



## About the Project:

The project is located at the NW of the State in the Marshall County close to Roseau and Kittson Counties. The Project footprint covers approximately **3 sq. miles** which includes the well known **East Park WMA**. Project owners joined over 50 years ago to provide both natural resources enhancement and flood control benefits to the community with this facility.

The Nelson Slough within the East Park WMA is an on-channel multi-purpose impoundment site constructed in 1971 and has undergone significant degradation over the years with hybrid cattail growth and water levels consistently above normal pool levels.



Hybrid Cattails close to the outlet structure

A planning process started in **2016** through which the Middle-Snake-Tamarac Rivers Watershed District (**MSTRWD**) and the Minnesota Department of Natural Resources (**DNR**) have been cooperatively working to develop a plan to provide improved water level management capabilities and enhanced flood damage reduction benefits at Nelson Slough.

Over the last recent years, traces of **Sheathed Pondweed** (an MN endangered Specie) was observed in the Slough which increases the importance of the project to keep not only this plant but also numerous others protected.

The project design has considerably **wider weir structure** which enables the operators to manage water level to the appropriate level in different seasons of the year to harness best mutual results of natural resource benefits and flood damage reduction. The project also increases the levee height to meet the new dam safety codes. As it currently doesn't meet the code.

Whether we call it **climate change** or the new normal, it is obvious we are having heavier and flashier rain falls for which if we cannot manage the water elevation in the facility quick enough, **many resources will be drawn and lost**.



Current outlet structure needs weeks/ months to take the water to desired elevation

## Project Partners:

- DNR
- JD 19 Drainage Authority
- LSOHC
- MSTRWD
- Red River Watershed Management Board,
- State of Minnesota Flood Damage Reduction Program
- Township

## **Project Benefits:**

### Natural Resource Enhancement:

- Improve the Nelson Slough shallow lake
- Improve over water nesting birds habitat
- Improve habitat for migratory birds
- Improve biodiversity and aquatic plants
- Improve mix of open water and vegetated areas within impoundment
- Enhance diversity and composition of wetland plant communities and aquatic invertebrate populations

### Recreational and aesthetic:

- Hunting and Bird watching
- Scientific research potential
- Canoeing and kayaking

### Water Quality

- Improve stability of Judicial Ditch (JD) 19
- Reduce sediment transfer downstream

### Flood Control

- Provide local and Red River flood damage reduction
- Improve hydrologic conditions within the JD 19 sub-watershed

Sheathed Pondweed in parts of Nelson Slough



White Swan on the water and Cranes flying – Nelson Slough – 08/22/22