

Sec. 6.13.4. Stormwater quantity criteria.

- A. Methodologies, rainfall distribution and intensities shall be consistent with those approved by the governing water management district. Assumed parameters must be supported by conventional methods.
- B. Design storms shall consider open or closed basins as provided in Table 6.13-1.

Table 6.13-1 Design Storms and Discharge Conditions

Basin	Frequency Duration	Peak Discharge Rate	Discharge Volume
Open Basin without downstream retention storage	25-year 24-hour	Post ₂₅ less than or equal to Pre ₂₅	Post ₂₅ less than or equal to Pre ₂₅
Closed Basin or Open Basin with downstream retention storage	25-year 24-hour and 100-year 24-hour	Post ₂₅ less than or equal to Pre ₂₅ and Post ₁₀₀ less than or equal to Pre ₁₀₀	Post ₁₀₀ less than or equal to Pre ₁₀₀
Open or Closed Basin with downstream flooding*	25-year 24-hour and 100-year 24-hour	Post₂₅ less than or equal to Pre₂₅ and Post₁₀₀ at least 25 percent less than Pre₁₀₀	Post₁₀₀ at least 25 percent less than Pre₁₀₀

Commented [CJ1]: SWFWMD requires 100-year storm analysis when there is downstream retention

*Downstream flooding is that flooding ~~observed and which has been~~ validated by the County ~~Engineer or their designee through field observations, FEMA FIRMs, or County Flood Prone data.~~

- C. Discharge conditions
- (1) All stormwater facilities shall be designed to limit discharges considering open or closed basins per Table 6.13-1.
 - (2) Discharges shall mimic the pre-development condition, match the pre-development location and not exceed the pre-development rate, except when discharging into a stormwater system designed to accept such discharges.
 - (3) The bypass or discharge of offsite runoff, shall be allowed when it mimics the pre-development condition, matches the pre-development location and does not exceed the pre-development rate, except when discharging into a stormwater system designed to accept such discharges.
 - (4) In ~~open or~~ closed basins with downstream flooding, existing improvements may be ~~included in the pre-development calculations excluded from the discharge volume reduction requirements~~ when all of the following apply:
 - (a) The existing improvements were constructed as part of a development with a permitted stormwater system or constructed prior to stormwater permitting requirements;
 - (b) Discharge from the existing improvements ~~are is~~ into a ~~private~~ system designed to accept such discharges ~~or a public system~~; and
 - (c) There is no adverse impact downstream including, but not limited to, flooding of structures or hindering of access.

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- (5) A discharge structure shall be required for all retention/detention areas not designed to retain the entire 100-year 24-hour post-development design storm.
 - (6) Discharge structures shall include a skimmer at a minimum. Design elements such as baffles or other mechanisms suitable for preventing oils, greases, and floating pollutants from discharging out of the facility shall be considered. When discharging from a natural facility, a skimmer may not be required upon approval from the County Engineer or his designee. When a grassed weir is used it shall be constructed with a hard core center or geoweb.

D. Recovery.

- (1) All retention/detention areas shall recover the total volume required to meet the discharge volume limitations within 14 days following the design rainfall event.
- (2) For retention/detention areas not able to recover the total required volume within 14 days, the stormwater facility volume shall be increased to retain an additional volume of the post minus pre difference in runoff for the 25-year 24-hour design storm when in an open basin without downstream retention storage or flooding or for the post minus pre difference in runoff for the 100-year 24-hour design storm when in a closed basin or open basin with downstream retention storage or flooding. The control elevation for retaining this volume shall be no greater than the top of constructed stormwater facility or the easement limits of a natural facility. Credit for the recovered volume through the 14-day duration may be considered to meet this requirement.

E. Infiltration or percolation can be considered when establishing the design high and discharge elevation.

F. Other design criteria may be used if approved by the County Engineer or his designee.

(Ord. No. 13-20, § 2, 7-11-2013)