

# Circular DEQ-8 Draft Task Force Presentation

August 10, 2023  
Steve Lipetzky, PE

# What's Happened

- Subcommittee – 5 meetings since January 2023
  - Sarah Friederichs – Hyalite Engineering
  - Jeff Larsen – Larsen Engineering
  - Ben Rankin – WGM Group
  - Kyle Crapster – Missoula County
  - Barb Kingery – RBK Consulting
  - Kelly Lynch – MT League of Cities and Towns
- Draft Stormwater Circular (DEQ-8) sent to Task Force end July

# Goals

- Increase clarity of submittal requirements
- Improve consistency of interpretation and application of standards by submitters and reviewers
- SB 285 – Simplified Plan Requirements
- Post Development approach for unknown development – raised by stakeholders
- Maintain protection of water quality, adequate drainage ways, and adjacent properties

# Updates Overview

- Submittal clarifications
  - Number and type of drawings and
  - Calculations and Detail Drawing Submittals moved to pertinent sections
- Simplified Plan
  - Qualification Changes
  - Prescriptive Methodology
  - Conveyance Structures
- Acceptable Methods Updates
- Initial Storm Water Facility
  - Montana Post Construction BMP Design Manual allowed when designed for 80% TSS removal

# Updates Overview – Cont'd

- Pre and Post Development Conditions
- Rainfall/IDF Curves – Remove rainfall depths from Circular, NOAA Atlas 2 still allowed, include MDT Hydrology Manual
  - MDT IDF information from their Hydrology Manual Appendix B
- Conveyance Structures
  - Culvert Crossing calculations
  - Road Over-Topping
- Storage Facilities
  - Retention
  - Detention
  - Infiltration

# Simplified Plans

- Qualification Updates – all lots must meet criteria
  - Minor Subdivisions only
  - Remove maximum slope criteria
  - Facilities must be located on each lot
  - Drainage crossings no greater than 5 acres
- Prescriptive Methodology – SB 285
  - Retention Pond minimum size 750 cubic feet
  - 250 cubic feet per 1,000 square feet of impervious area – 95<sup>th</sup> percentile
  - Can still use existing spreadsheet
  - Conveyance – minimum 12-inch diameter, recommend 2% slope
    - Sizing required if requested by reviewing authority

# Acceptable Methods

- Rational Method – minor clarification of applicability
- Modified Rational Method
  - Application for detention pond volume sizing
  - Critical Storm Duration Method
- SCS Curve Number Method (TR-55)
  - If  $Ia/P$  greater than 0.5 do not adjust CN, set  $Ia/P = 0.5$
  - Curve Number Table provided – TR-55 Bulletin values also allowable

# Pre and Post Development Conditions

- Previously approved stormwater facilities are not subject to review and impervious area can be included in Pre-Developed Condition
- Existing state and county highways and roads may be included in Pre-Developed Condition
- When Post Development conditions are unknown
  - Building Location Area/Stormwater Construction Area – must meet all setbacks
  - Assumed Imperious Area will need to be included in COSA
  - Rewrites, or revised lot layout, required for deviations from original design assumptions/locations



# Conveyance Structures

- Road Over-Topping – Distinction b/w roadways and driveways

Conveyance structures should be included to prevent overtopping driveways for single family living units.

Conveyance structures must be designed to meet the following during the 10-year storm event:

- Flow depth at culvert crossings must not over-top roadways
- Flow depth at culvert crossing must not over-top driveways that provide access to a commercial unit or three or more single family living units
- Flow depth at culvert crossings over the driveway must not exceed a flow depth of 2-inches for less than three single family living units
- Cross-pans or valley pans at roadway intersections must not exceed a flow depth of 2-inches.
- Flow depth and spread in roadside ditches or curb/gutter/inlets must maintain a 10-foot-wide lane for emergency access, 5-foot either side of the crown or median.
- parking lots must be designed such that a maximum flow depth of 2-inches is not exceeded

# Retention, Detention and Infiltration Facilities

- Separation from groundwater
- Overflow control
- Roadside ditches for retention storage
- Test pit requirements for infiltration facilities

# From Here...

- SATF Review and Comment Period
- Draft Final Circular and Reason Statements Internally
- Public Hearing and Comment Period
- Address Comments and Complete Rule Package
- Adoption

# Connect with us!

- **Steve Lipetzky, PE**
- *Environmental Engineer PE*
- [Steven.Lipetzky@mt.gov](mailto:Steven.Lipetzky@mt.gov)
- 406.444.5368



[Facebook](#)



[Twitter](#)



[Instagram](#)



[YouTube](#)