

**Alameda Countywide Clean Water Program Stormwater Treatment □
Requirements for New Development and Redevelopment**

Numeric Sizing Criteria for Pollutant Removal Treatment Systems:

All Dischargers shall require that treatment BMPs be constructed for applicable projects, as defined in section C.3.c. of the NPDES permit. These BMPs must incorporate, at a minimum, the following hydraulic sizing design criteria to treat stormwater runoff. As appropriate for each criterion, the Dischargers shall use or appropriately analyze local rainfall data to be used for that criterion.

- A. Volume Hydraulic Design Basis: Treatment BMPs whose primary mode of action depends on volume capacity, such as detention/retention units or infiltration structures, shall be designed to treat stormwater runoff equal to:
 - 1. the maximized stormwater quality capture volume for the area, based on historical rainfall records, determined using the formula and volume capture coefficients set forth in Urban Runoff Quality Management, WEF Manual of Practice No. 23/ASCE Manual of Practice No. 87, (1998), pages 175-178 (e.g., approximately the 85th percentile 24-hour storm runoff event); or
 - 2. the volume of annual runoff required to achieve 80 percent or more capture, determined in accordance with the methodology set forth in Appendix D of the California Stormwater Best Management Practices Handbook, (1993), using local rainfall data.

- B. Flow Hydraulic Design Basis: Treatment BMPs whose primary mode of action depends on flow capacity, such as swales, sand filters, or wetlands, shall be sized to treat:
 - 1. 10% of the 50-year peak flow rate; or
 - 2. the flow runoff produced by a rain event equal to at least two times the 85th percentile hourly rainfall intensity for the applicable area, based on historical records of hourly rainfall depths; or
 - 3. the flow of runoff resulting from a rain event equal to at least 0.2 inches per hour intensity.