XII.N. Hydrologic Conditions of Concern (Pg. 52)

1. Co-permittees must address the changes in a priority project site's hydrology in the project WQMP according to the requirements of this Section except under any of the following conditions:
    a. The runoff volume and time of concentration for the two-year frequency, 24-hour storm event are not significantly affected by the project. A significant effect must be deemed to occur only where:
        i. The calculated runoff volume from the site increases by 5% or more over the pre-project condition, and/or
        ii. The calculated time of concentration for runoff from the site decreases by 5% or more over the pre-project condition.
    b. All downstream conveyance channels that will receive runoff from the project are engineered~~, hardened,~~[1] and regularly maintained to accommodate the necessary design flow capacity as dictated by the latest version of the County Hydrology Manual, and no sensitive stream habitat areas have the potential to be adversely affected by discrete or cumulative changes in hydrology.
    c. The project has the demonstrated capacity to infiltrate, harvest and use, evaporate, or evapotranspirate the volume of runoff produced by a two-year storm event within a 48-hour period.
    d. The Executive Officer grants an individual or general variance in writing to the Permittee(s).
        i. The granting of such variances must be supported by objective and relevant studies.
        ii. The Co-permittees must comply with any conditions placed on the issuance of the variance by the Executive Officer.
        iii. The Executive Officer and the requesting Co-permittee(s) must provide the public an opportunity to comment on the proposed variance for a period of not less than 30-days prior to its issuance.
2. For those priority projects that do not meet the conditions in Subsection XII.N.1. above, the Co-permittees must apply the following conditions:
    a. The project WQMP must include a hydrology study that quantifies the pre- and post-project runoff volumes, peak flow rates, and times of concentration for a 2-year storm event.
    b. ~~The~~ Except as provided in section XII.N.2.c, the project WQMP must provide BMPs that modify runoff ~~flow rates,~~ volumes and times of concentration~~ to pre-~~ from the project ~~conditions~~site for ~~a~~the 2-year, 24-hour storm such that:

[1] Engineered channels may include hardened channels and/or channels with engineered grade control structures or similar features designed to provide the necessary flow capacity and to be geomorphically stable under discrete and expected cumulative changes in hydrology.

i. Post-project runoff volumes for the 2-year, 24-hour storm event ~~or to within~~do not increase by more than 10% ~~thereof~~compared to the pre-project runoff volumes for the 2-year, 24-hour storm event, and

ii. Post project times of concentration for the 2-year, 24-hour storm event do not decrease by more than 10% compared to the pre-project times of concentration for the 2-year, 24-hour storm event.

c. The provisions of section XII.N.2.b shall apply unless any of the following ~~has~~have occurred:

i. A Clean Water Act Section 401 Water Quality Standards Certification has been issued authorizing discharges of fill associated with channel modifications that would accommodate the project's changes in hydrology while protecting beneficial uses.

ii. Site design and/or structural treatment control BMPs proposed for the site to reduce pollutants in urban runoff already effectively modify runoff volumes and times of concentration such that they satisfy Provision XII.N.2.b~~.~~, above.

iii. The Project WQMP has demonstrated that it is infeasible to satisfy the criteria of XII.N.2.b, above, through the use of infiltration and/or harvest and use, and the project has provided site design, structural treatment control, and/or flow control BMPs such that the post-project peak runoff flow rates for the 2-year, 24-hour storm event are not increased by more 10% compared to the pre-project peak flow rates for the 2-year, 24-hour storm event.

Comment [ES1]: We could offer up some reduction beyond 10% or the option to do a hydromod plan.

3. Co-permittees must prepare a set of watershed maps that identify management areas tributary to drainages that have not been engineered~~, hardened,~~ and regularly maintained to accommodate the design flow capacity, as dictated by the latest version of the Orange County Hydrology Manual, and where sensitive stream habitat areas have the potential to be adversely affected by discrete or cumulative changes in hydrology (see Provision XII.N.1.b. above).

a. The Co-permittees must submit the watershed maps in draft form to the Executive Officer for approval no later than 6 months following the adoption of this Order.

b. The Co-permittees must make changes requested by the Executive Officer within 30-days of receipt of the request. The Executive Officer is authorized to approve the watershed maps conditioned upon completion of the changes.

c. Upon approval by the Executive Officer, the Co-permittees must consistently use the applicable maps to identify projects that will be subject to the limitations on changes in runoff volumes ~~and~~, times of concentration~~-~~, and peak flow rates provided in this Section (Section XII.N).