

Memorandum

To: Distribution, See Below

From: David Hedstrom P.E., Hydraulic Engineer *DJH*
Annette Compton P.E., Hydraulics Operations Engineer *AMC*

Date: December 11, 2023

Subject: Hydraulics / Road Design 2023 Manual Updates

The following chapters of the Hydraulics Manual are new and are available for implementation:

- Chapter 1 – Hydraulic Section Operations
- Chapter 2 – Hydraulic Activities in Project Development Process
- Chapter 3 – Legal Aspects
- Chapter 4 – Hydraulic Design Sequence
- Chapter 5 – Location Hydraulic Study
- Chapter 7 – Permitting
- Chapter 8 – Hydraulics Software
- Chapter 10 – Channel Design
- Chapter 16 – Stream Stability Assessment
- Chapter 18 – Stream Instability Countermeasures

The following chapters of the Hydraulics Manual have been updated and are available for implementation:

- Chapter 11 – Culverts (Updated December 2023)
- Chapter 12 – Irrigation Facilities (Updated December 2023)

The following chapter in the Road Design Manual has been updated to reflect the changes in the Hydraulics Manual and is available for implementation:

- Chapter 11 – Drainage and Irrigation Design (Updated December 2023)

Please use the following guidelines to implement and apply the new and updated chapters:

1. Projects that are before the Plan in Hand Review milestone (PIH) should be designed and documented using the updated Hydraulics Manual and Road Design chapters.
2. For projects that are after PIH, the updated Hydraulics Manual may be implemented on a case-by-case basis. Please note that:
 - Implementing the updated design criteria on post PIH projects may require design and plan changes.
 - The decision to use the updated design criteria should be made in consultation with the District Hydraulic Engineer and the design project manager.

Electronic access to the Hydraulics Manual chapters can be found at the following link:

<https://www.mdt.mt.gov/publications/manuals.aspx#category-hydraulics>

Please contact Dave Hedstrom, Annette Compton, or any of the District Hydraulic Engineers with questions or comments on the new manual.

copies:

Dustin Rouse – Engineering Division Administrator
Ryan Dahlke – Preconstruction Engineer
Damian Krings – Highways Engineer
Jeremy Terry – Road Design Engineer
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Tyler Steffan – Bridge Design Engineer
Kelly Williams – Consultant Design Engineer
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