

Carroll County

Procedure for Ultimate Conditions Hydrologic and Hydraulic Analysis

(For use in fulfilling 2023 MDE Dam Safety MD-378 requirements)

Runoff Curve Numbers

Runoff Curve Numbers (RCN) must be computed based on ultimate land use taken from the most recent zoning map, existing development, and/or the proposed site or subdivision map; whichever, generates the greatest runoff. The soil types shall be based on the Carroll County Soil Survey (Making the assumption that the land will remain undeveloped is unacceptable). In drainage areas where the existing zoning is agricultural, assume that all agricultural acres are contoured row crop agriculture.

Conservation-zoned areas have a lot yield of one lot per three acres. To establish the maximum ultimate conditions RCN, the available lots should be assumed to be one acre in size. The lots should replace woods first, meadow second, and row crop agricultural lands last if all other areas have been exhausted.

Notes:

1. All RCNs are from SCS TR-55 June 1986 table 2-2.
2. Undevelopable areas (ie: open space, stream buffers, wetlands, forest conservation) may be analyzed as is.

Time of Concentration

Assume that the existing amount of overland flow will remain in ultimate condition but that the rest of the flow path will be entirely in closed storm drains with an average velocity of 7ft/sec.

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Adopted from C.C. Floodplain Manual

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