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	25-year 24-hour and 100-year 24-hour	Post 25-year and 100-year less than or equal to ~~Pre 25~~ pre-developed conditions	Post 25-year and 100-year less than or equal to ~~Pre~~ pre-developed conditions~~25~~ during 24-hour storm[2]
Closed Basin	25-year 24-hour and 100-year 24-hour	Post 25-year and 100-year less than or equal to ~~Pre~~ pre-developed conditions~~25~~ ~~and~~ ~~Post 100 less than or equal to Pre 100~~	Post 25-year and 100-year less than or equal to ~~Pre~~ pre-developed conditions~~100~~ during 24-hour storm and following 14-day period[2]
Open Basin subject to downstream flooding[1]	25-year 24-hour and 100-year 24-hour	Post 25-year and 100-year at least 25 percent less than pre-developed conditions	Post 25-year and 100-year less than or equal to pre-developed conditions during 24-hour storm
Closed Basin subject ~~w/~~to downstream flooding~~*~~[1]	25-year 24-hour and 100-year 24-hour	~~0 cfs~~ Post 25-year and 100-year less than or equal to pre-developed conditions	~~0 cf~~ Post 25-year and 100-year at least 25 percent less than pre-developed conditions during 24-hour storm and following 14-day period

~~*~~[1]Downstream flooding is that flooding of structures or hindering of access ~~observed and~~which has been validated by the County Engineer or their designee through field observation, FEMA flood insurance rate map (FIRM), or County flood prone data.

[2] An overage tolerance no greater than half the pre-developed volume of the 2-year 24-hour storm is permitted upon approval by the County Engineer or their designee.

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 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~~;~~ and

(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~~.

(5) A discharge structure shall be required for all ~~retention/detention areas~~stormwater facilities 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~~ their designee. When a grassed weir is used it shall be armored or constructed with a ~~hard core~~concrete center ~~or geoweb~~ to resist erosion and withstand the anticipated flow velocity.

D. Recovery.

(1) All ~~retention/detention areas~~stormwater facilities in closed basins 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~~stormwater facilities 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 or for the post minus pre difference in runoff for the~~ 100-year 24-hour design storm ~~when in a closed basin~~. 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.

(3) All stormwater facilities in open basins shall have adequate storage volume available to meet the peak discharge requirements within 72 hours following the design rainfall event. The control elevation for this storage volume shall be no greater than the top of constructed stormwater facility or easement limits of a natural facility. The total post minus pre difference in runoff volume shall not be released in less than 24 hours following the design rainfall event.

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~~ their designee.

(Ord. No. 13-20, § 2, 7-11-2013)