

Infiltration

1. Research cold climate design considerations
 - a. overflows, infiltration beneath frost layer, storage of 10y design storm
 - b. capillary leak needed
 - c. Ex) Maine has design for overflows in bioretention areas
 - d. concern about roadside infiltration and salt infiltration to groundwater
 - i. PA study of chloride retention under pervious pavement
2. Require use of sand filter for infiltration basins
 - a. base layer of stone instead of grass to prevent freezing
3. Reconsider requirement that infiltration take place on native soils only
 - a. urban/redevelopment sites do not have a lot of native soils
 - b. bring in sand
4. Reconsider requirement to pre-treat 100% of WQV
 - a. ex) proprietary system to meet pre-treatment – to remove TSS
 - b. consider source of runoff and device
 - i. rooftops don't require pretreatment; should we evaluate amount of pretreatment based on source area?
5. Set specific standards for particular practices
 - a. encourage infiltration (helpful in impaired waters)
6. Adjust separation requirement to seasonal high ground water table
 - a. evaluate current wastewater gw separation distances
 - b. rooftop runoff does not need 3 feet
 - c. WW requires 6 inch separation & bring in sand mound systems
 - d. allow flexibility in design – extend WW sand system for stormwater infiltration
 - e. need to have consistency/review with WW systems
7. Consider differences between urban and rural sites for infiltration
 - a. infill – can't meet disconnection
 - i. this is greener and has less impact – should get credit
8. Depth to groundwater
 - a. Does the separation requirement discourage infiltration by being overly restrictive
9. Testing requirements
 - a. Test pits
 - i. Replace the requirement for test pits every 220sf of infiltration basin and allow for less testing based on a demonstration of adequately characterizing the soils
 - ii. WW requires a minimum of 2 test pits per 400-500 sqft
 - iii. If getting consistent results, then should have to have fewer; allow flexibility

b. Use of “standardized” tables based on soil textural classification (or does soil structure play too much of a role to rely solely on texture)

10. Inconsistency with dewatering and infiltration on the same site

i. Underdrains take water away