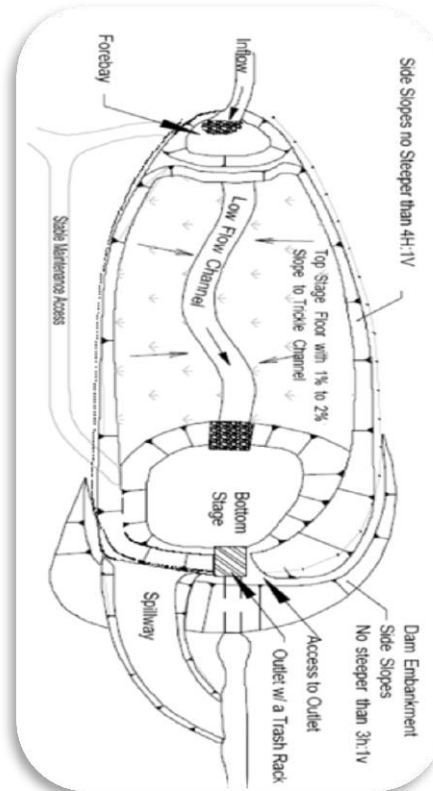




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CDOT's updated New Development and Redevelopment Program and Maintenance of Permanent Control Measures



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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



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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



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Good Idea, But ...



- Regulators didn't want to try something this inovative



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**So we got a committee
together and.....**





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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

4/13/2011 11:03:30 AM Site Map on SH 2 ML

Route 002A | Refpt : 2.121
visitReason Outfall Screening
Location lat: 39.68399100 long: -104.94171400
tmosCodes 2755 | Cat: STORMWATER
tmosName
Collector MCDADER | Permit:
FunctLoc CO-002A-RS00003
Shape Multi-Point | TotalVerts: 1
County 031 - DENVER CO
Region 6 | Com: 1 | PIA: 3
Patrol 87 | MSec: | Mpo: 1
Owner | Tpri: 2 | DENVER AREA

Address: X
[ShowMap](#)
Directions Search nearby more +

Images

Site Location IN DENVER

Address:

Description: I-25/COLORADO BOULEVARD INTERCHANGE STRS (F-17-CW) AND (F-17-NP) AND SIGN BRIDGE STR (F-17-GS) - JCT I-25 NW AND SE - COLORADO BLVD (LIGHT RAIL) OVERPASS SEPARATIONS - BEGIN HPMS SAMPLE (031-0005-002)

StrID: F-17-CW strType: CRF AliasName: Colorado Blvd

Unknown Zone (Mixed) | Protected Mode: OF





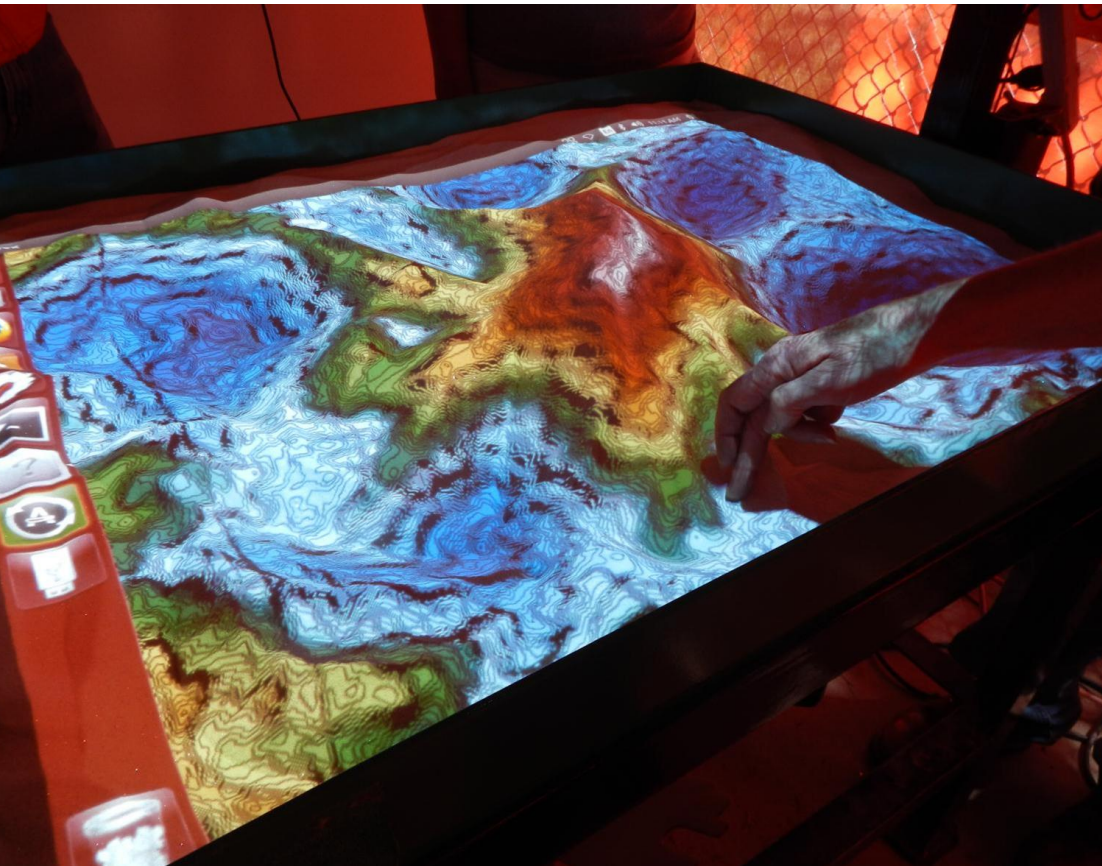
Training

- 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





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Humor is essential to a career in Stormwater Management



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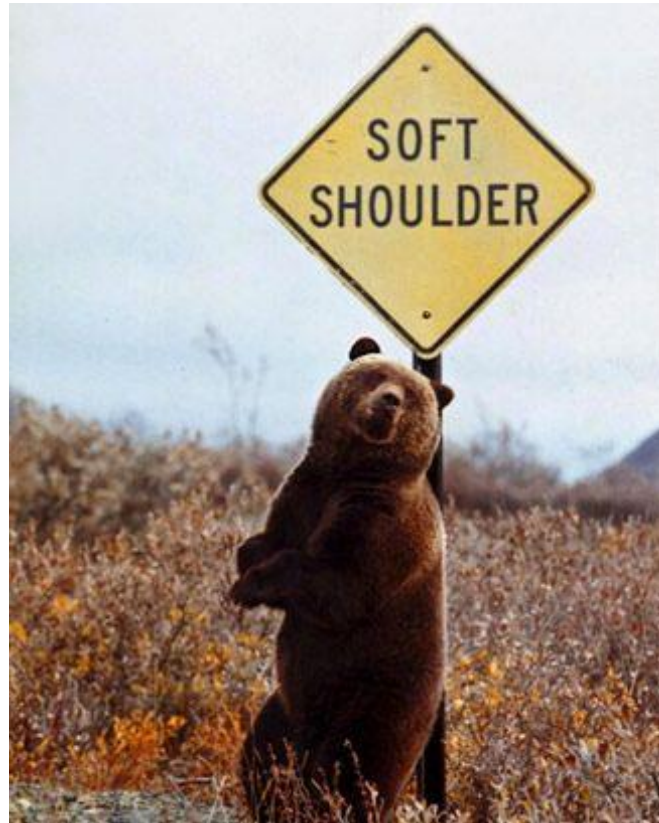
Other challenges that MS4s face:



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Permeable pavement





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Pollution Prevention





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Green Infrastructure





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Global Warming





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**And with beetle kill and
wildfires, the consequences
of Deforestation aren't pretty**

