AASHTO SCOD/SCOE 2017 Annual Meeting

Joint Meeting of the Natural Resources Subcommittee and Technical Committee on Hydrology & Hydraulics

SCOE Research Update - Stormwater Management Resources

Center for Environmental Excellence | Stormwater Community of Practice

http://environment.transportation.org/center/products_programs/communities_of_practice.aspx# StormwaterManagement

Practitioner Field Guides

- Construction Stormwater Field Guide (April 2016)
- Maintenance Stormwater Field Guide (April 2016)

Practitioner's Handbook

• AASHTO Practitioner's Handbook #13: <u>Developing and Implementing a Stormwater Management Program in a Transportation Agency</u> (June 2009)

State of the Practice Reports

- Water Quality Monitoring (June 2013 Draft)
- Stormwater Program Effectiveness Assessment (July 2012)
- Watershed-Based Stormwater Management (December 2012)
- Source Control (May 2011)
- EPA Post-Construction Stormwater Control Rulemaking (January 2011)
- EPA Regulations (October 2010)
- Post-Construction BMPs (June 2010)
- Total Maximum Daily Load (TMDL) (March 2010)
- Effluent Limitations Guidelines (March 2010)
- Construction Stormwater Management (June 2009)

AASHTO Stormwater Research Road Map (June 2015, Appendix F of SCOE Strategic Plan and Research Plan)

http://environment.transportation.org/pdf/communities_of_practice/nchrp25-25-95_scoestrategicplanandresearchplan.pdf

National Cooperative Highway Research Program (NCHRP)

Project 25-25 (short term/low cost research)

25-25/Task 16 State Transportation Agency Strategies to Address NPDES Phase II Requirements

25-25/Task 53 Stormwater Treatment with Vegetated Buffers

25-25/Task 56 Cost and Benefit of Transportation Specific MS4 and Construction Permitting

25-25/Task 74 Meeting the New EPA Effluent Limitations Guideline for Construction Site Discharge Turbidity: Effectiveness of Different Turbidity Control Systems and Monitoring Methods

25-25/Task 82 Permeable Shoulders with Stone Reservoirs

25-25/Task 83 Current Practice of Post- Construction Structural Stormwater Control

25-25/Task 85 Nutrient (Nitrogen/Phosphorous) Management and Source Control

25-25/Task 86 Toxicological Effects of Chloride Based Deicers in the Natural Environment

25-25/Task 92 Transferability of Post-Construction Stormwater Quality BMP Effectiveness Studies

25-25/Task 101 Stormwater Monitoring Program Goals, Objectives and Protocols for State Departments of Transportation

Full NCHRP Research Projects/Reports

Project Number	Project Title	Stage	Comments
NCHRP 20- 06/Topic 21-02	Claims Related to Stormwater Discharges	Final	
NCHRP 25- 13 and 25- 13(2)	Assessments of Impacts of Bridge Deck Runoff Contaminants on Receiving Waters	Completed	
NCHRP 25- 31	Guidelines for Evaluating and Selecting Modifications to Existing Roadway Drainage Infrastructure to Improve Water Quality in Ultra-Urban Areas	Completed	NCHRP Report 729
NCHRP 25- 32	Measuring and Removing Dissolved Metals from Storm Water in Highly Urbanized Areas	Completed	NCHRP Report 767
NCHRP 25- 37	A Watershed Approach to Mitigating Stormwater Impacts	Completed	NCHRP Report 840
NCHRP 25- 40	Long-Term Performance and Life-Cycle Costs of Stormwater Best Management Practices	Completed	NCHRP Report 792.
NCHRP 25- 42	Bridge Stormwater Runoff Analysis and Treatment Options	Final	NCHRP Report 778
NCHRP 25- 51	Limitations of the Infiltration Approach to Stormwater Management in the Highway Environment	Active	Research underway.
NCHRP 25- 53	Approaches for Determining and Complying with TMDL Requirements Related to Roadway Stormwater Runoff	Pending	
NCHRP 25- 54	Field Testing of BMPs Using Granulated Ferric Oxide Media to Remove Dissolved Metals in Roadway Stormwater Runoff	Active	
NCHRP 14- 39	Using Vegetated Compost Blankets to Achieve Highway Runoff Volume and Pollutant Reduction	Pending	
NCHRP 25- 12	Wet Detention Pond Design for Highway Runoff Pollution Control	Completed	Report not published.
NCHRP 25- 20(01)	Evaluation of Best Management Practices for Highway Runoff Control	Completed	

Project Number	Project Title	Stage	Comments
NCHRP 25- 20(02)	Identification of Research Needs Related to Highway Runoff Management	Completed	
NCHRP 25- 41	Guidance for Achieving Volume Reduction of Highway Runoff in Urban Areas	Completed	NCHRP Report 802
NCHRP 06- 16	Guidelines for the Selection of Snow and Ice Control Materials To Mitigate Environmental Impacts	Completed	
NCHRP 10- 90	Guidance for Complying with EPA Effluent Limitation Guidelines for Construction Runoff	Anticipated	
NCHRP Synthesis 20-05/Topic 43-06	Pollutant Load Reductions for Total Maximum Daily Load (TMDL) Reductions for Highways	Final (Synthesis)	
NCHRP 20- 07/Task 338	Hydrology for Water Quality Analysis and Design	Completed	

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