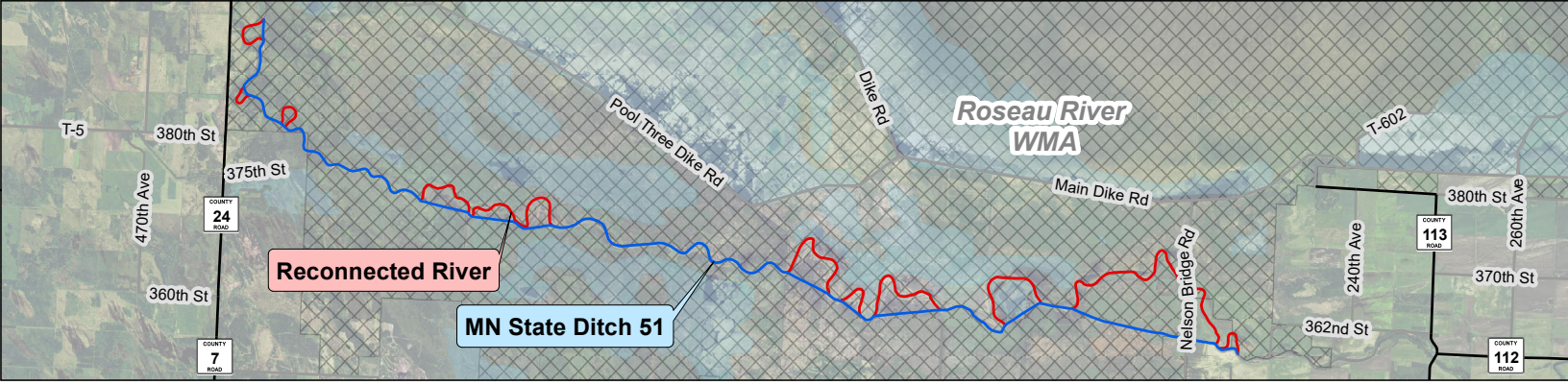


ROSEAU RIVER HABITAT RESTORATION

RRWD ROSEAU RIVER WATERSHED DISTRICT

DEPARTMENT OF NATURAL RESOURCES

BACKGROUND

Roseau River Watershed District in partnership with the MN DNR is leading implementation to restore a channelized reach of the Roseau River that is located almost entirely within the Roseau River Wildlife Management Area (RRWMA).

This stretch of the Roseau River was channelized in the early 1900s and is currently classified as MN State Ditch 51.

TIMELINE

Fall 2020	Winter 2020	Summer 2021	Fall 2022	Fall 2023	Summer 2025
Survey and Data Collection	Existing Conditions Hydrologic and Hydraulic Modeling	Restoration Design and Hydraulic Modeling	Final Restoration Design, Permitting, Construction Plans, and Specs	Start Phase 1* Construction	Finish Phase 1* Construction and Start Maintenance

additional phases subject to funding availability

PROJECT SCOPE

Design and restore natural channel geomorphology based on stream classification and channel evolution principles

Reconnect historic oxbows to reestablish natural meandering pattern

Recreate diverse geomorphic river features such as riffles, runs, bends, pools, and sand/gravel bars

Restored high-quality aquatic terrestial habitat

Rebuild conservation corridor between priority habitats

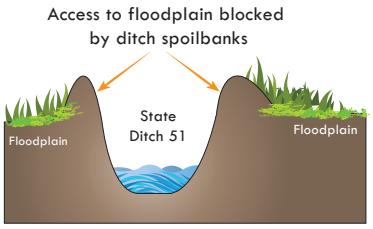
Restore natural hydrology to the area

Reconnect floodplain and riparian corridor to the river

RIPARIAN CORRIDOR ENHANCEMENT

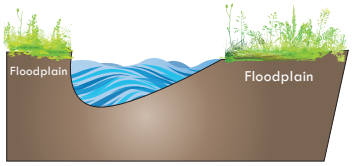
RIVER RESTORATION

RIVER CROSS-SECTION



Before

Restored Roseau River



After

OUTPUT AND OUTCOMES AND BENEFITS

OUTPUT

Reconnect **13.6 miles** of historic oxbows

Total restoration of **22.5 miles** of river, floodplain, and associated riparian habitat

366 acres of restored aquatic habitat for several species:

- Lake sturgeon*
- Black sandshell*
- Walleye
- Northern pike

OUTCOMES/BENEFITS

Restored Riverine Habitat to augment the RRWMA waterfowl pools and the Roseau Lake Restoration

Increased resilience of the ecosystem surrounding the river and protection from invasive species

Strengthen biodiversity and support native plant communities

Improved populations of species of greatest conservation need and game fish species

Support and strengthen restablishment of lake sturgeon* within the Red River Basin

Enhanced paddling and fishing along the restored river

Expanded opportunities for outdoor recreation, birding, and wildlife viewing

Reduce bank erosion and entrenchment for **improved water quality**

*species of greatest conservation need