

800 Drainage

800.1 General

The New Mexico Department of Transportation (NMDOT) has developed several resources related to drainage analysis and design for use by both NMDOT staff and consultants on NMDOT projects. Links to these references and a brief description of their contents is provided below.

800.2 References

The design manuals below should be used for reference when assessing drainage and designing drainage systems for NMDOT projects. Together, these documents provide for standardized methods of design and documentation for NMDOT projects. The drainage manuals, appendices, and design criteria are in the process of being updated.

- NMDOT [Drainage Manual Volume I, Hydrology - Volume 1](#) identifies standard methods of hydrologic analysis that should be used for all NMDOT projects. The manual focuses on hydrology and how to predict flood flows at roadway crossings. A brief description of each analysis method is included in the Drainage Manual, followed by a step-by-step procedure that explains how to apply the method. Example problems and limitations on the use of each analysis method are included to assist the drainage designer.
- NMDOT [Drainage Manual Volume II, Hydraulics, Sedimentation, and Erosion](#) - This manual provides methods of hydraulic analysis, analysis methods and countermeasures for sedimentation and erosion, design information for stormwater

storage facilities, and construction and maintenance considerations.

- NMDOT [Drainage Manual Appendices](#) - These appendices provide supporting information to the NMDOT Drainage Manual Volumes I and II.
- NMDOT [Drainage Design Criteria](#) - This document provides the latest information on NMDOT's drainage design criteria according to highway classification, average daily traffic (ADT), location (urban or rural), and other factors.
- [National Pollutant Discharge Elimination System \(NPDES\) Manual](#) - The NPDES Stormwater Permit Program is a federal program developed under Section 402 of the Clean Water Act (CWA). The NPDES Manual was developed for and approved for statewide use by multiple entities in New Mexico. The NPDES Manual:
 - Provides information regarding the development of Stormwater Pollution Prevention Plans (SWPPPs), as well as the application of best management practices (BMPs) for construction and industrial sites.
 - Assists regulated entities in the permitting and notification process.
 - Assists regulated entities in understanding the importance of stormwater management.
 - Provides the basics of planning and design for stormwater management.
 - Assists regulated entities' coverage under the NPDES General Permit for Stormwater Discharges from Construction Activities (CGP) instead of under a site-specific permit.
 - Assists regulated entities' coverage under the NPDES Multi-Sector General Permit (MSGP) for Stormwater Activities Associated with Industrial Activities instead of under a site-specific permit.
 - Assists Municipal Separate Storm Sewer Systems (MS4s) with their programmatic requirements.