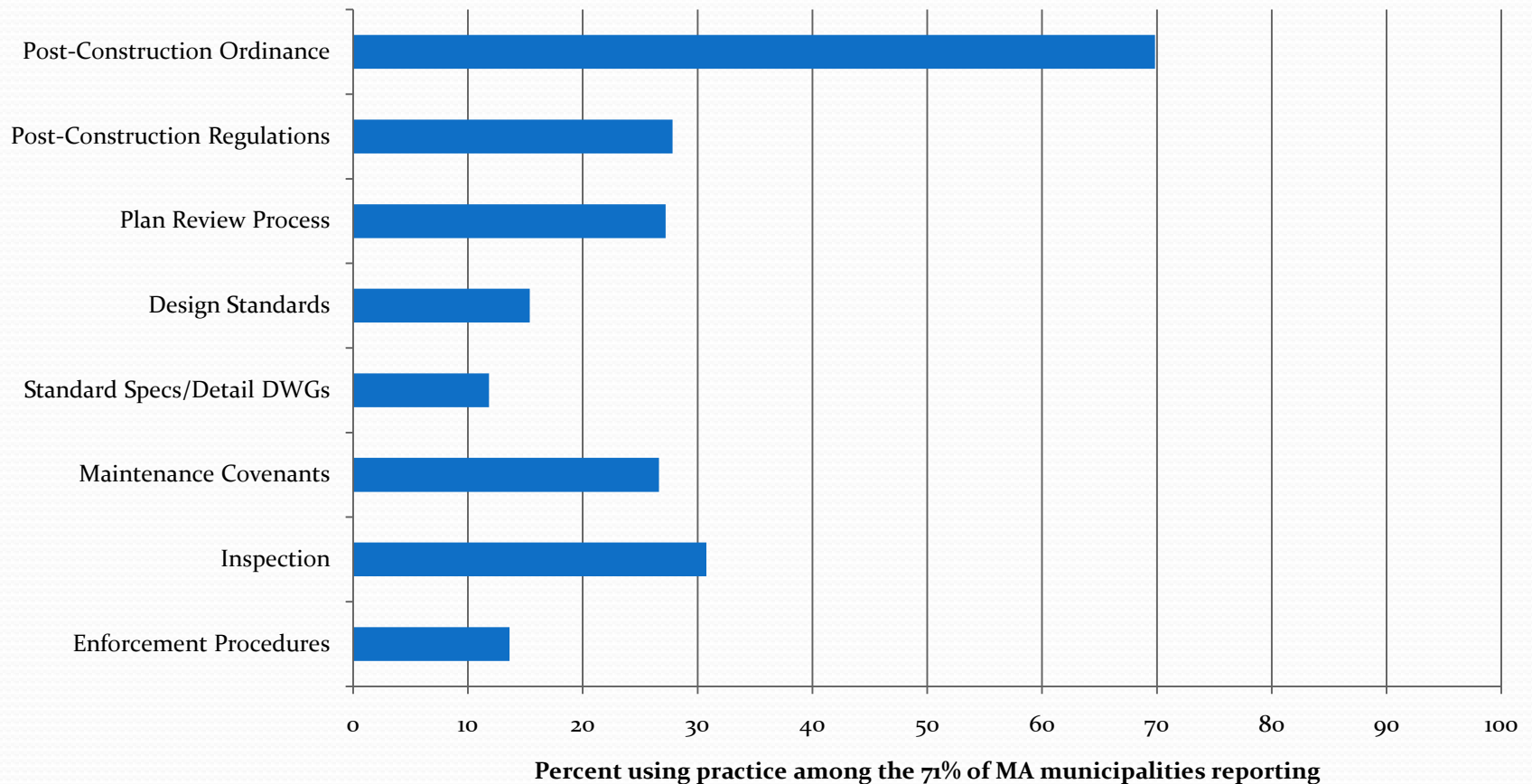
Construction Site Stormwater Runoff Control Metric (MCM 4)

Construction/Erosion and Sediment Control Regulatory Mechanism Status



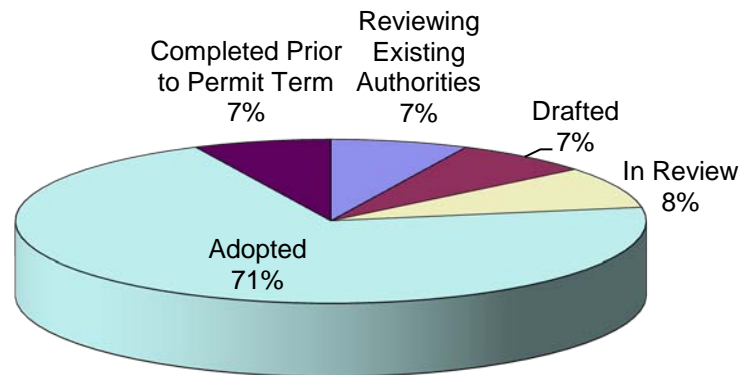
50% reporting (84 of 169 municipalities)

Post-Construction Stormwater Management in New Development and Redevelopment BMPs (MCM 5)



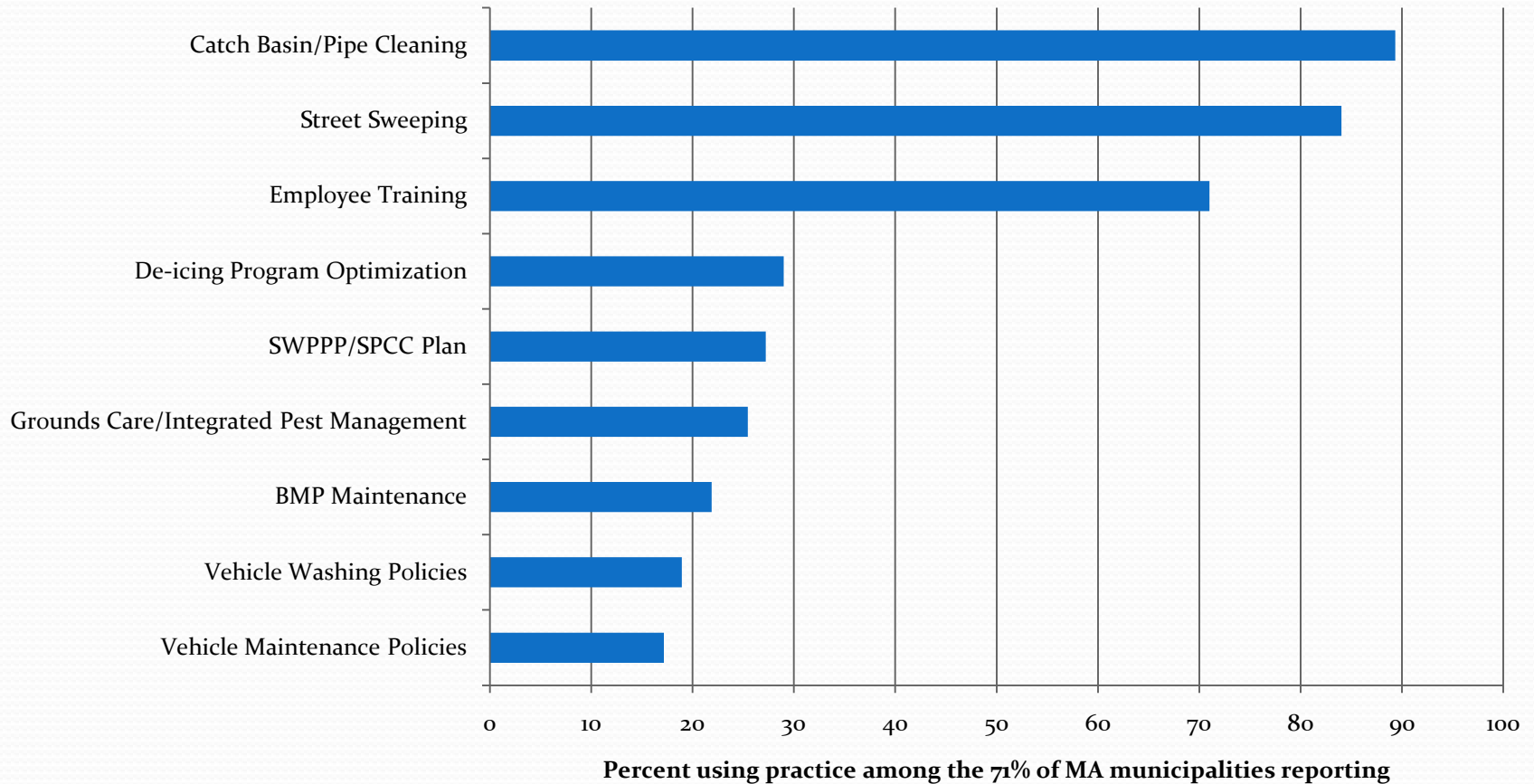
Post-Construction Stormwater Management in New Development and Redevelopment Metric (MCM 5)

Post-Development Regulatory Mechanism Status



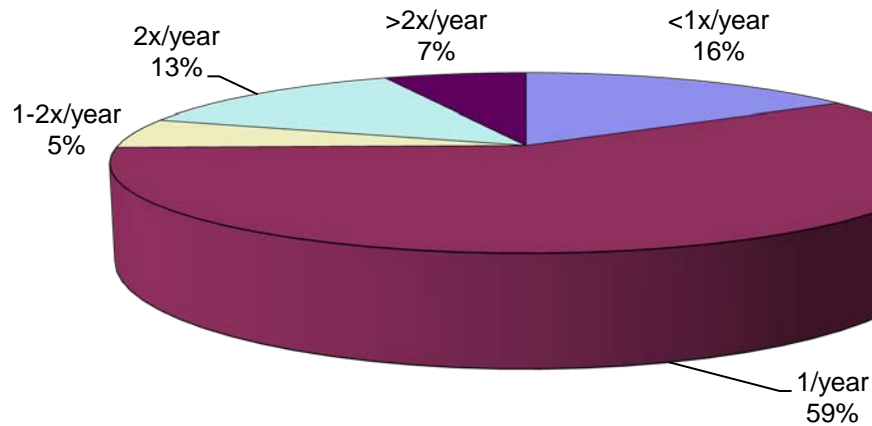
50% reporting (85 of 169 municipalities)

Municipal Good Housekeeping BMPs (MCM 6)



Municipal Good Housekeeping Metric (MCM 6)

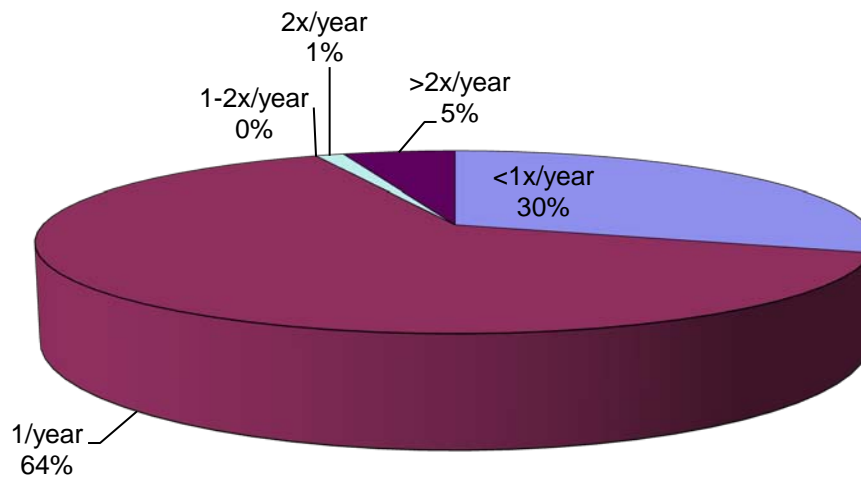
Average frequency of catch basin cleaning on commercial/arterial streets



44% reporting (75 of 169 municipalities)

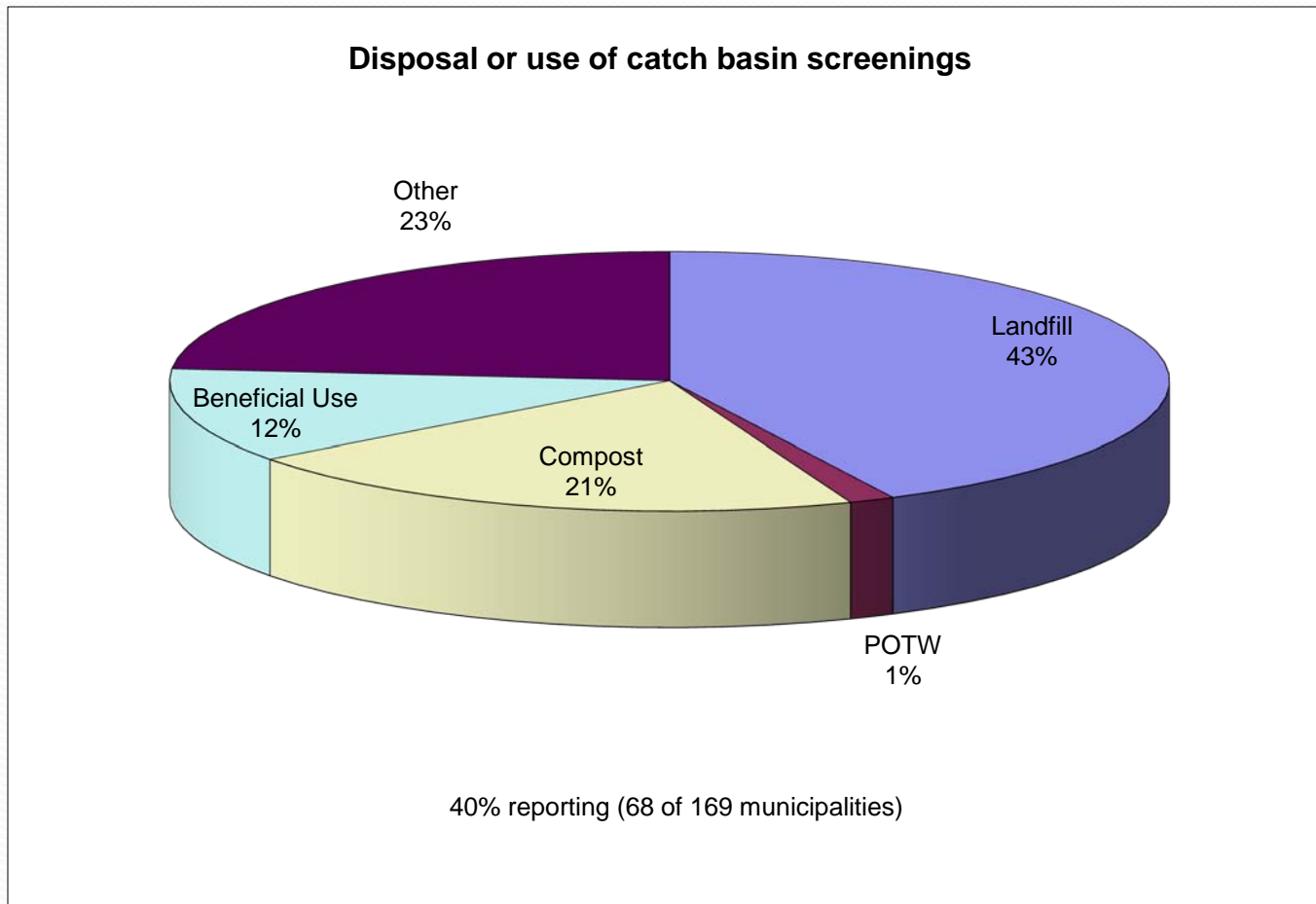
Municipal Good Housekeeping Metric (MCM 6)

Average frequency of catch basin cleaning on residential streets



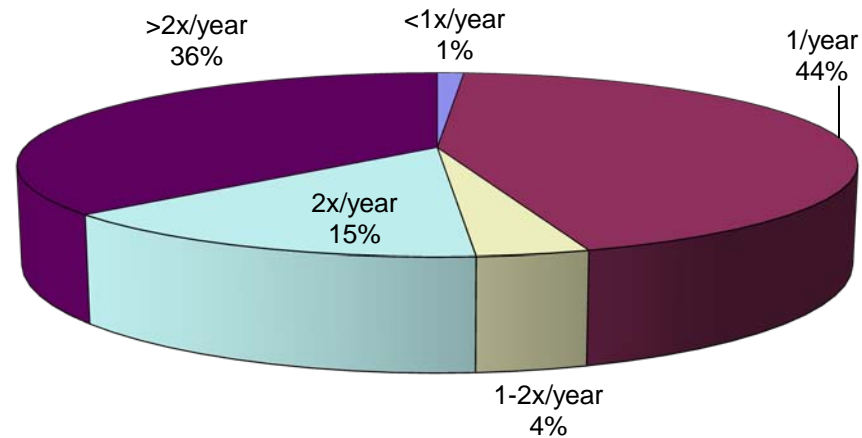
46% reporting (77 of 169 municipalities)

Municipal Good Housekeeping Metric (MCM 6)



Municipal Good Housekeeping Metric (MCM 6)

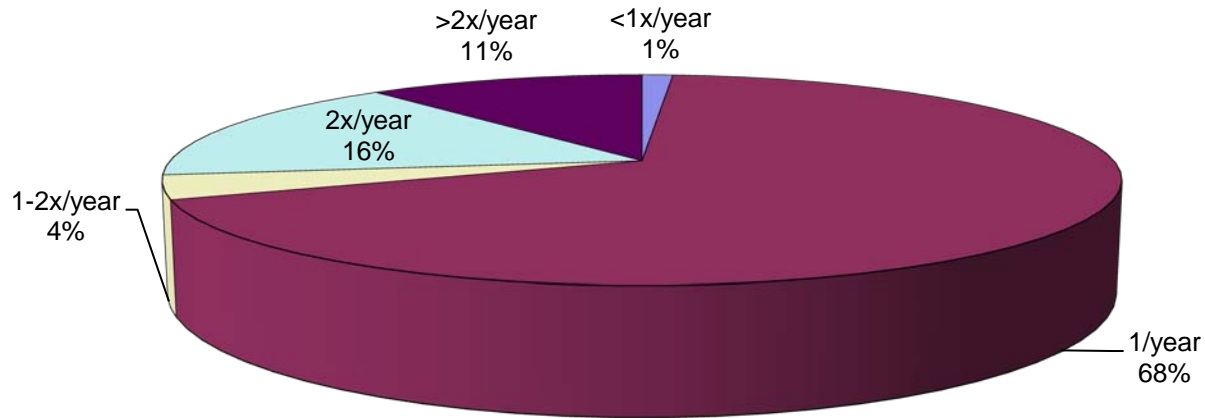
Average frequency of street sweeping on commercial/arterial streets



49% reporting (82 of 169 municipalities)

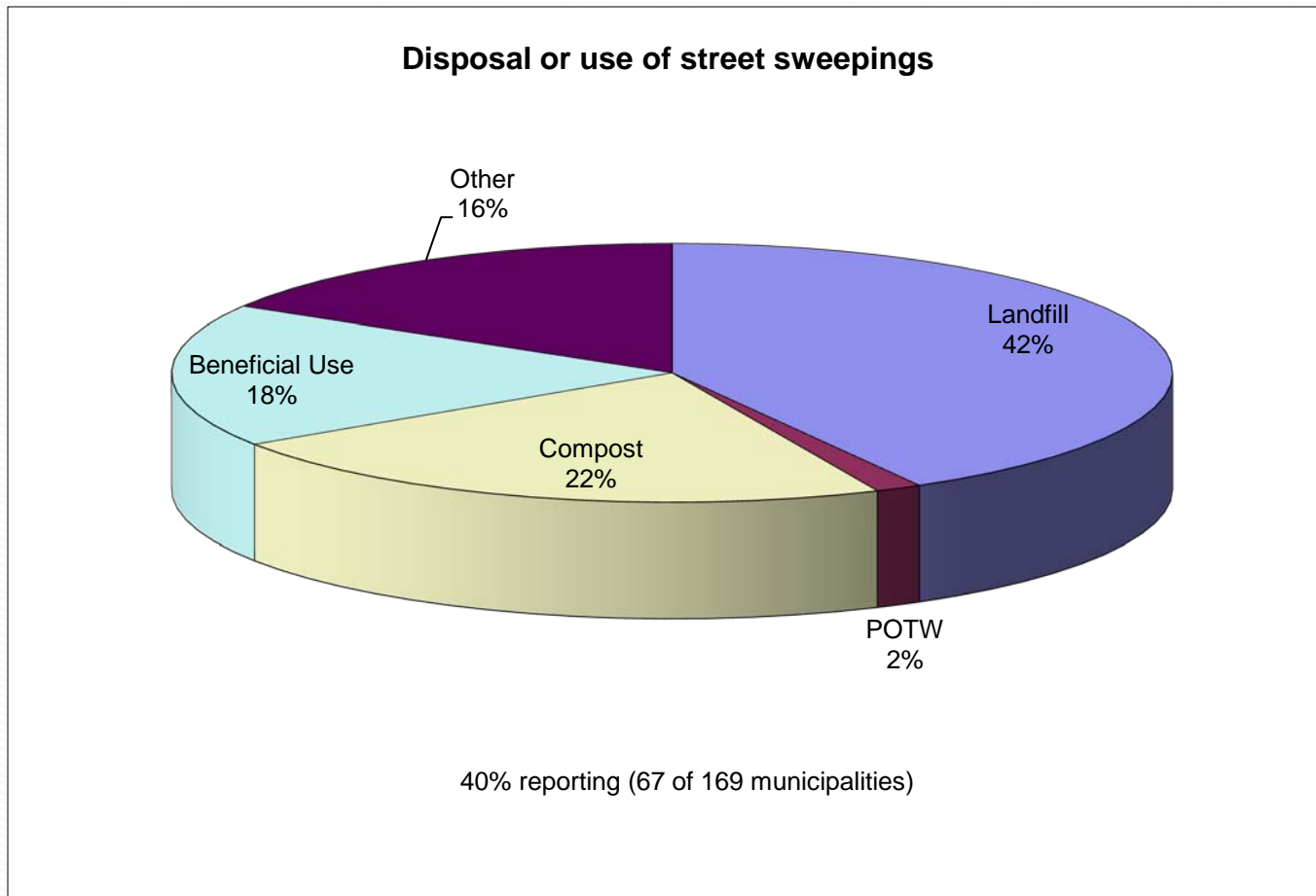
Municipal Good Housekeeping Metric (MCM 6)

Average frequency of street sweeping on residential streets



48% reporting (81 of 169 municipalities)

Municipal Good Housekeeping Metric (MCM 6)



Municipal Good Housekeeping Metric (MCM 6)

De-icing equipment/techniques used	
Equipment/Technique	% of municipalities using this equipment/technique
Automatic or Zero-Velocity Spreaders	43% of 67 municipalities reporting
Manual Control Spreaders	86% of 73 municipalities reporting
Pre-wetting Techniques	48% of 71 municipalities reporting
100% of salt pile(s) covered in storage shed(s)	96% of 80 municipalities reporting

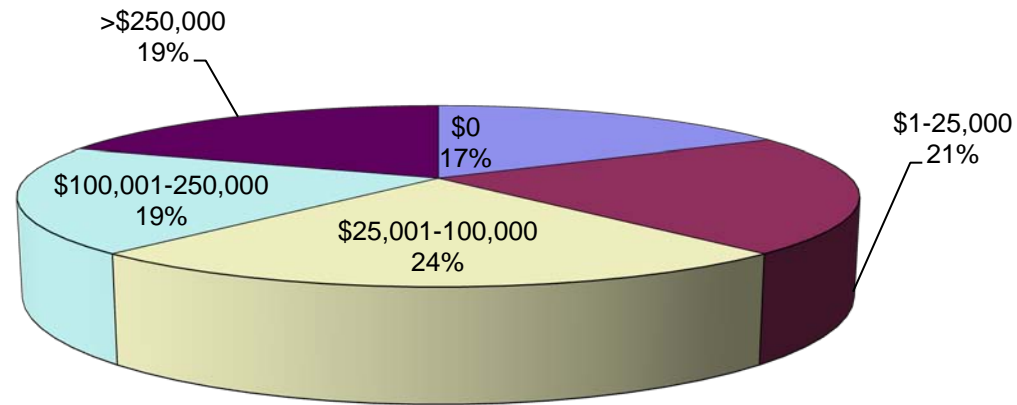
Municipal Good Housekeeping Metric (MCM 6)

De-icing products used	
Product	Average reported % of all de-icing products represented by this product (considering only municipalities that reported on their use of the product)¹
NaCl	54% (55 municipalities reported their NaCl use)
CaCl ₂	15% (19 municipalities reported their CaCl ₂ use)
MgCl ₂	9% (6 municipalities reported their MgCl ₂ use)
Sand	48% (57 municipalities reported their sand use)

¹ For example, of the 55 municipalities that reported using NaCl, on average, 54% of the mix of deicing products used by these municipalities is composed of NaCl

Stormwater management program

Annual program budget/expenditures



28% reporting (47 of 169 municipalities)

Select BMPs of interest implemented by municipalities in April 2010 – March 2011 reporting period

- Outfall monitoring – wet or dry weather (47)
- Snow & ice control optimization program (48)
- Low Impact Development (LID) practices permitted and encouraged (31)
- BMP maintenance required through escrow, covenants, deed restrictions, etc. (21)

() denotes # of municipalities reporting this BMP