CDOT’s updated New Development and Redevelopment Program and Maintenance of Permanent Control Measures
Background

• CDOT’s permit expired January 2012 and is administratively extended

• Colorado Department of Public Health and Environment (CDPHE) issued the draft permit Dec. 2013

• CDOT has rewritten, with extensive CDPHE input, the New Development and Redevelopment (NDRD) Program

• CDPHE approved an Interim version of the program until a new permit can be issued
How Did We Think of This?

- Conferred with regulator about out-of-the-box NDRD solution
- Flexible, Streamlined
- Holistic and efficient Water Quality Improvement
- Contribute to Statewide Water Quality Improvement Fund rather than site specific Permanent Water Control Structures
Good Idea, But …

- Regulators didn’t want to try something this innovative
So we got a committee together and…….
Agreed On a Hybrid
New Program Overview

• Majority of treatment from regional BMPs
• Program funded through a statewide Water Quality Mitigation Fund
• Permanent Water Quality Mitigation Fund as Maximum Extent Practicable (MEP)
• Still must provide Permanent Water Quality on certain specific transportation projects
• Projects must treat flows from CDOT MS4 (but can partner and treat additional areas)
Mitigation Fund

- Mitigation Fund
- Regional Approach
- Priority Project

- $6.5 million per year
- 80% of fund spent on a 3 year rolling average
- Only for planning, designing and construction-not maintenance
- Not tied to transportation project
- Approach encourages partnering with other agencies
- Specific project
- New impervious surface
Design Standards

• Regional Approach

• Priority Project

- WQCV or TSS (80%) removal for all flows captured by BMP
- Volume Reduction for all areas draining to the BMP
- WQCV or Pollutant Removal for 90% of the new impervious area
- Infiltrate/reduce runoff (70%) from the project
How the New Program Assists Maintenance

• More partnerships means less maintenance
• Better design should be evident meaning easier maintenance
• New program has better document description and control
• Fewer structures in highly constrained areas means more space to build more maintainable structures
• New program requires documentation of training for those crews maintaining structures

• Maintenance agreements can be formed with partners
• More stringent design criteria will bring maintenance in on design decisions
• New document description and management will allow communication with SWIT
• Building controls offsite on constrained projects will allow more ROW in order to provide better maintenance access
• MTECS training will further educate maintenance crews to provide better, more efficient maintenance
(SWIT) Stormwater Inspection Tool

- Documents inspection of WQ structures via a tablet computer
- Locations and features of structures
- Photo-documents inspection
- Documents and notifies crews about maintenance needs
- Updating SWIT for mobile apps
- Will be part of the NDRD documentation requirement
Training

- NDRD (CMT) Control Measure Training
  - Possible at CDOT Maintenance Academy
  - Inspection and Maintenance
  - Required by MS4 Permit
- (MTECS) Maintenance Transportation Control Supervisor
  - Maintenance of Post-Construction Projects
  - Revegetation and close out of Stormwater Construction Permit
Training Facility
Humor is essential to a career in Stormwater Management
Other challenges that MS4s face:
Permeable pavement

[Image of a bear standing on its hind legs next to a sign that says "SOFT SHOULDER"]
Pollution Prevention

PLEASE DO NOT EMPTY YOUR DOG HERE
Green Infrastructure
Global Warming
And with beetle kill and wildfires, the consequences of Deforestation aren’t pretty.