2-7.4 Engineering and Economic Feasibility for Stormwater Deviations to the HRM

The *Highway Runoff Manual* provides policy and guidelines for the majority of WSDOT stormwater-related design issues. However, there are instances where the HRM’s policies and guidelines do not seem appropriate for a particular project situation. WSDOT and Ecology recognize that alternatives ways may exist to meet the HRM’s requirements. For these situations, WSDOT created the *Demonstrative Approach Team* (DAT), which includes staff from Ecology and WSDOT, to review and approve (if appropriate) alternative stormwater design proposals. While stormwater deviations rarely relieve the project from minimum requirement obligations, The DAT can approve an alternate compliance pathway to meeting the intent of the minimum requirements using a project-specific demonstrative approach.

Highway projects seeking an alternative compliance pathway typically experience site-specific limitations (e.g., infrastructural, geographical, geotechnical, hydraulic, environmental, or benefit/cost related) that presents an obstacle to fully meeting minimum requirements, particularly runoff treatment and flow control, within the project right of way. An example includes deviating from the prescribed 5% maximum roadway cross slope for a CAVFS since the existing roadway exceeds 5%. Another example might involve efforts to avoid building a detention pond in a heavily forested area and instead opting for an off-site in-kind (nonforested) location to achieve the required flow control obligation.

A project proponent must make a formal assessment to identify constraints on meeting the minimum requirements in the TDA. *Appendix 2A includes guidelines for this assessment*, referred to as *engineering and economic feasibility (EEF) evaluation*. The EEF assessment must be performed as early as possible in project development to document reasons for seeking an alternative compliance pathway. The design team must also formulate an alternative design to ensure that the alternate compliance pathway to meets the intent of the HRM (i.e., does not adversely affecting water quality and satisfies state and federal water quality laws). The design team should consult with the Region Hydraulics Office, HQ Highway Runoff Unit, or the HQ ESO Stormwater and Watershed Program.

The steps below describe the general process for seeking a HRM deviation review and approval:

1. The design team identifies the policy(ies) or guideline(s) in the HRM that the project proposes to deviate from.

2. The design team provides the justification for the deviation using the EEF assessment. The design team also provides the alternative design and shows how it achieves the intent of the HRM policy or guidance.

3. The design team submits the documentation (#1 and #2 above) to the DAT for review and approval.
4. If approved, the DAT issues a joint WSDOT and Ecology letter to the project office authorizing the alternative stormwater compliance approach.

If approved, the design team shall include the all of the above documentation in the appendix of the project’s *Hydraulic Report.*