

SECTION 3 - STORMWATER TREATMENT PRACTICE SIZING CRITERIA

Based on our NJDEP Certification and State and regional verification/certification programs, the following sizing criteria is recommended. Please note, approvals with the Maine Department of Environmental Protection (MEDPE), Maryland Department of the Environment (MDE) and Vermont Department of Environmental Conservation (VTDEC) were all achieved using results from the same 3rd party field study, with addition of the NAVFAC-EXWC field study being used to achieve the VTDEC Tier 2 approval (Tier 2 practices are approved for 60-80% TP removal).

1. Per NJDEP Certification, the media infiltration rate was 160"/hr (1.6 gpm/SF loading rate). As such, a system designed to achieve a 40% TP removal would be sized using this hydraulic loading rate and translates to a filter bed area to impervious drainage area ratio of 109 SF/acre of impervious area when treating a 1" rainfall depth.
2. Per State verification and certifications programs, which is based on 3rd party field testing using a media infiltration rate of 100 "/hr (1.0 gpm/SF loading rate), a system designed to achieve a 50% TP removal would be sized using a filter bed area to impervious drainage area ratio of 174 SF/acre of impervious area when treating a 1" rainfall depth.