## Cass County Highway Department 2011 Flood Update

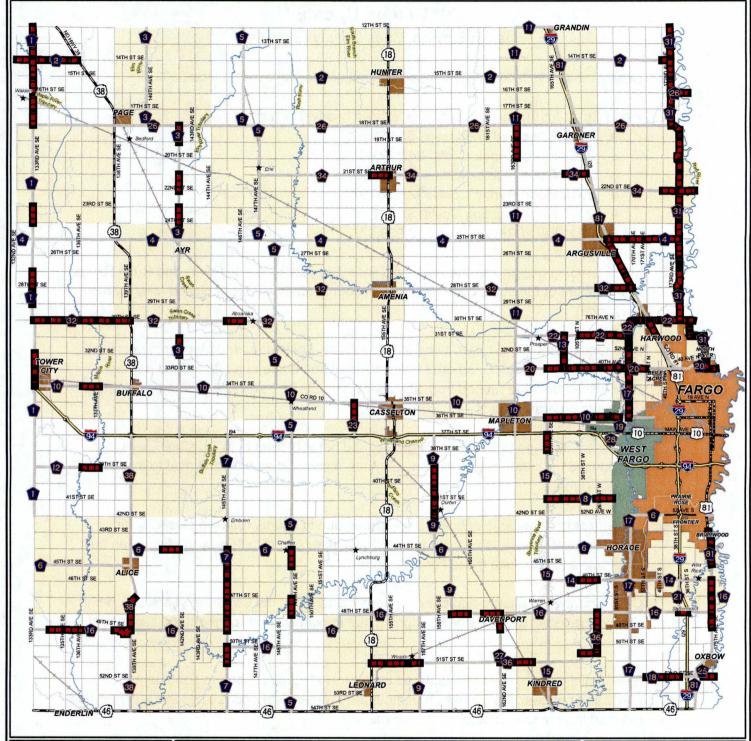
Jason Benson, Cass County Engineer

- 1. Cass County has faced three consecutive major flooding events since 2009.
- 2. Flood Costs for the three floods have totaled nearly \$17 million:
  - a. 2009 Flood Fighting Costs: \$3,080,032
  - b. 2009 Flood Repair Costs: \$4,819,401
  - c. 2010 Flood Fighting Costs: \$912,135
  - d. 2010 Flood Repair Costs: \$2,607,797
  - e. 2011 Flood Fighting Costs: \$2,567,461
  - f. 2011 Flood Repair Costs: \$2,939,376
- 3. Major flooding occured on the Red, Wild Rice, Sheyenne, Maple River, and Rush Rivers. At the height of the flood, over 100 miles of county roadways were closed (see map on back side).
- 4. Substantial damage to roads along the Red River, Sheyenne, and Maple river corridors. 2011 flood damage included over 50 major sites and numerous minor flood damage sites. Road damage ranged from shoulder washouts on paved roads to major, full depth washouts on gravel roads.
- Significant damage to the county's gravel road network from high moisture levels. An additional \$1.5 million was spent on subgrade repair and additional gravel to fix damaged roads.
- 6. Two major road realignments were completed due to county roads in closed basins where the water has overtopping the roadway. Over one mile of new roadway was built to reroute traffic around these flooded roads.
- 7. Cass County had a large number of bridges damaged in the last three years of flooding. The bridge repair work has been ongoing due to high water throughout the summer of 2011.
- 8. Substantial detours were encountered by the travelling public due to flood damaged roads and bridges. Fortunately, much our road repairs were completed this summer and reduced the number of detours prior to harvest.

Cass County has 650 miles of roads, including 321 miles of paved roads and 329 miles of gravel roads. The Cass County Highway Department maintains over 300 bridges with a length of 20 feet or longer. Cass County also maintains a large number of box culverts and bridge structures less than 20 feet in length.

## CASS COUNTY ROAD CONDITIONS DUE TO FLOODING

Spring Flooding - Cass County, ND, 2011





Cass County Hwy Dept. Cass County GIS 701-298-2370



Roads Either Closed or Inundated
During 2011 Spring and/or Summer Flooding

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