

INTERIM CRITERIA

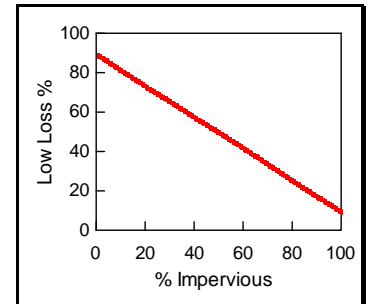
FOR SIZING INCREASED RUNOFF

DETENTION FACILITIES

- * The entire area of proposed development will be routed through a detention facility(s) to mitigate increased runoff. All basins must have positive drainage; dead storage basins shall not be acceptable.
- * Storms to be studied will include the 1-hour, 3-hour, 6-hour and 24-hour duration events for the 2-year, 5-year and 10-year return frequencies. Detention basin(s) and outlet(s) sizing will ensure that none of these storm events have a higher peak discharge in the "after" condition than in the "before" condition.
- * For the 2-year and 5-year events the loss rate will be determined using an AMC I condition. For the 10-year event AMC II will be used. Constant loss rates shall be used for the 1-hour, 3-hour and 6-hour events. A variable loss rate shall be used for the 24-hour events.

* Low Loss rates will be determined using the following:

- Undeveloped Condition --> Low Loss = 90%
- Developed Condition --> Low Loss = .9 - (.8 x % impervious)
- Basin Site --> Low Loss = 10%



- * Where possible and feasible the on-site flows should be mitigated before combining with off-site flows to minimize the size of the detention facility required. If it is necessary to combine off-site and on-site flows into a detention facility two separate conditions should be evaluated for each duration/return period/before-after development combination studied; the first for the total tributary area (off-site plus on-site), and the second for the area to be developed alone (on-site). It must be clearly demonstrated that there is no increase in peak flow rates under either condition (total tributary area or on-site alone), for each of the return period/duration combinations required to be evaluated. A single plot showing the pre-developed, post-developed and routed hydrographs for each storm considered, shall be included with the submittal of the hydrology study.
- * No outlet pipe(s) will be less than 18" in diameter. Where necessary an orifice plate may be used to restrict outflow rates. Appropriate trash racks shall be provided for all outlets less than 48 inches in diameter.
- * The basin(s) and outlet structure(s) must be capable of passing the 100-year storm without damage to the facility.
- * Mitigation basins should be designed for joint use and be incorporated into open space or park areas. Side slopes should be no steeper than 4:1 and depths should be minimized where public access is uncontrolled.
- * A viable maintenance mechanism, acceptable to both the County and the District, should be provided for detention facilities. Generally, this would mean a CSA, landscape district, parks agency or commercial property owners association. Residential homeowners associations would generally not be acceptable.