

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
- Iowa
- 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. bio-filtration)
- Maximum basin depth
- Infiltration rates
 - Tiered soils table – how many categories
- Pre-treatment
 - what type(s)
 - quantify