

L:\work\projects\60189836\400_Technical\FDM Chapter 10 Updates\10-35-1 Stormwater Control Measure Selection\TRANS 401 Flow Chart v8.vsd

6/28/2012

TREATMENT EFFICIENCIES FOR WISDOT STORMWATER CONTROL PRACTICES AS REQUIRED FOR HIGHWAY FACILITIES COVERED UNDER TRANS 401

Stormwater Control Practice	Planning Level Percent TSS Reduction	Final Design Percent TSS Reduction
Wet Detention Ponds	80% (1)	By Design (1)
Catchbasins (4)	15%	By Design (2)
Grass Swales	80%	Standard Met (8) (Apply 80% Reduction Rate)
Highway Embankment Filter Strips	Clay Soils - 60% Silt Soils - 70% Sandy Soils - 100%	By Design (3)
Biofiltration (5)	80%	80%
Street Cleaning (4)	10%	By Design (6)

Notes:

- 1. Assumes pond will be designed using <u>FDM 10-35-15</u>, Wet Detention Pond Stormwater Quality Design. This approach is developed from the WDNR Standard 1001, Wet Detention Pond.
- 2. Apply the appropriate design charts in <u>FDM 10-35-20</u> for Catchbasin percent reductions for urban cross sections with sumps in the inlets.
- 3. Apply the appropriate design charts in <u>FDM 10-35-10</u> (Not complete) for Filter Strip percent reductions for rural cross sections.
- 4. Percent reduction values assume that the control practice will be maintained.
- 5. Biofilter percent reductions assume that the biofilter is designed according to WDNR Standard 1004 and that the drain tile is located at the bottom of the device. Additional reductions can occur if the drain tile is raised above the bottom of the device.
- 6. Apply the appropriate design charts in <u>FDM 10-35-25</u> (Not Complete) for Street Cleaning percent reductions for urban cross sections, assuming commercial land uses.
- 7. All stormwater control practices must comply with the relevant section of TRANS 401.106
- 8. May not apply to ERW, ORW (<u>http://dnr.wi.gov/topic/SurfaceWater/orwerw.html</u>), 303(d) listed waters (<u>http://dnr.wi.gov/topic/impairedwaters/</u>) with an approved TMDL.
- 9. DNR technical standards are available from: http://dnr.wi.gov/topic/stormwater/.