



FM AREA DIVERSION PROJECT PROJECT IMPROVEMENTS

November 2016

The Federal Project has been optimized to **reduce impacts** to land, people and the environment.

ALIGNMENT WAS SHIFTED FROM MN TO ND

- ▶ MN diversion had downstream impacts extending to Canada
- ▶ Approximately 4,500 structures impacted downstream
- ▶ MN Diversion footprint impacted 6,500 acres in MN
- ▶ Minnesota officials stated a diversion channel on the Minnesota side would not be supported
- ▶ A diversion channel on the North Dakota side of the river provides protection from tributaries (Sheyenne, Maple, Rush and Lower Rush rivers)

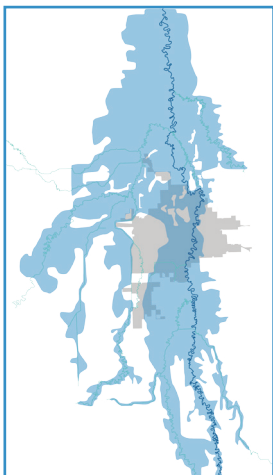
DOWNSTREAM IMPACTS WERE MITIGATED WITH UPSTREAM STAGING

- ▶ Downstream impacts in excess of 2 feet and extended to Canada
- ▶ Upstream staging was added to ND diversion to mitigate
- ▶ Downstream impacts virtually eliminated
- ▶ Impacts confined to a defined, mitigatable area

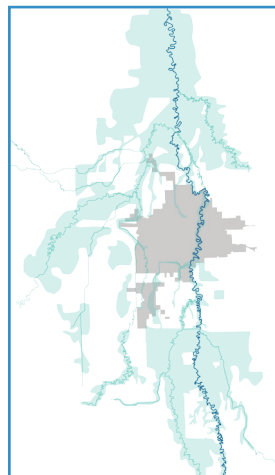
MINIMIZED UPSTREAM IMPACTS

- ▶ Moved alignment north, added gates to the Inlet Structure and built in-town levees and floodwalls to allow more flow through town
- ▶ Reduced the frequency [from 3-5 years to 10 years] and duration of project operation
- ▶ Reduced environmental impacts of project
- ▶ Reduced impacts to structures from 4,500 to approximately 800 [126 residential]

100-YEAR FLOOD WITHOUT PROJECT



100-YEAR FLOOD WITH PROJECT



AT A GLANCE

- ▶ **reduced** impacts to structures by **80%**
- ▶ more than **16K** structures **benefited** by project
- ▶ more than **50K** net acres **benefited** by the project

This is the optimized federal project that provides 100-year certifiable flood risk management

