

**PROPOSED EDIT TO:
STORMWATER MANAGEMENT CRITERIA**

A. Overview of Permit Requirements

As urban areas continue to expand and as sites redevelop the volume of runoff rises because of the increased imperviousness. Previously, stormwater management philosophy concentrated primarily on the affects of the additional volume of flow being generated. However, with the enactment of the NPDES Phase II Stormwater Permit regulations the current philosophy focuses on an integrated approach that acknowledges the aspects of volume, rate and quality as well as the relationship between ground water and surface water.

The 2013 NPDES Permit (post construction runoff control for new and redevelopment projects) establishes new minimum treatment requirements for stormwater discharges. Previously the minimum standard for treatment (first flush) was the first ½ inch of precipitation runoff measured over the entire site. The applicant was required to retain this amount for 24 hours before releasing. The current standards, which are applicable to all Eaton County watersheds and sub-watershed, are:

Minimum treatment volume (first flush) standard

- One inch (1.0") of precipitation runoff from the entire catchment area, or
- ~~One half inch (0.5") of runoff from the entire catchment area provided treatment of the entire amount in excess of 0.5" is included in an already approved watershed management plan or constructed drainage system design.~~

Treatment methods shall be designed on a site-specific basis to achieve:

- A minimum of 80 percent removal of total suspended solids (TSS), as compared with uncontrolled runoff, or
- Discharge concentrations of TSS not to exceed 80 milligrams per liter (mg/l).

A minimum treatment volume standard is not required where site conditions are such that TSS concentrations in storm water discharges will not exceed 80 mg/l.

24-hour Bankfull treatment standard

Bankfull treatment must be calculated based on the 90 percentile annual non-exceedance storm for the Lansing Region.

The channel protection criteria is necessary to maintain post-development site runoff volume and peak flow rate at or below existing levels for all storms up to the 2-year 24-hour event. "Existing levels" means the runoff volume and rate for the last land use prior to the planned new development or redevelopment. Where more restrictive channel protection criteria already exists or is needed to further reduce runoff volume and peak flow, the more restrictive standard will be applied.