# **Infiltration Basins BMP Work Group**

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## Challenge

- Define infiltration basin
- Design standards
- Infiltration rates
- Pretreatment
- MN Stormwater Manual
- Literature search

#### Sources

- MN Stormwater Manual
- MPCA (blue book)
- Met Council (small sites BMP manual)
- USEPA
- WI DNR
- King County, WA
- CWP

- lowa
- Michigan
- Nebraska
- New Jersey
- Virginia
- Vermont
- California
- BMP data base

#### **Common Ground**

- Pretreatment - YES!
- Draw down time - 24 to 72 hours (48)
- Infiltration rate 0.2 to 0.5 inches per hour
- Bottom separation - 2 to 4 feet (3)
- HSG - A and B soils preferred
- Side slopes - 3:1 or 4:1

## **Important Consideration**

- Max. drainage Area - 2 acres to 50 acres
- Slope of contributing area
- Max. basin depth
- Maintenance
- Pollutant Removal %:

Susp. Solids	Phosph.	Nitrogen	Metals	Bacteria
75 – 95	60 – 70	42 – 60	85 – 95	90

#### **Aaaaahaa! Moment**

- Need to link Calculator BMPs with Stormwater Manual update
  - Design standards
  - Performance standards
  - CADD drawings revised
  - Construction notes updates
- Co-ordinate with Mike Trojan (MPCA)

### **Next Steps**

- Definition of Infiltration Basin (vs. biofiltration)
- Maximum basin depth
- Infiltration rates
  - Tiered soils table how many categories
- Pre-treatment
  - what type(s)
  - quantify