

Willamette Basin Five Year Review 2013-2018

Designated Management Agency TMDL Implementation

Dec. 12, 2019

Wilsonville City Hall, Second Floor



Today's Overview

- TMDL urban/rural nonpoint source implementation
 - Background
 - Five year status 2013-2018
 - Data comparisons – 2014 and 2019
 - Water quality status and trends
- Questions ???
- Conclusions

Willamette TMDLS

- Goal
 - Achieve TMDL allocations over time to meet water quality standards
 - TMDLs
 - Primary: Bacteria, Mercury, Temperature
 - Dissolved Oxygen, Pesticides, Phosphorus, Turbidity

OAR 340 Division 42 TMDLs

- 340-042-0040 Establishing
- 340-042-0060 Issuing Order
- 340-042-0080 Implementing

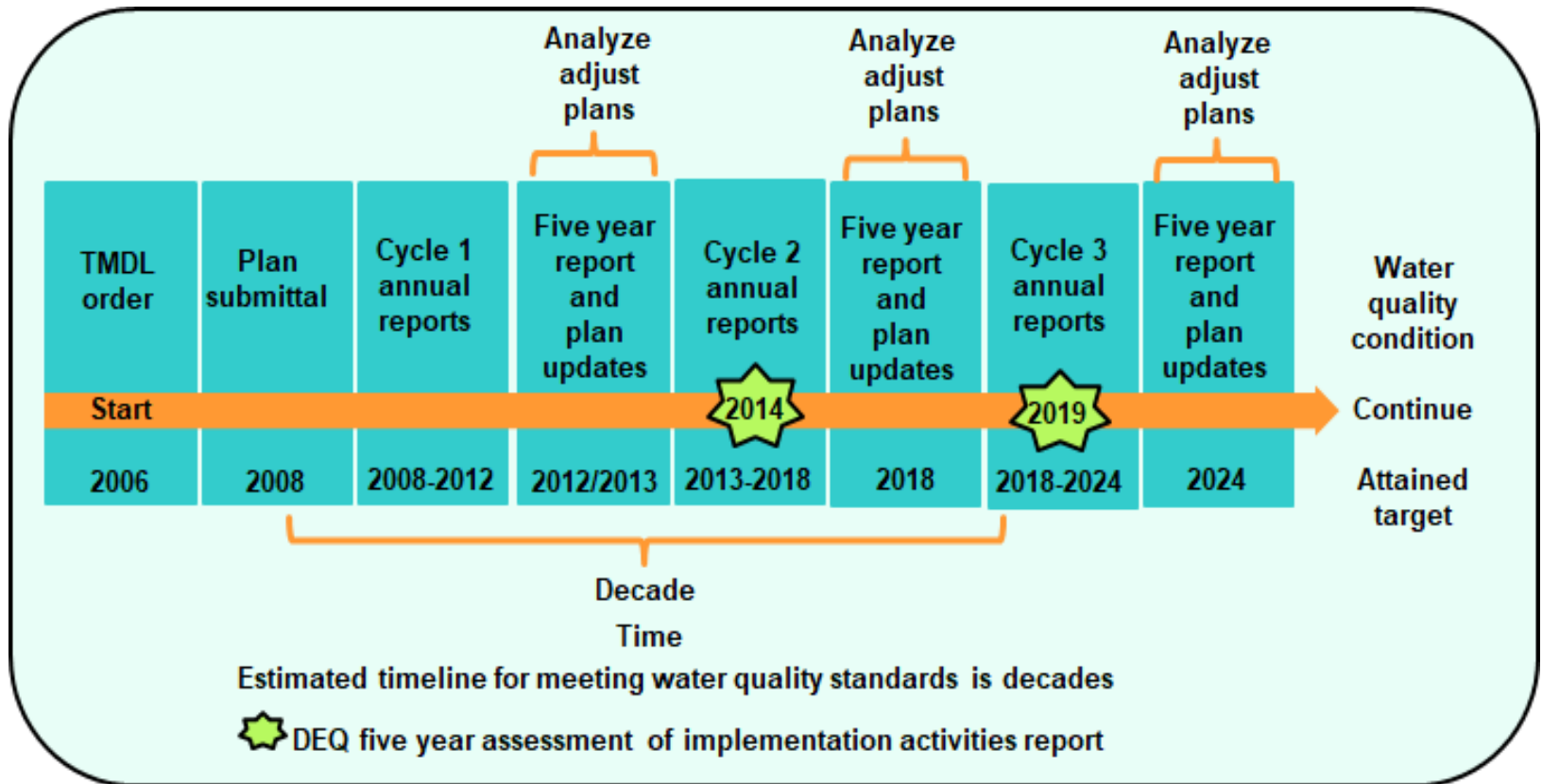
340-042-0080(4)(a)

- Prepare an implementation plan
 - Identify the management strategies
 - Timeline for implementing strategies
 - Performance monitoring
 - Compliance with land use requirements
 - Other analyses or information specified in the WQMP
- DEQ for review and approval
- Implement and revise the plan as needed

Monitoring and Evaluation

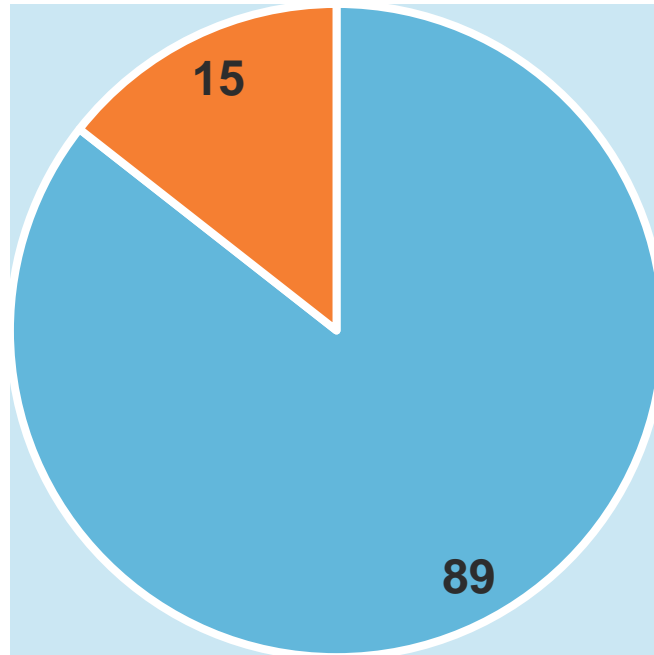
- Three broad components
 - Selection and implementation of effective strategies in TMDL implementation plans
 - Strategy effectiveness monitoring and,
 - Assessment of water quality or surrogate measures improvement

Timeline and Reporting Process



Willamette Basin DMAs

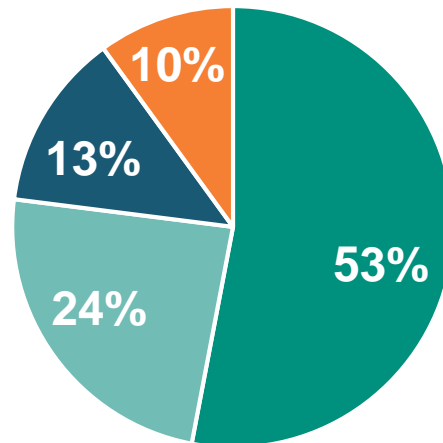
Willamette Basin TMDL DMA Total



- Urban/Rural Cities, Counties, Special Districts
- Federal & State Agencies, Water Conveyance, Special Districts

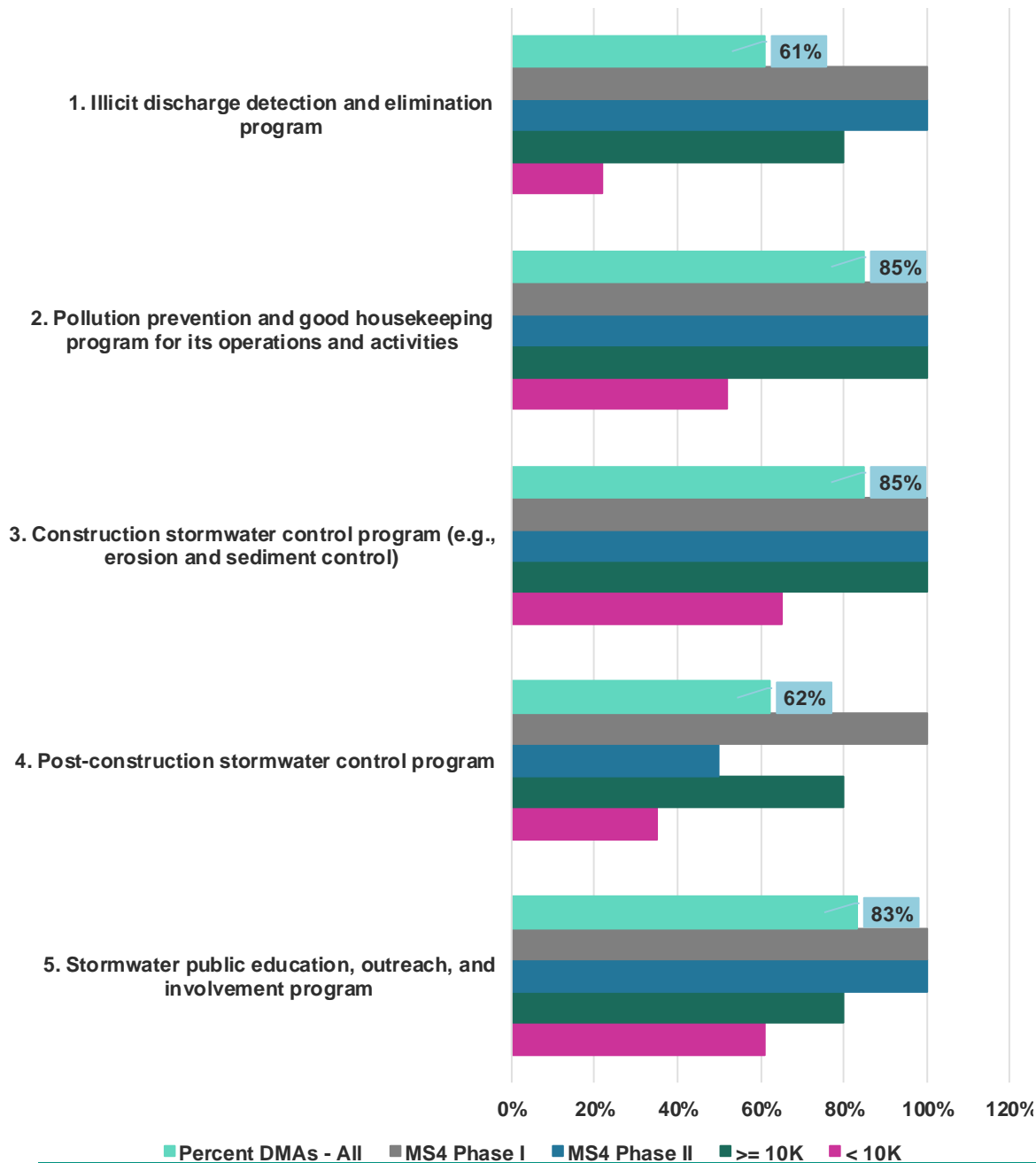
Willamette Basin Urban/Rural DMAs

Five Year Review Reporting Timelines



- 2018 Willamette 2006 and Tualatin
- 2019-2021 Willamette 2006 Other
- 2021 Molalla-Pudding
- Yamhill - No requirements

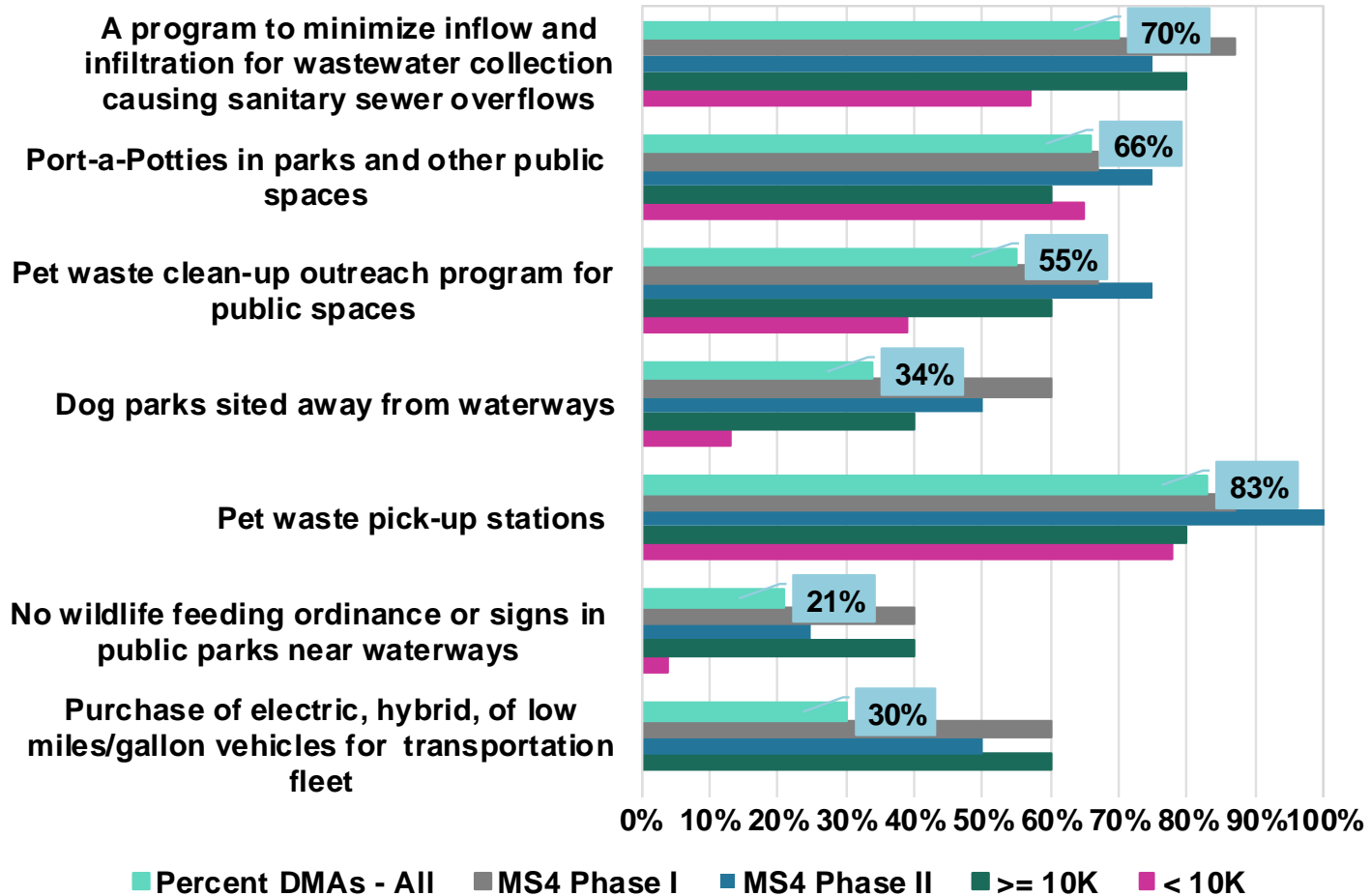
Control Measures Stormwater Program Planning



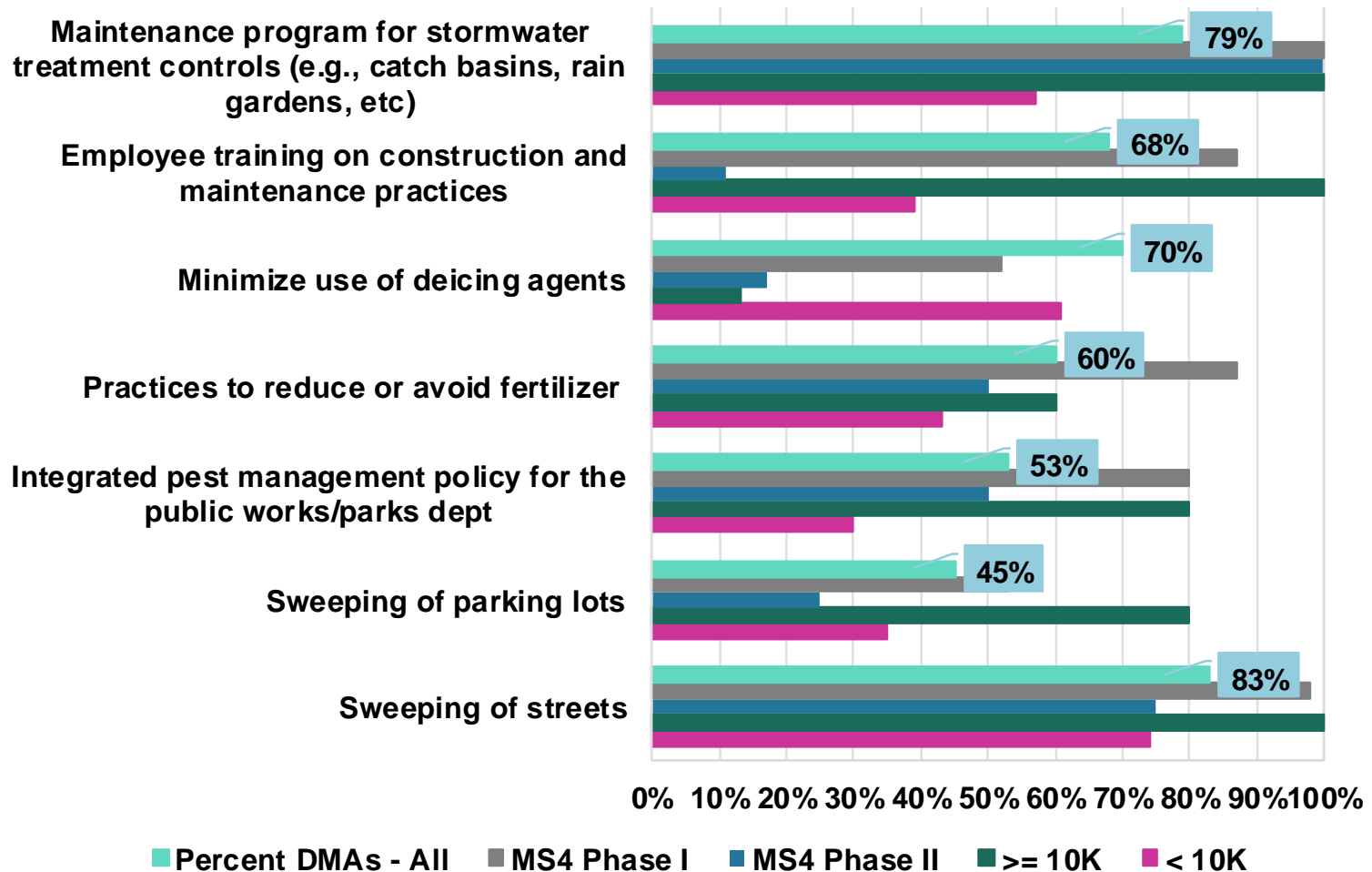
Example: Differences in Program Elements

	Percent of DMAs Implementing Construction SW Program	Percent of DMAs Implementing Construction Site Inspections	Percent of DMAs Implementing Employee Training on Construction and Maintenance Practices to Protect WQ
Phase I	100	93	87
Phase II	100	100	11
≥ 10,000	100	80	100
< 10,000	65	48	39

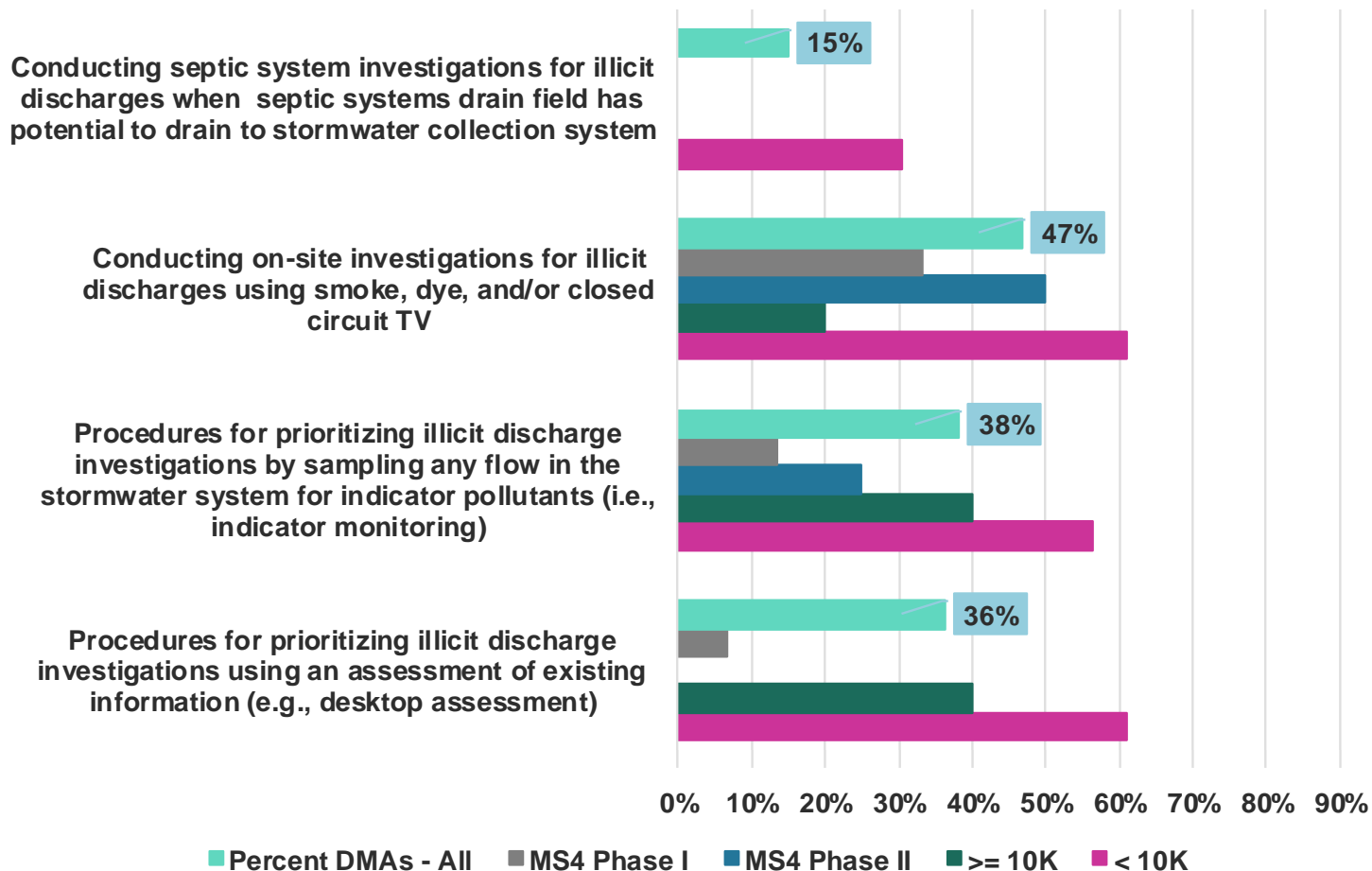
Pollution Prevention in Municipal Operations



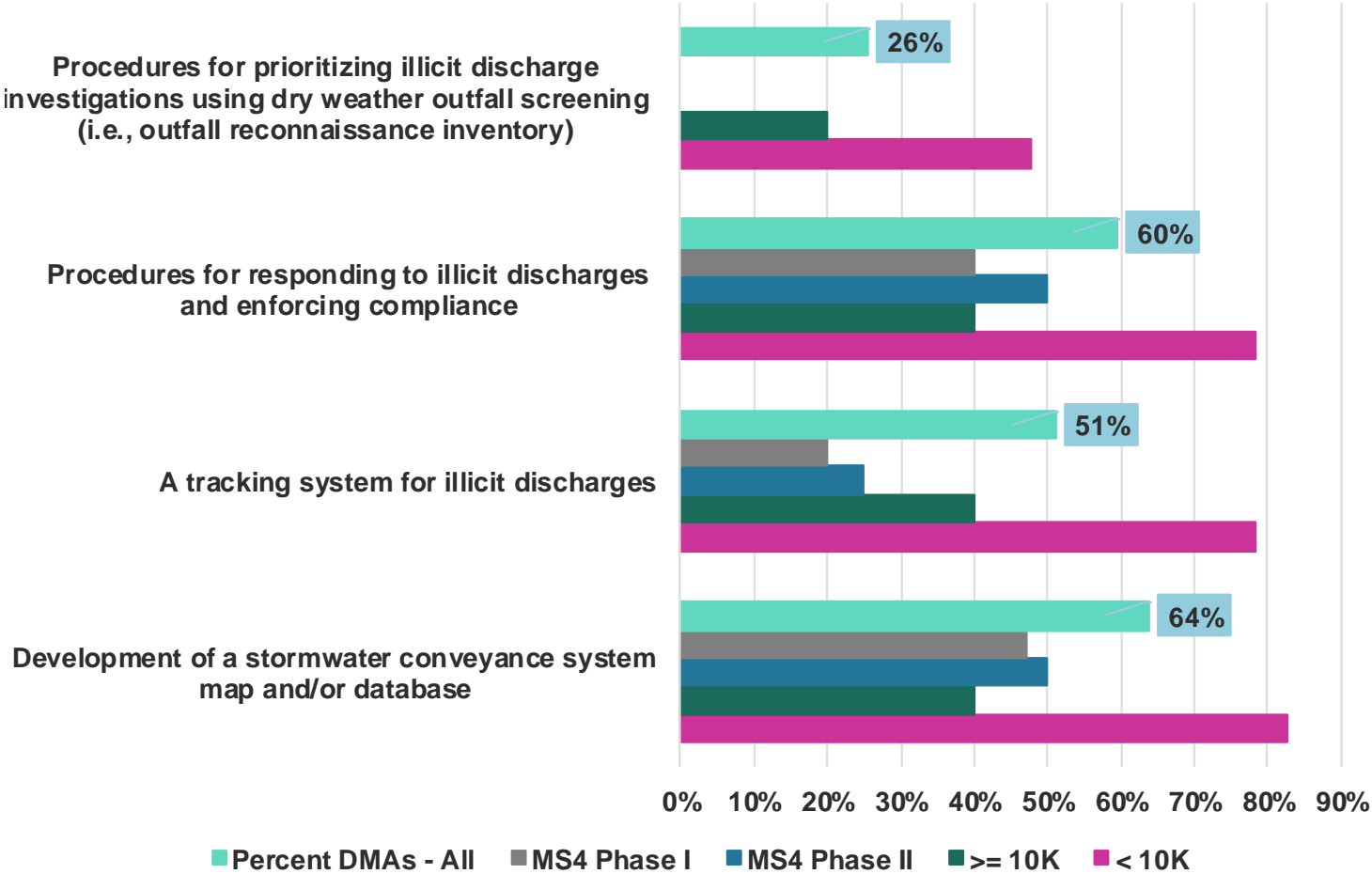
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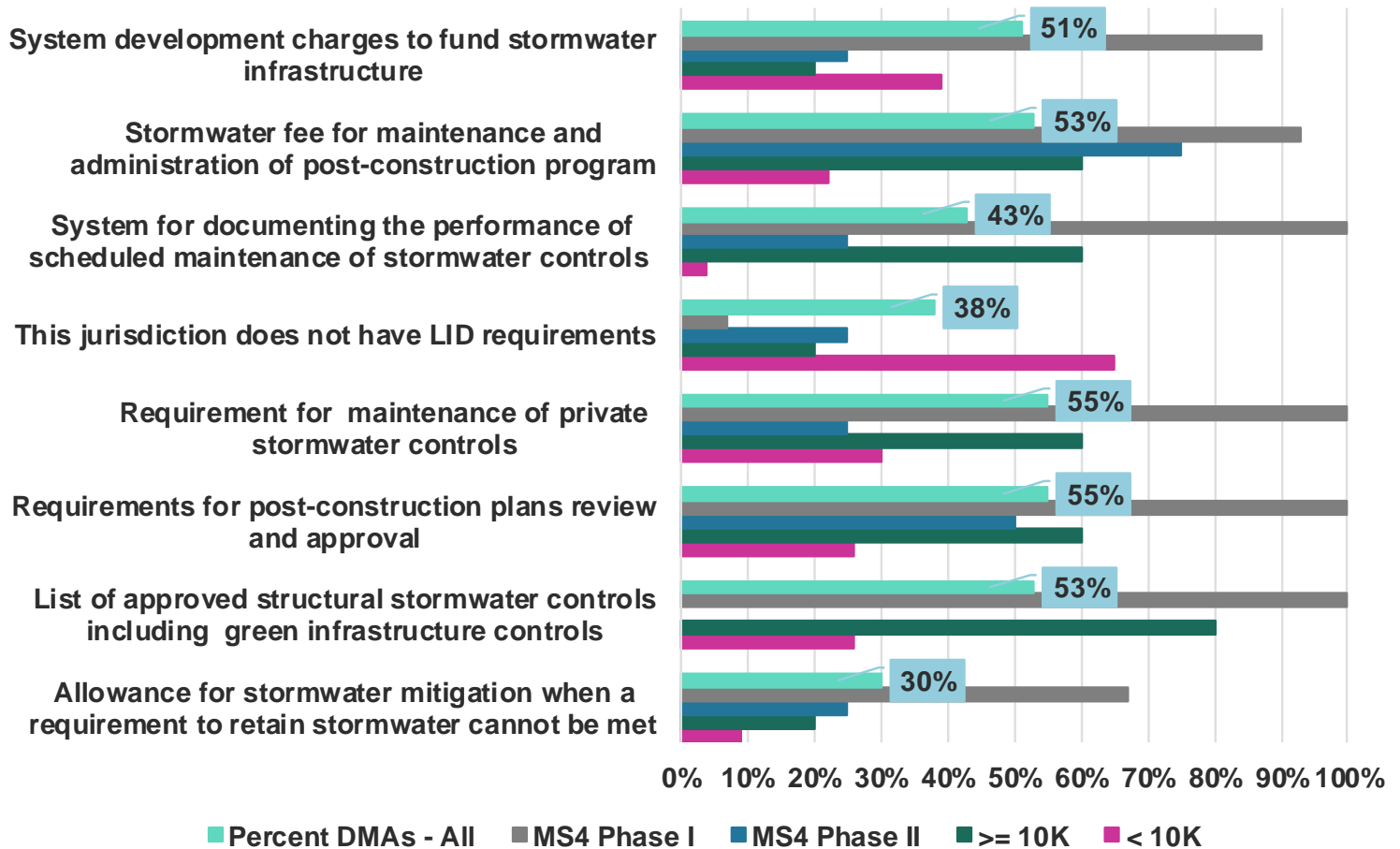
Illicit Discharge, Detection and Elimination



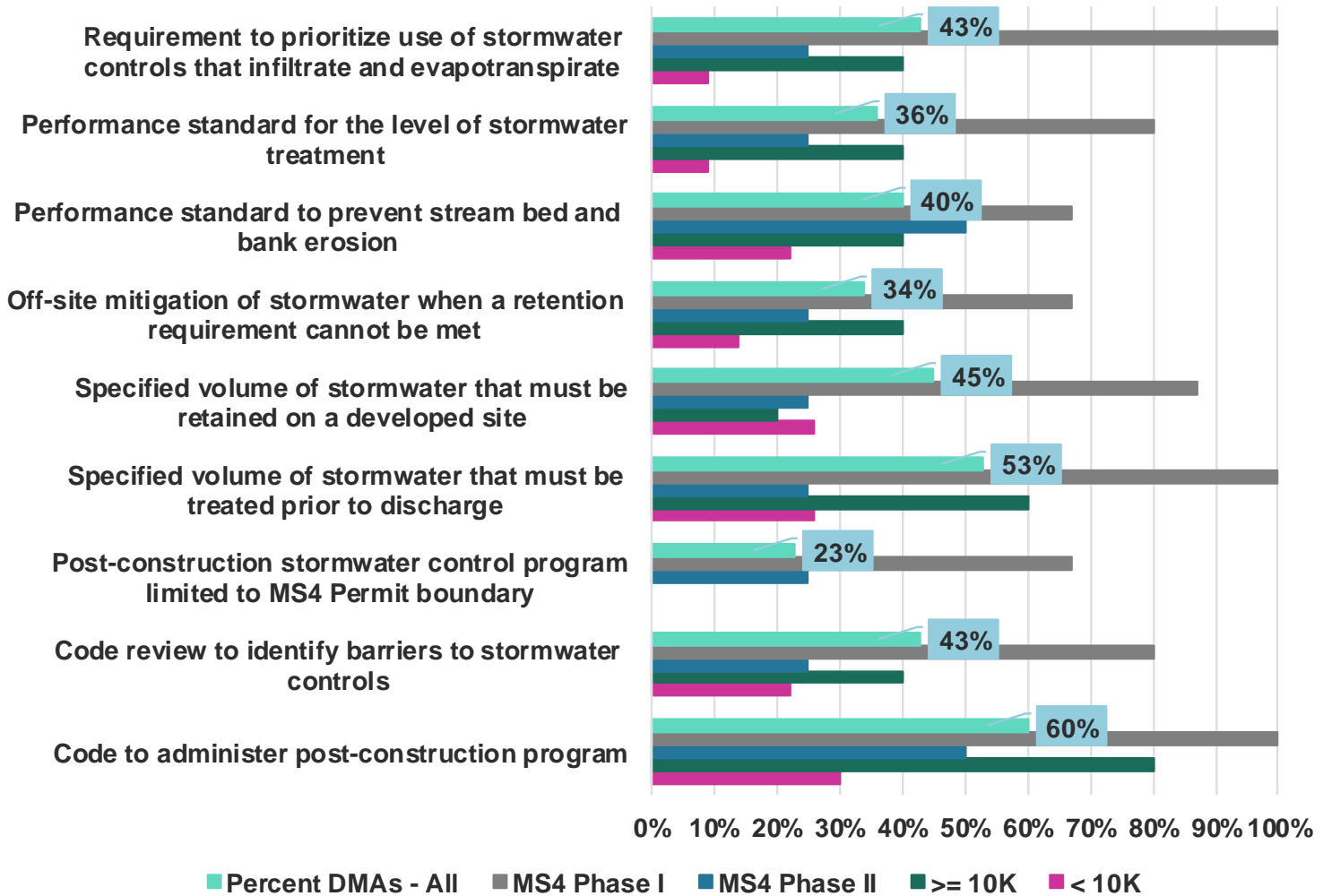
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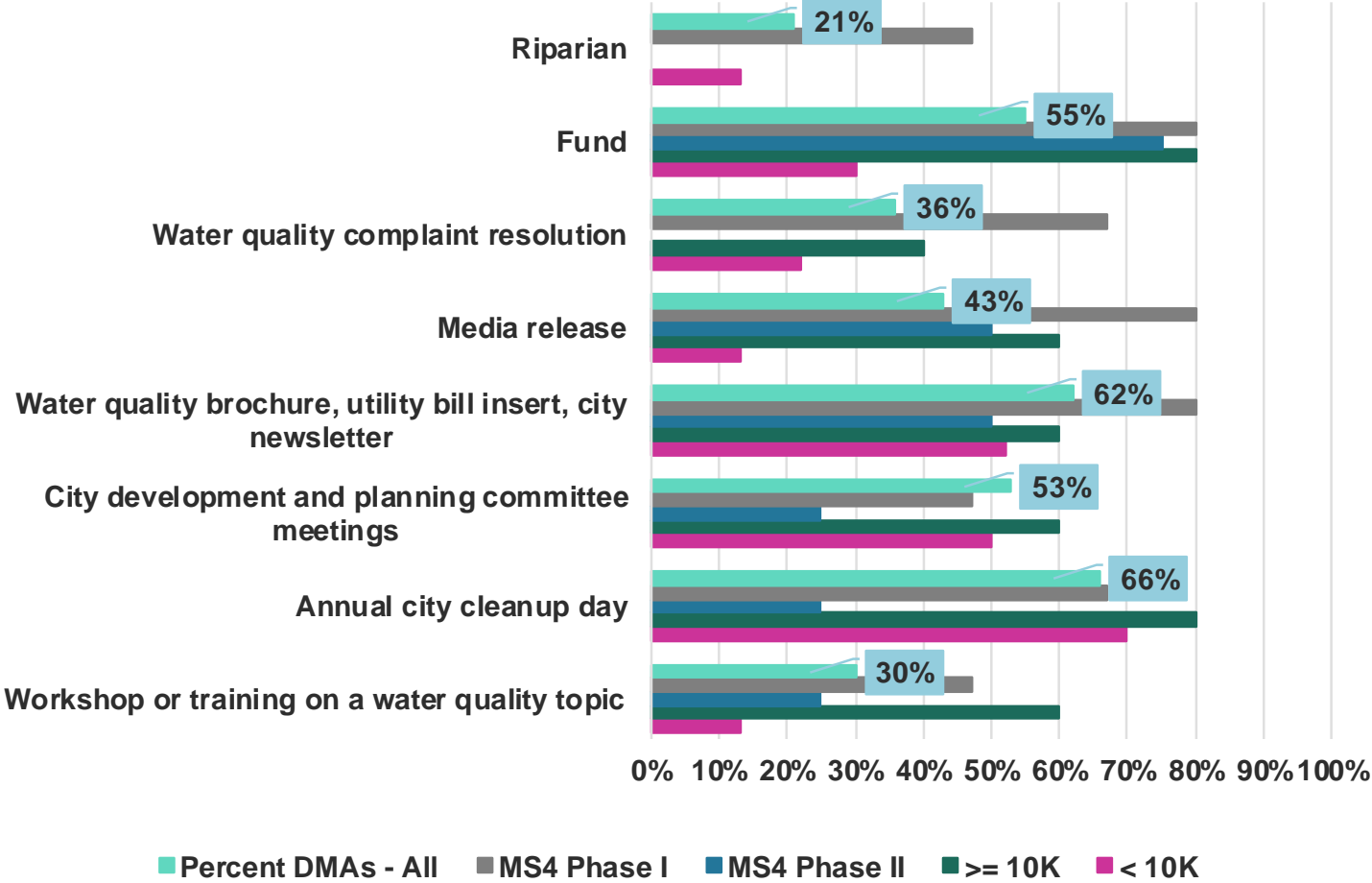
Post-Construction to Control Stormwater



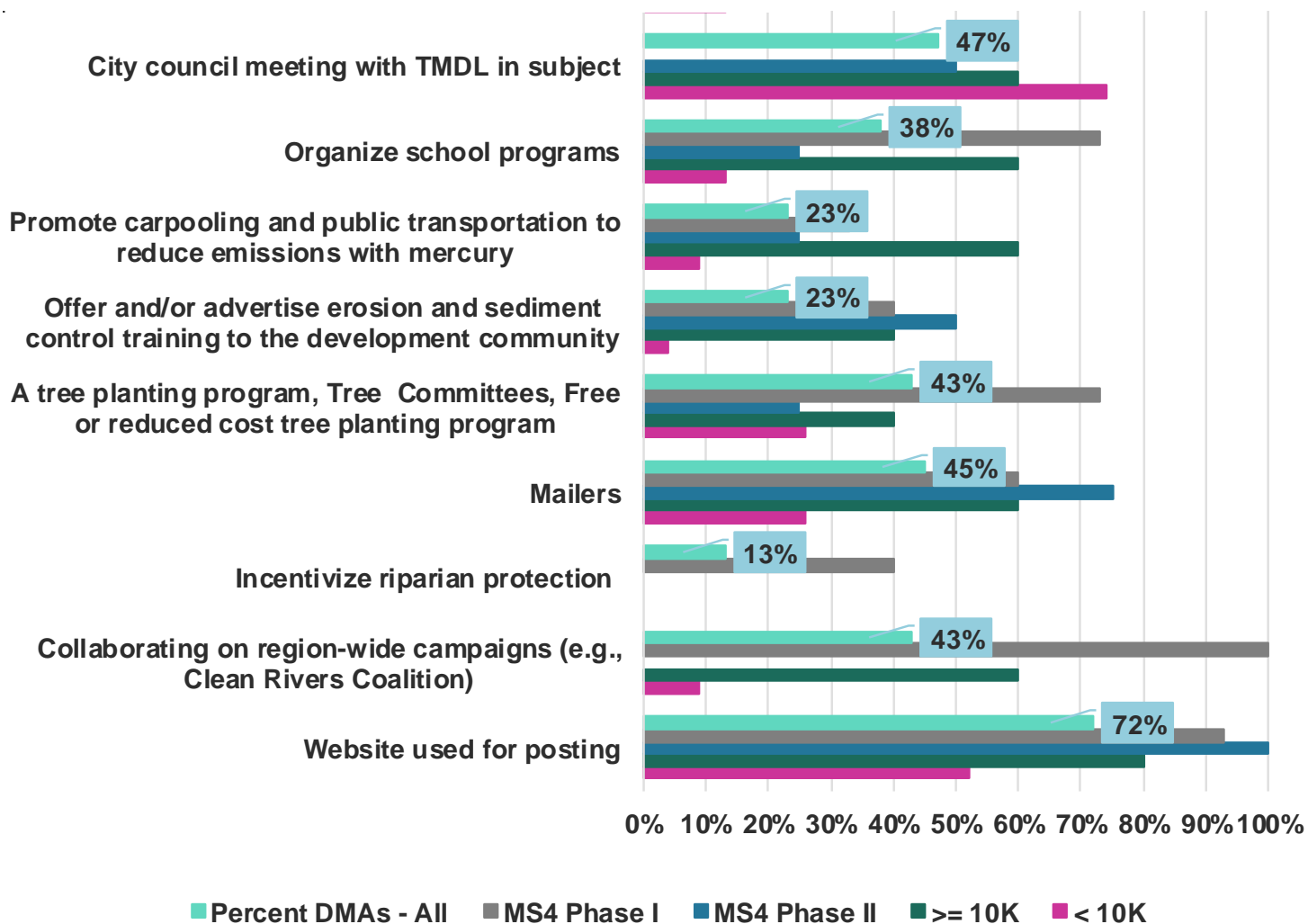
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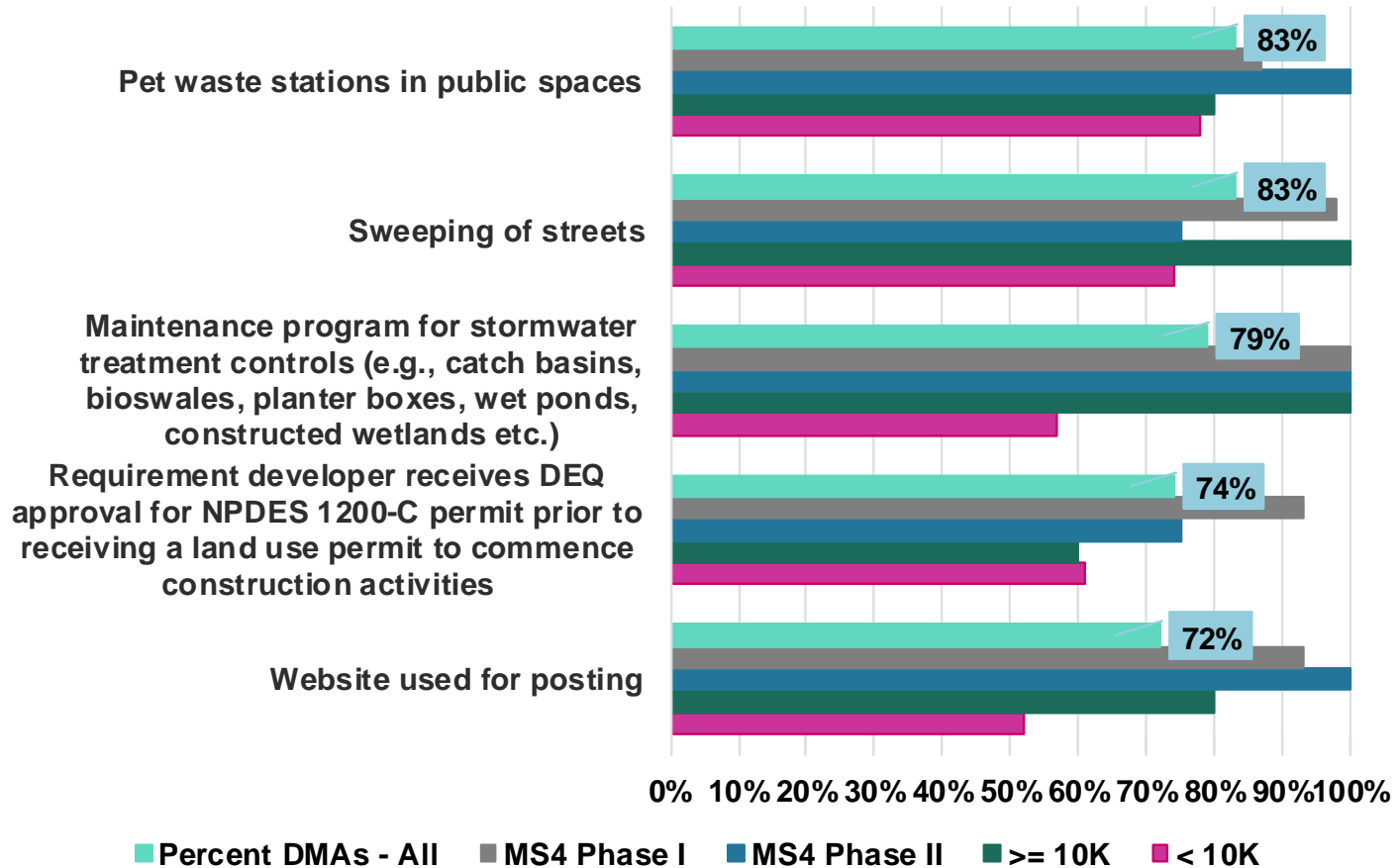
Public Outreach, Education and Involvement



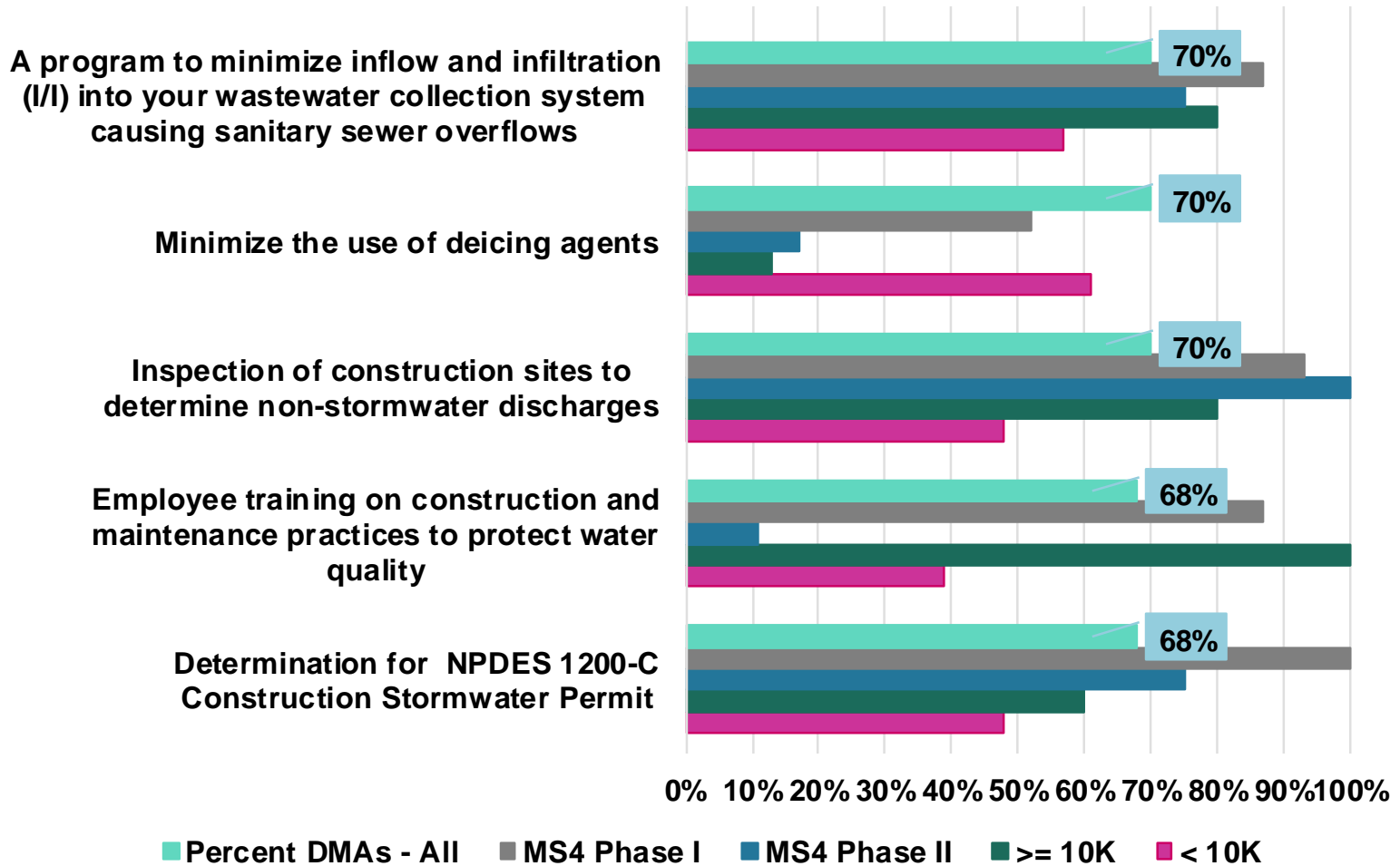
Public Outreach, Education and Involvement



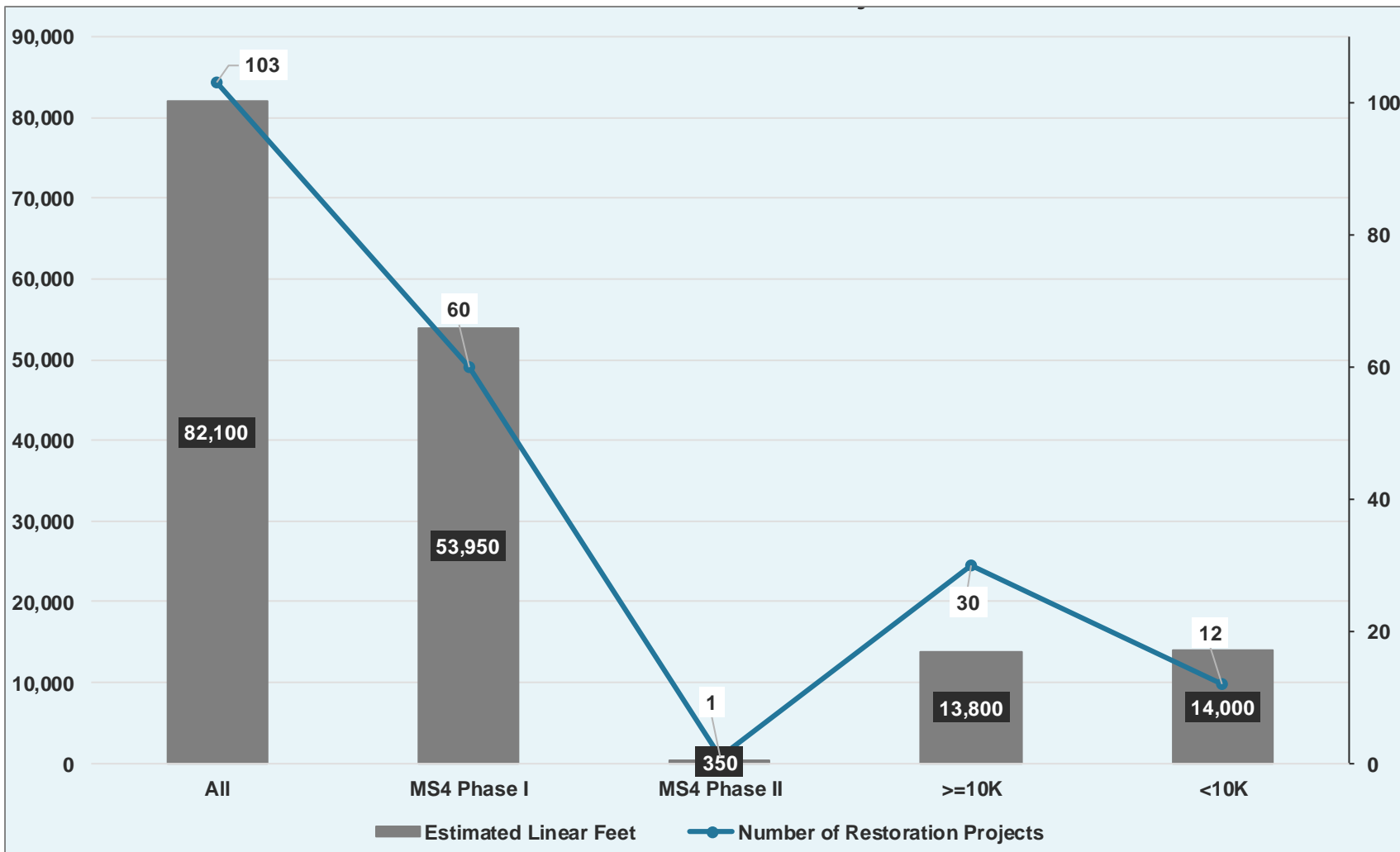
Top 10: DMA- Reported Strategies



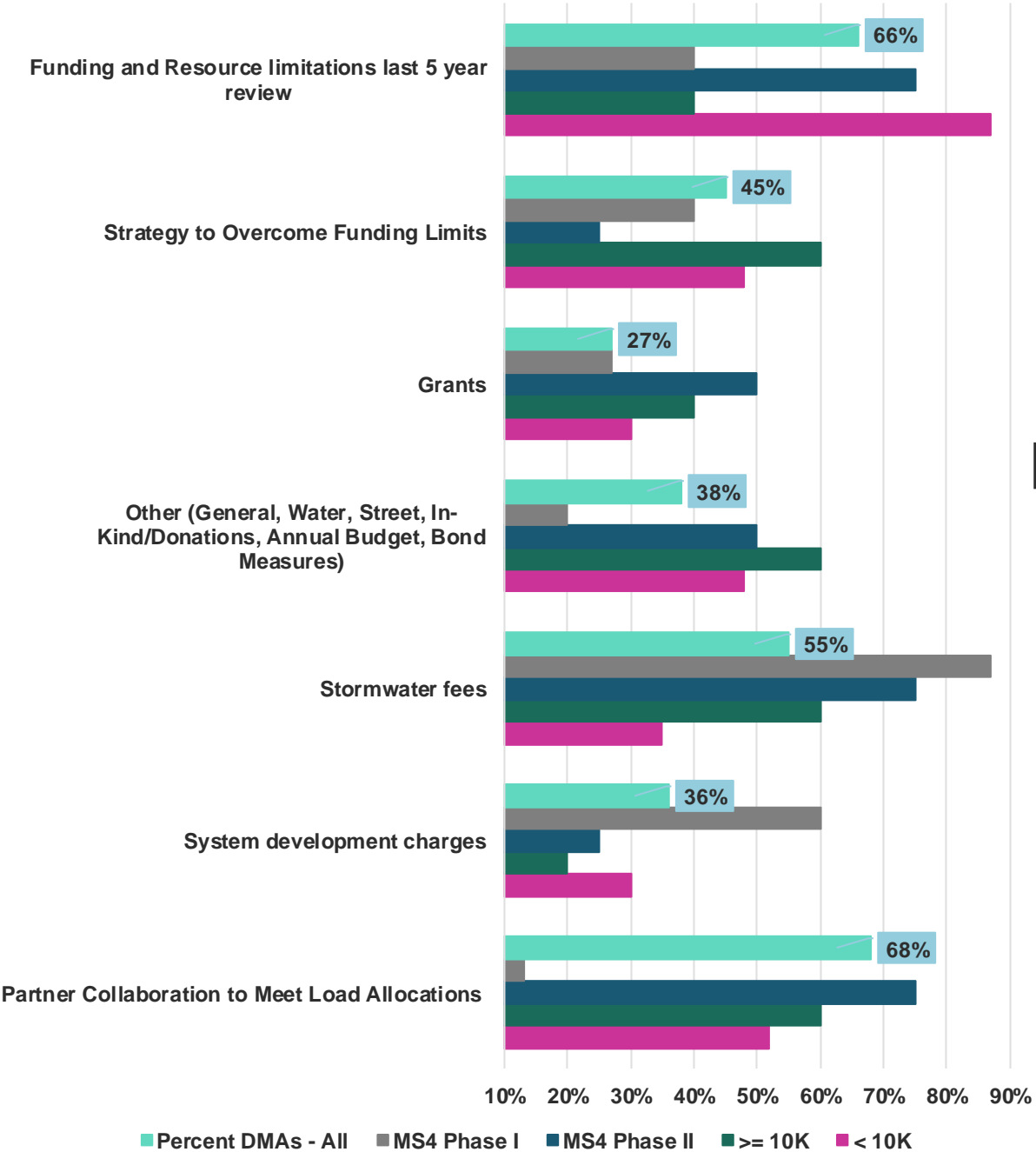
Top 10: DMA- Reported Strategies Cont.



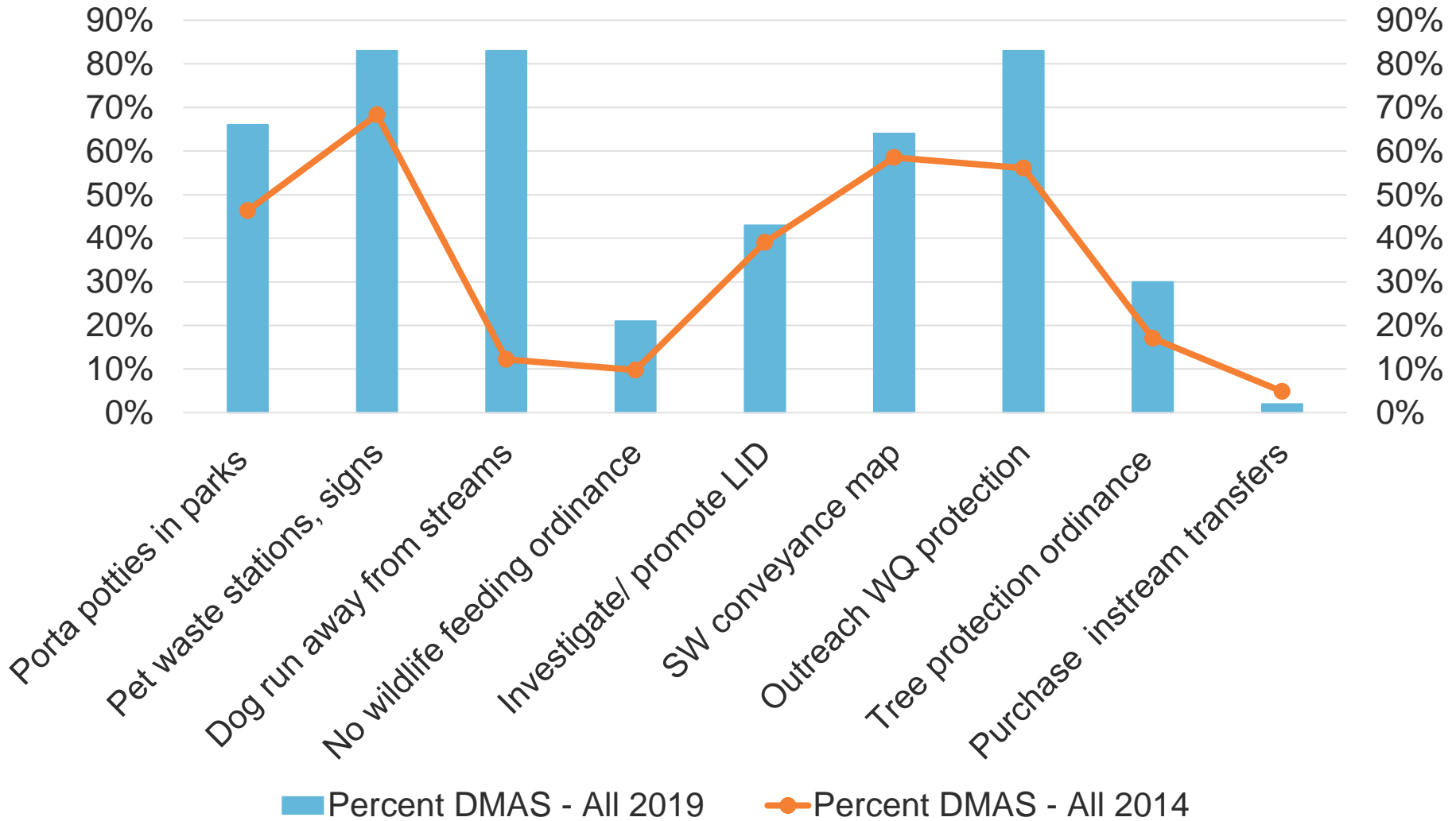
Restoration Projects Implemented or Funded in Last Four Years



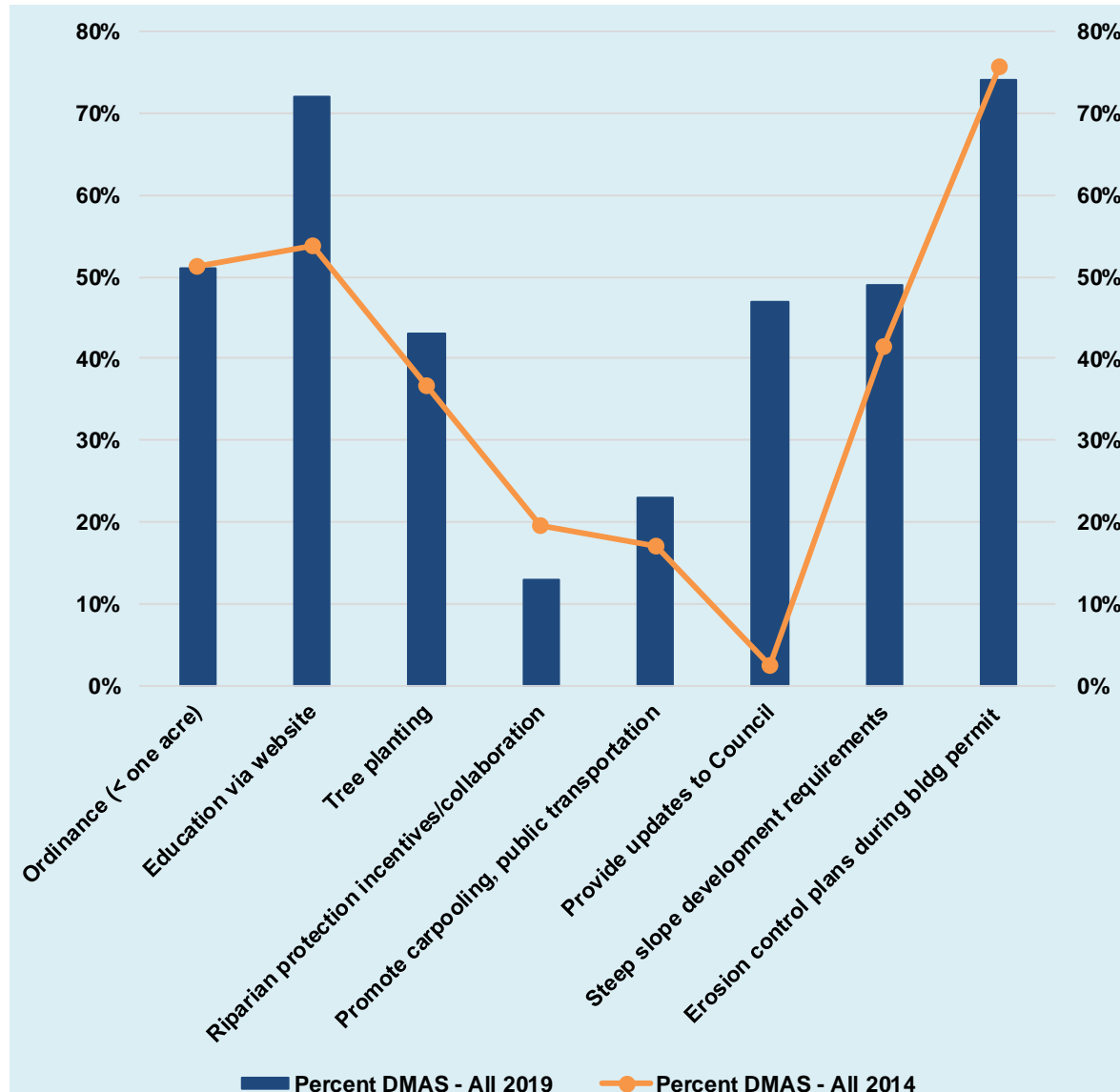
Funding Solutions Reported



Stormwater, Riparian, and Water Quality Strategies



Erosion Control, Public Outreach and Education



Questions?



Conclusions

- Implementation tracking
 - Plans
 - Reporting
- Selection and implementation of effective strategies
- Positive change – 2014 vs 2018

Conclusions

- BMP/Strategy effectiveness
- Water quality analysis – status and trends
- Post-Construction and IDDE
- Riparian protection and restoration