## **Stony Creek Water Resource Management Project**

Clay County Moorhead ENTER REFE Ba Legend Stony Creek Restoration - Diversion Channel Principal Spillway - Setback Level Embankment 5 Flood Pool Stony Creek Restoration 25 0 125 0 0.25 M **Emergency Spillway Location** BUFFALO RED RIVER Stony Creek Inflow Diversion Damesylle Typ. G

Proposer: Buffalo-Red River Watershed District

## **Description/Location:**

The project area is located approximately 5 miles to the northwest of Barnesville, MN and is located on Clay County Ditch No. 31 (also known as Stony Creek). The watershed is steep and flashy and has a drainage area of 35 square miles. The project is located in the BRRWD's Central Planning Region. The project is currently in its study phase. The project consists of numerous features: 4.5 mile long river corridor restoration enclosed by setback levees, a floodwater impoundment and expansion of buffers along Stony Creek and its tributaries. The proposed 7,000 acre-feet of gated storage will provide more than 80% in reduction to the peak flow contributed by Stony Creek. Reductions to peak flows downstream on the South Branch Buffalo River are expected to be around 5%.

| Project Benefits<br>Flood Control Goal | 80%+ reduction in the 10-yr & 100-yr spring flood discharges from  |
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|  | contributing drainage area   |
| Habitat Restoration                    | Reduced turbidity, enhanced fish habitat, stream restoration along Stony   |
|  | Creek and riparian buffer corridor.  |
| Erosion Reduction                      | Reduction in riverbank erosion and bank sloughing; buffering (89 acres)<br>along the stream restoration reach, reduction of overland flooding and<br>reduction in turbidity and suspended solids thereby improving water<br>quality. |

Project Cost: \$16.3 Million State DNR (\$4.85M) / LSOHC (\$2.0M) / WD (\$7.30M) / USDA (\$0.50M) / FMDA (\$1.65M)

**Key:** WD=Watershed District; DNR=Minnesota DNR HMGP; LSOHC=Lessard-Sams Outdoor Heritage Council Outdoor Heritage Fund; USDA=Conservation Reserve Enhancement Program; FMDA=Fargo-Moorhead Diversion Authority **Status: Currently in Design Phase, Land Acquisition in 2019, Construction Ready in 2020** 

## Flood Damage Reduction/Natural Resources Enhancement Benefits

- Reduces 10-year and 100-year floods by more than 80%
- Overland flooding eliminated
- 7,000 acre-feet of Flood Storage
- 100+ acres of Expanded and Enhanced Riparian Habitat Corridor
- 4.5 miles of Stream Restoration
- Enhanced Fish Habitat
- Water Quality Improvements
- Reduced Erosion and Sedimentation
- Reduced Turbidity
- Pollinator Habitat

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| noillim 0. <b>č</b> r‡ | Off-Channel Storage Site               |
| noillim f.f\$          | Interstate No. 94 Culvert Improvements |
| noillim 2.2\$          | Stream Restoration                     |

## **Punding**

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| noillim Շ.\\$         | Buffalo-Red River Watershed District               |
| noillim 23.1\$        | FM Diversion Authority                             |
| noillim 28.4\$        | PNR Flood Hazard Mitigation Grant<br>mereord       |
| noillim 0.S <b>\$</b> | LSOHC-Outdoor Heritage Fund                        |
| noillim 2.0\$         | Conservation Reserve<br>Enhancement Program (CREP) |