

**WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
DESIGN DIRECTIVE**

<p>DD-504 DESIGN DISCHARGE DETERMINATION <i>July 1, 2006</i></p>
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The recommended priority for the selection of design discharges for new and/or replacement structures are:

1. The Flood Insurance Study (FIS) for the local community, if available. A community is either the county, town, or city, whichever has political jurisdiction over the flood plain site. Design Discharge differing by more than 10% from the published FIS values will need justification.
2. Corps of Engineers (COE) or Natural Resources Conservation Service (NRCS) modified frequency discharges taking into account stream regulation by reservoirs and detention dams upstream (i.e. Wheeling Creek by NRCS and Guyandotte River by COE).
3. Local gaging station records and frequency, taking into account the length of unregulated systematic record.
4. Frequency computations as outlined in the latest issue of the Division of Highways' Drainage Manual.

NOTE: If it is determined Division activities will cause notable changes in the published FIS flood plain data, 100-year flood profile - or floodway width, provisions should be made to revise the community FIS.