

## **New Weight Restriction**

South Fork McDonald Creek Bridge (#6003)



The Montana Department of Transportation (MDT) recently issued a new load posting for the South Fork McDonald Creek Bridge, west of Grass Range, on US 87, in Fergus County. The posting is part of a multi-year effort to update load ratings and postings on Montana bridges as mandated by the Federal Highway Administration (FHWA).



The exact location of the South Fork McDonald Creek Bridge is pictured above and viewable on Google Maps here: <a href="https://bit.ly/SouthForkMcDonald">https://bit.ly/SouthForkMcDonald</a>.

The FHWA mandate is in response to changes in the trucking industry over the last decade. Truck manufacturers are building specialized hauling vehicles (SHVs) capable of legally carrying heavier loads than typical vehicles have in the past. SHVs are single-unit, short-wheelbase, multiple-axle trucks commonly used in the construction, waste management, bulk cargo, and commodities hauling industries. Often one or more axles can be raised or lowered as needed to comply with statutory weight limitations.

These SHV configurations concentrate heavy loads over a short length. They have been found to overstress bridges beyond what was previously modeled by standard commercial vehicles. To account for their increasing presence and ensure safe operation, FHWA has determined that all states must include these new, short, heavy vehicles when evaluating the safe limits of bridge capacity.



The posting on the South Fork McDonald Creek Bridge applies to SHVs; it limits the maximum gross vehicle weight of single-unit vehicles with 5, 6, or 7 axles to 27 tons.

Further information on understanding and interpreting Montana's weight limit signs and silhouettes can be found in MDT's load posting brochure, located here: http://bit.ly/mtbridgebrochure.

To comply with the mandate, MDT is currently updating load ratings for 4,500 public bridges across the state, including approximately 2,500 owned and maintained by MDT. This effort is expected to take about four years to complete.

Bridge weight restrictions are required when the engineering analysis of a bridge, known as a load rating, indicates that it cannot carry standard, legal loads. Load ratings provide information about how much distributed weight can safely pass over a bridge. Load posting signs show maximum weight limits for different vehicle types, depending on their axle configuration. A posted bridge is safe to use, but the weight of certain vehicles must be limited accordingly.



