




**WisDOT Update**  
**Post-Construction Stormwater Management**  
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**Outline**


- Project Categories
- Stormwater Guidance Documents & Requirements
- Proposed Stormwater Form Development
- Overall Stormwater Program
- Stormwater pictures



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**WisDOT Directed & Supervised Project Categories**

1. WisDOT Roadways
  - Interstate, I-94, I-90, I-43, I-41
  - U.S. Highways, 45, 151, 10, 53, 12, 14, 18
  - State Highways – 29, 8, 19, 60
2. Connecting Highways
  - Some WisDOT Roadways Within Some Municipalities
3. Local Program
  - Local Road projects administered by WisDOT



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**Poll Question 1**



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**WisDOT Project Categories Key Elements**


- Directed & Supervised by WisDOT
  - WisDOT Design Project Manager
  - WisDOT Environmental Document & Design Process
  - WisDOT Construction Plan Template
- WDNR Review & Approval (Final Concurrence & TCGP Coverage) through the Cooperative Agreement Process
  - DNR Transportation Liaisons → DOT Point of Contact with DNR



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### WisDOT Post-Construction Stormwater Requirements Guidance Documents

- WDNR/WisDOT Cooperative Agreement
  - 3 Stormwater Attachments
- Trans 401
- Facilities Development Manual (FDM)
  - Chapter 10
  - Chapter 13
- Transportation Construction General Permit (TCGP) – DNR
- Transportation Separate Storm Sewer System (TS4) Permit -DNR



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### Stormwater Design Best Practices


- Perform Elevation & Sizing verification analysis early
  - Pavement, shoulders/inlets, swales, storm sewers, culverts & SW facilities
  - Off-site drainage
- Start written narrative at beginning of design
- Prepare & Organize Narratives, Calculations, Plans, Exhibits & Maps
- Keep updating



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### WisDOT Project Categories Stormwater Design


1. WisDOT Roadways
  - CoA, Trans 401, FDM, TCGP, TS4
2. Connecting Highways
  - CoA, Trans 401, FDM, TCGP, TS4, MS4 & Local Govt Needs
3. Local Program
  - CoA, Trans 401, FDM, TCGP, TS4, MS4 & Local Govt Needs



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### WisDOT Stormwater Design Challenges

- Elevations not engineered enough
- Inadequate ROW
- Under & Overdesigned
- Critical Elements Overlooked & Overcomplicated



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### Poll Question 2



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### WisDOT Stormwater Design Challenges

- Multiple engineers & staff involved w/design
- Deliberate Design Process
  - Agency Coordination, Utility Relocations, Real Estate Acquisition
- Staff Changes
- Timing & Project Changes
  - Projects on Hold, Scope Creep Up & Budget Cuts Down
- Stormwater Performance Standards & Goals difficult to meet within ROW



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### Post-Construction Stormwater Design Form


- User friendly
- Applicable to ALL DOT Administered projects
- Provide consistent format
- Documents:
  - Post-construction stormwater performance standards
  - Project specific information
  - Nothing needed on minor projects



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### Overall Stormwater Management Program


- Program described in CoA many years ago
  - Annual Reporting since early 2000's
- Further expanded by TS4 in 2018, Similar to MS4's
- Building Stage of Permit
  - Education, Public Outreach, Involvement & Participation
  - Illicit Discharge Detection & Prevention
  - Pollution Prevention, Construction & Post-Construction
  - Mapping, Inventory & Tracking



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### Design Form Benefits

- Engineers can focus on plans, calculations, coordination
  - Instead of how to organize the report
- Get decisions down on paper
  - Instead of memory or obscure notes
- Formatted & Organized to be Easier for Everyone to understand
  - Designers, Reviewers, DNR, stakeholders



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### Overall Stormwater Management Program


- Larger items we're working on
  - Inspection/Maintenance of Stormwater Facilities
  - Expanded modeling, especially in TMDL's
  - Guidance & training



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### Design Form Status

- Multiple iterations
- Reviewed by
  - WisDOT Central Office Technical Services
  - WisDOT Regional SWECs
  - WDNR Central Office Stormwater Engineers
- A bit more WisDOT review needed
- Stay Tuned



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### Pictures of WisDOT Stormwater Facilities

- WisDOT has hundreds of stormwater facilities
- Different types
- Creative Opportunities for you



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### Conclusion

- Resources
  - DOT Stormwater webpage - <https://wisconsin.gov/Pages/doing-business/eng-consultants/cnslt-rsrcs/environment/stormwtr-mgmt.aspx>
  - DOT Erosion Control & Drainage webpage - <https://wisconsin.gov/Pages/doing-business/eng-consultants/cnslt-rsrcs/environment/erosion-ctrl-drainage.aspx>
  - WisDOT Regional Stormwater & Erosion Control (SWEC) Engineer

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