

# KYTC New MS4 Permit Issued

August 8, 2012

# Background

- 1972 Clean Water Act
- 1991 Large & Medium MS<sub>4</sub>s
- 2003 sMS<sub>4</sub> KYTC Copermittee
- 2012 KYTC MS<sub>4</sub> Permit

# KYTC Permits

- KYR<sub>10</sub> Construction
- KYG<sub>50</sub> Maintenance Facilities
- KYS<sub>03</sub> sMS<sub>4</sub>

# Part I

- Applicability
  - KYTC ROW & Facilities located within urbanized boundaries of MS4s Across the State

# PART II SWQMP

- Develop a SWQMP to Comply with MCMs
  - MCM I Public Education & Outreach
  - MCM II Public Involvement/Participation
  - MCM III IDDE
  - MCM IV Construction Site Control
  - MCM V Post-Construction management
  - MCM VI Good Housekeeping
  - TMDL (Total Maximum Daily Load)

# MCM I

## Public Education & Outreach

- Public Awareness
- Revise EA Handbook & Training
- UKT2 Training
- Revise KYTC MS4 Website
- Participate in “Partner” Programs
- Update MOP

# MCM II

## Public Involvement and Participation

- Adopt-a-highway
- State Fair
- Rest Areas
- KEEN
- Statewide Survey
- Participate with “Partners”

# MCM III

Illicit Discharge Detection and Elimination

- Develop Program
- Training
- Mapping > 36" Diameter
- Utilize Partnerships
- Inspect in perpetuity

# MCM IV

## Construction Site Stormwater Runoff Control

- Develop Program
- Comply w/KYR10
- Individual Construction Permits
- Training KEPSC-RI
- Track NOIs & NOTs

# MCM V

Post-Construction Stormwater Management in New Development & Redevelopment

- Ron Will Review

# MCM V

Post-Construction Stormwater Management in New Development & Redevelopment

- Develop a Menu of Structural and non-Structural Post Construction Stormwater BMPs
- Regularly Update Drainage Manual

# WHAT ARE PC BMPs?

- A water quality structure that has been left in place once construction has concluded.
- What is the most common KYTC PC BMP? Hint: It is Green.
- Examples

# Karst (Sink Hole) Protection





# Infiltration Basin



**Infiltration basins are designed to collect stormwater from impervious areas and provide pollutant removal benefits through detention and filtration**

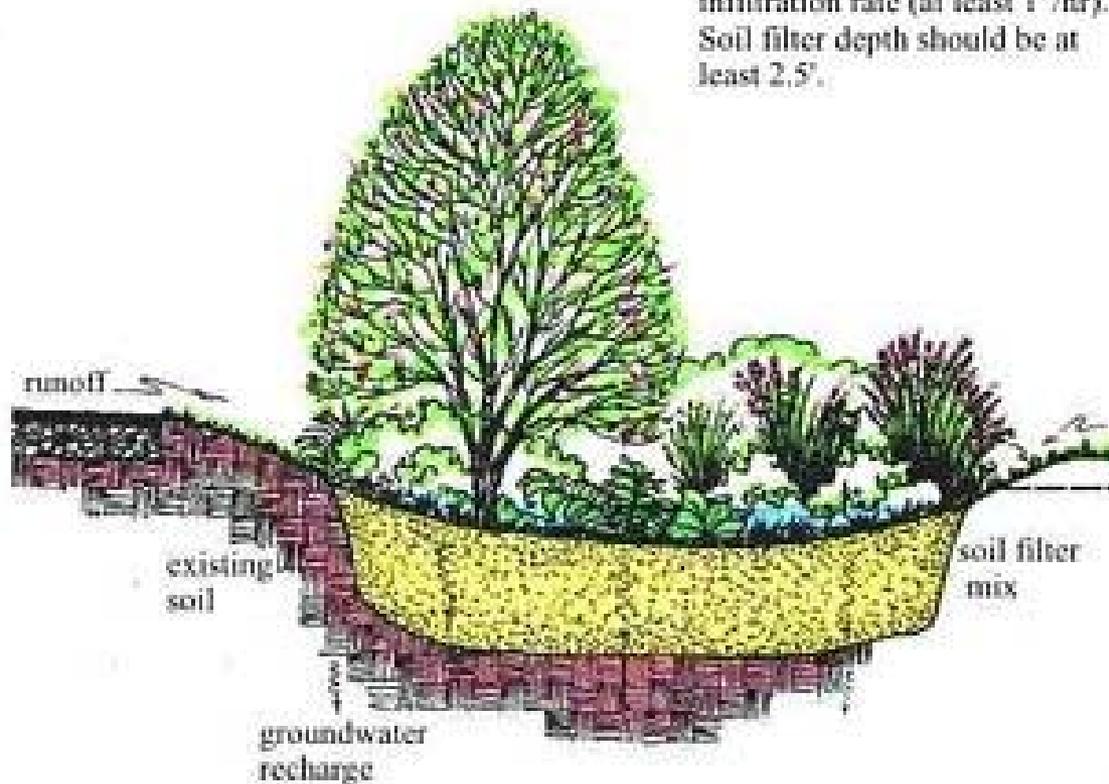
# Infiltration Trench



# Bioretention

## GROUNDWATER RECHARGE FACILITY

In-situ soils should have a high infiltration rate (at least 1"/hr).  
Soil filter depth should be at least 2.5'.



# Rock Check Dams



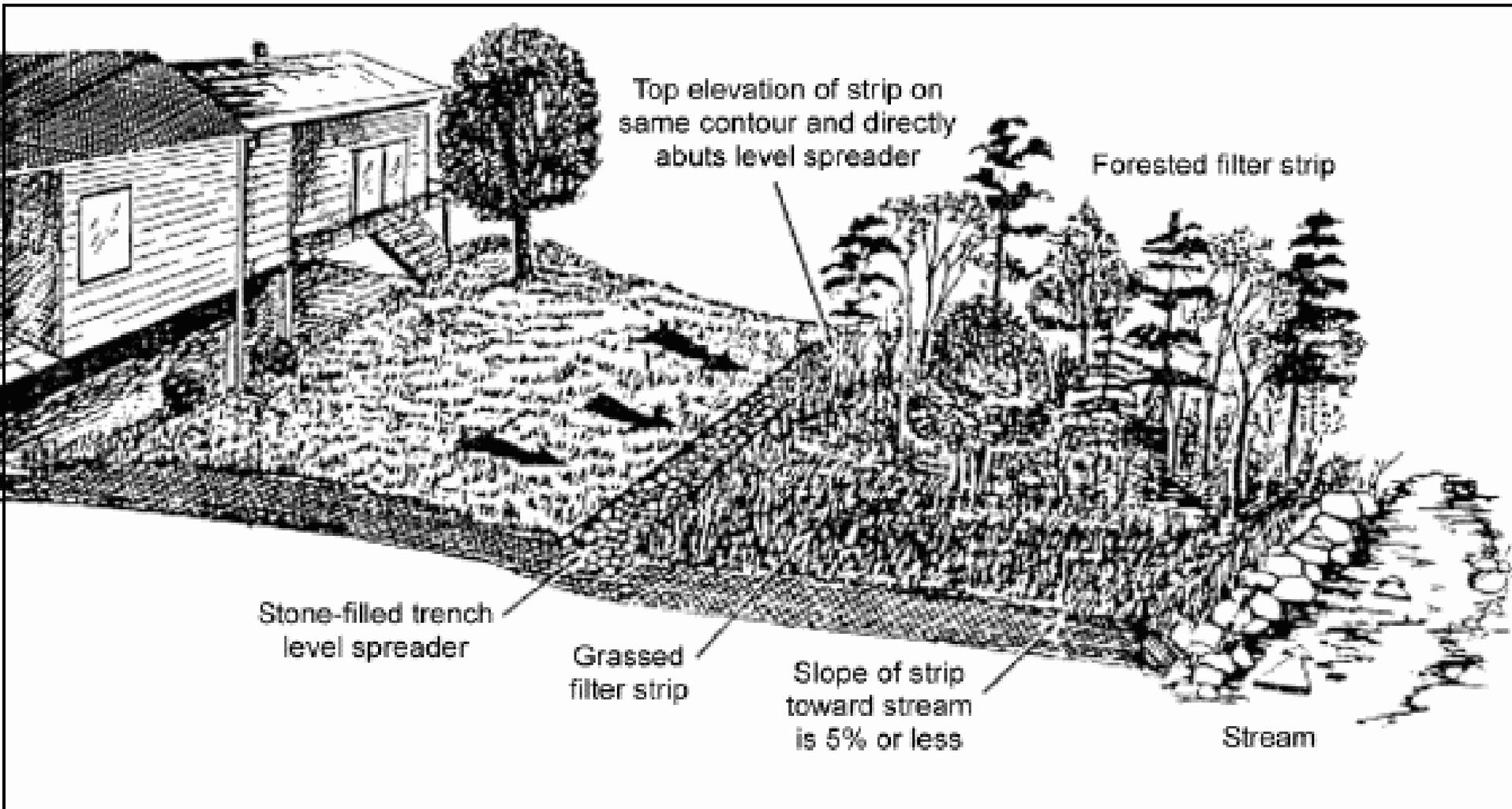
# Bioswales (Grass swales)



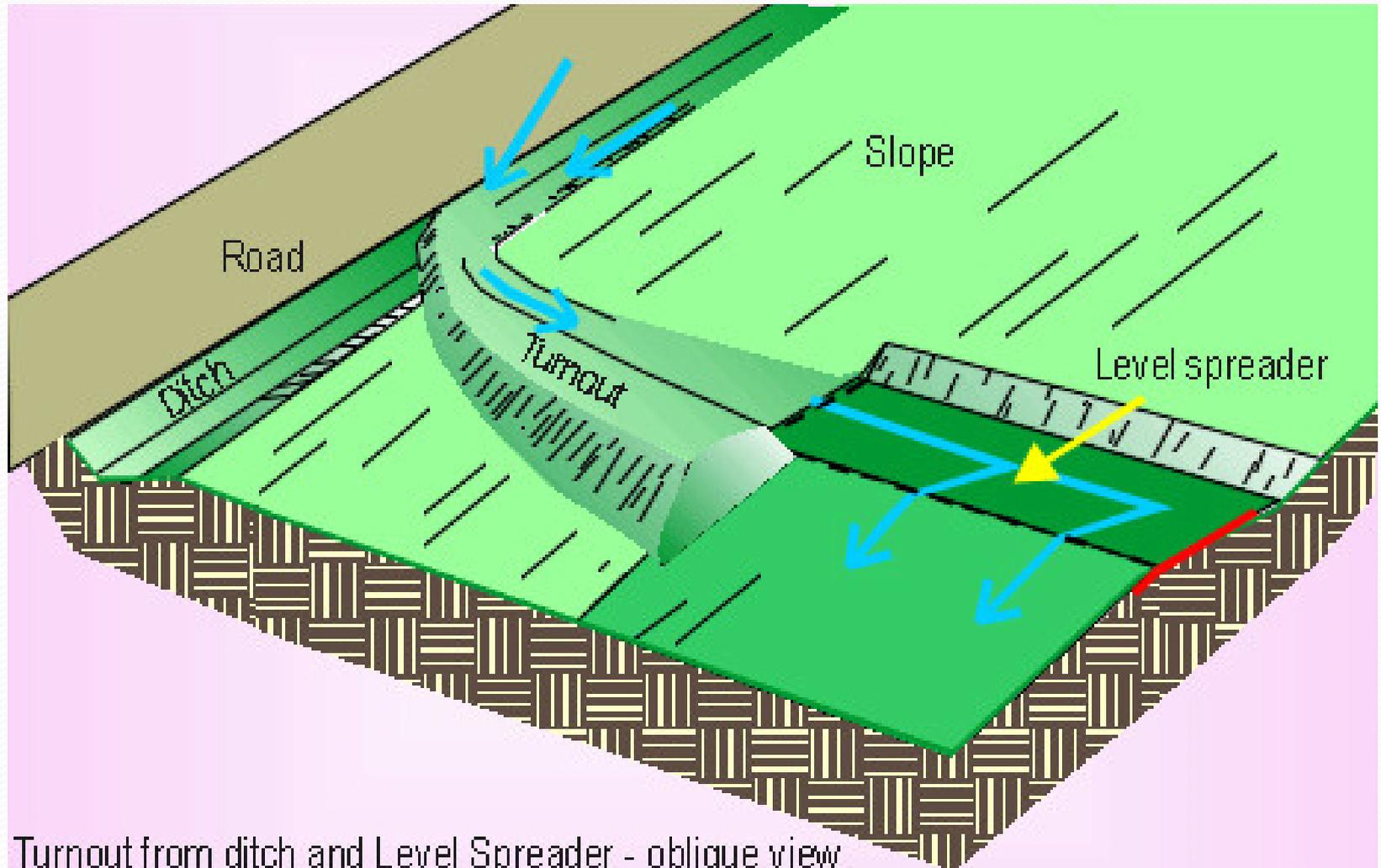
# Grass Filter Strips



# Vegetated Filter Strips



# Level Spreader



Turnout from ditch and Level Spreader - oblique view

# Detention Pond



# MCM V

Post-Construction Stormwater Management in New Development & Redevelopment

- Preformed Scour Hole
- Porous Asphalt Pavement
- Pervious Concrete Pavement
- Eliminating Curbs and Gutters
- Wet Ponds

# MCM VI

Pollution Prevention/Good Housekeeping for Operations & Maintenance

- Develop Program
- Includes Roads, D.O. Rest Areas & Maintenance Yards
- Inventory & Assess
- Update EA Handbook
- Quality Control Facility Plans

# TMDLs

- Division of Water establishes TMDLs
- TMDLs are Primarily for Fecal Coliform
- KYTC and MS<sub>4</sub> Community collaborate



**That's All Folks**