



Minnesota Wetland Protection and Restoration Programs

Rep. Rick Hansen

Minnesota House of Representatives (39A)



Governor's Executive Order 12-04

‘Supporting and Strengthening the State's Wetland Policy’

Pressures

- Mining: Ferrous, Copper-Nickel
- Agriculture: Ag Commodity prices = ag land value up 24% per year
- Road Expansion: Safety and Commerce

Potential Policy Adjustments

- Wetland Banking = better mitigation
- Federal delegation to State/Local for routine matters
- Turning temporary buffers (CRP) into permanent (RIM)



Governor's Executive Order 12-04

Agriculture:
Ag land value up
24% per year

Changing Hydrology on the Landscape?



2010 Aerial Photo
Chippewa County

0 800 1,600 3,200 Feet

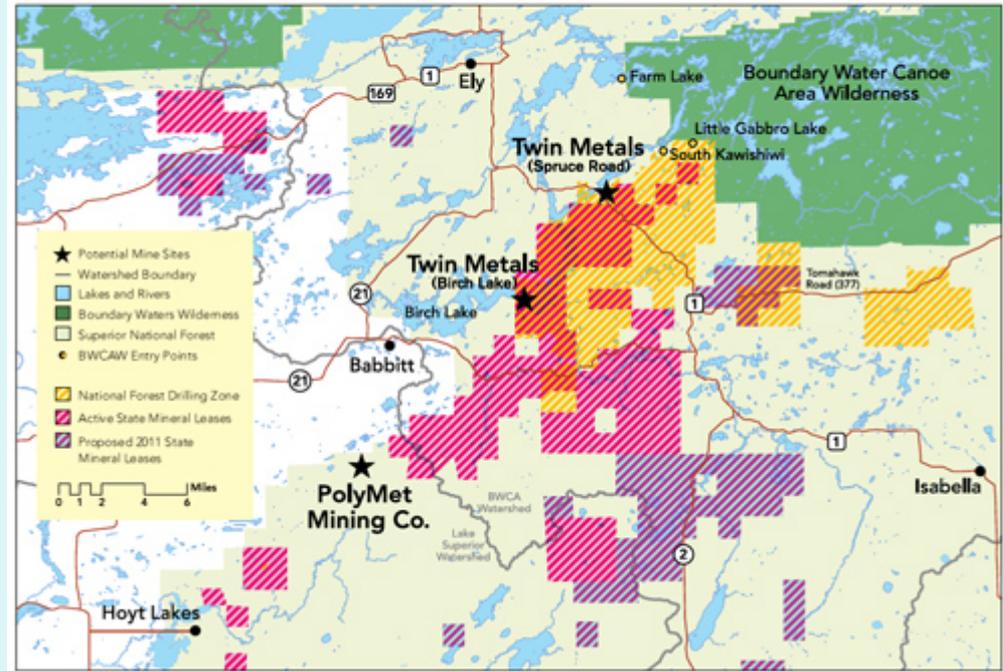
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Mining:

- Copper-Nickel near
- Ferrous expanding
- Frac Sand boom

Sulfide Mining Activity in Northeastern Minnesota

Using best information available 10.1.2011



Restoration and Protection

Restoration

Re-Invest in Minnesota (RIM) - *1986*

Protection

Wetland Conservation Act (WCA) - *1991*



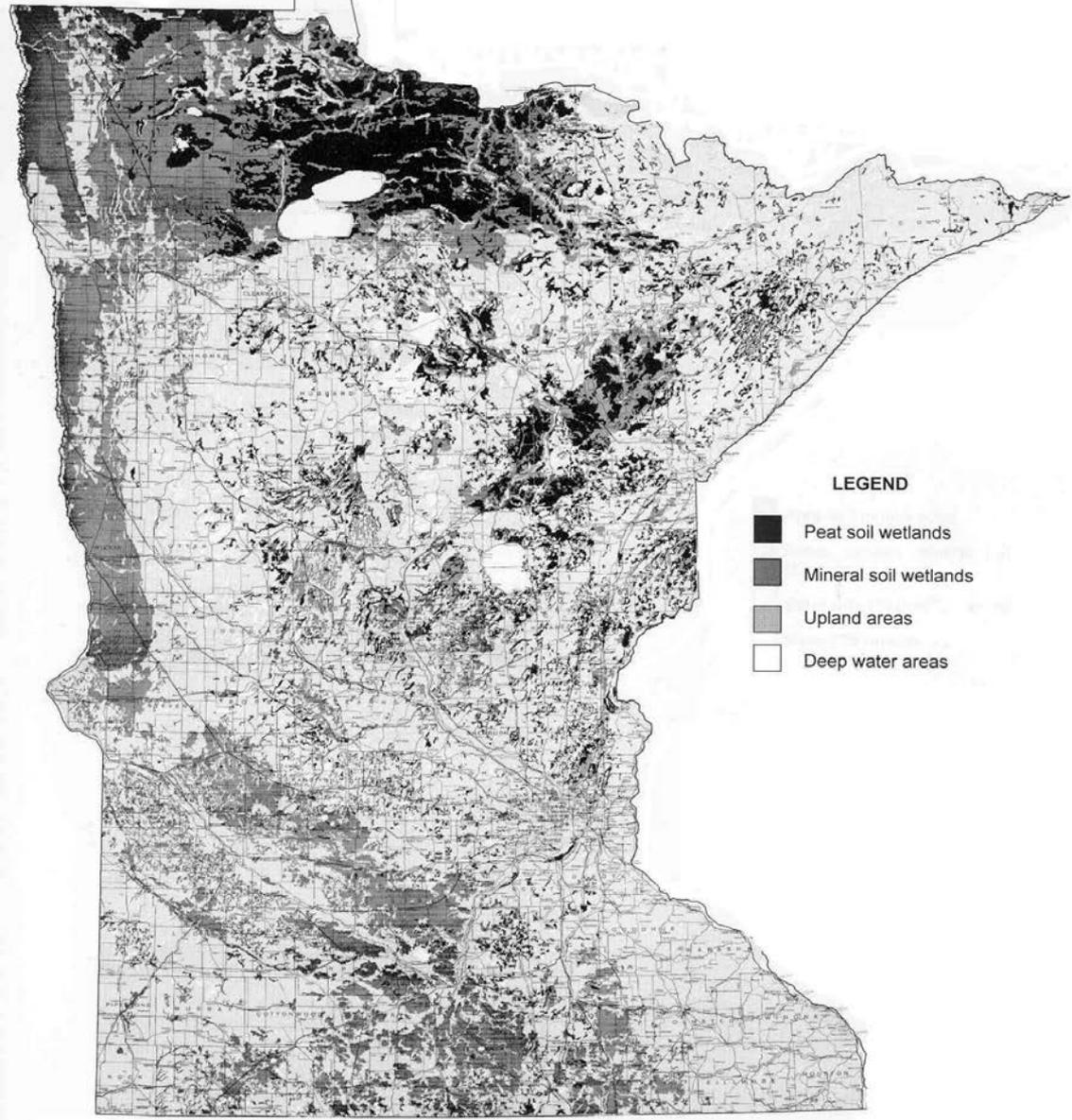
Local Government Implementation with State oversight/assistance *Board of Water and Soil Resources (BWSR)*

- Soil and Water Conservation Districts – landowner contact
- Counties, Cities – land use plans and zoning authority
- State Technical Evaluation/Engineering
- State Funding
- State easement
- State/local enforcement
- Alignment with Federal Programs
 - Corps of Engineers (Section 404 of Clean Water Act)
 - USDA ‘Swampbuster’ (Federal Farm Bill)



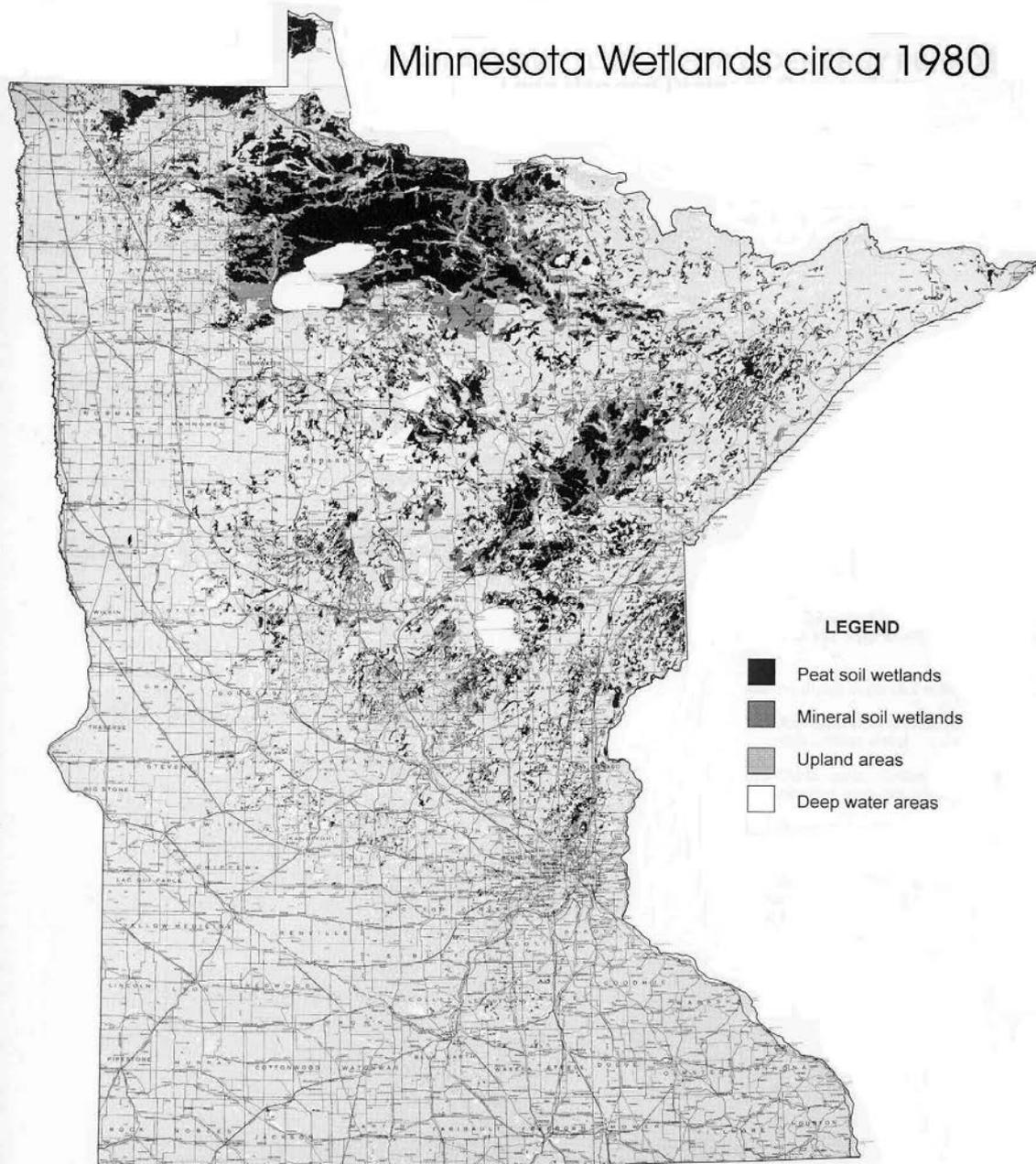


Estimate of Wetlands circa 1860's



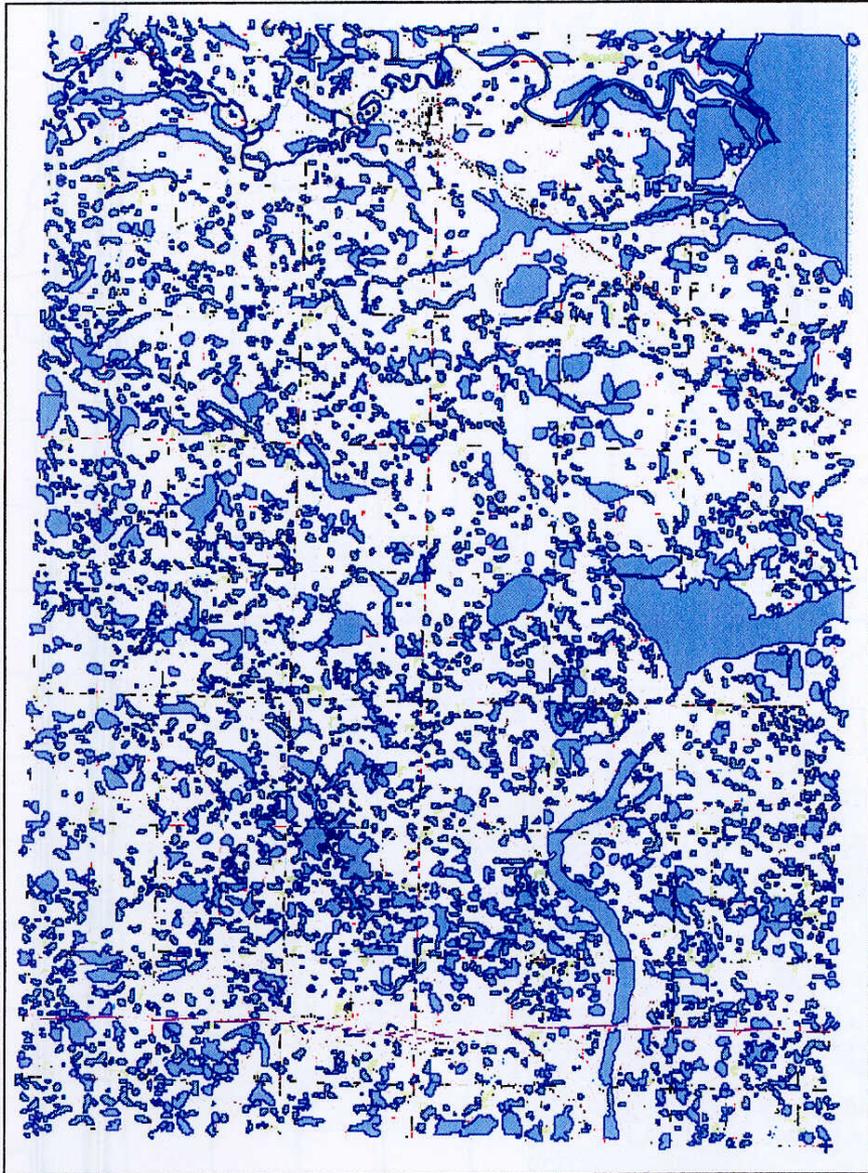
Source: Anderson & Craig, 1984

Minnesota Wetlands circa 1980

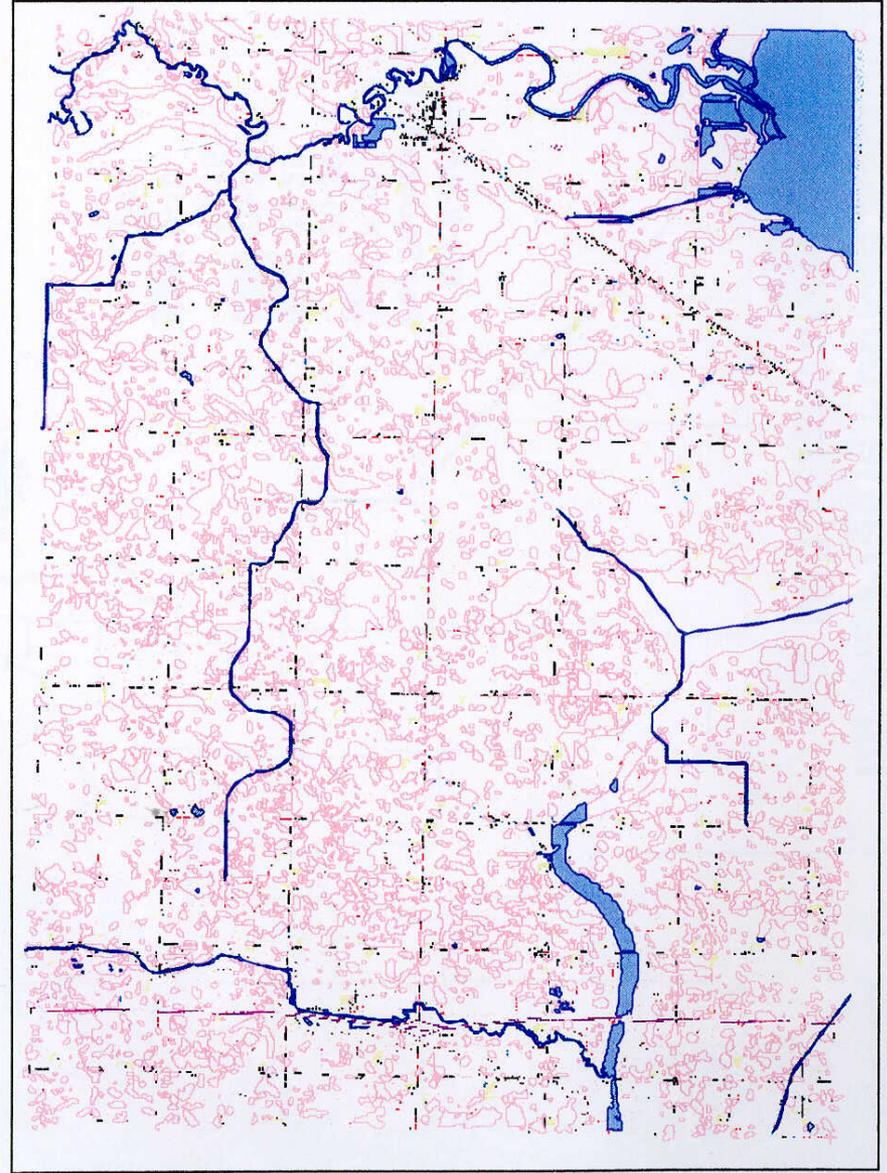


Source: Anderson & Craig, 1984

150 Years of Wetland Drainage in Minnesota



Circa 1844



Circa 1994

50 mi² of Jackson County

Source: USFWS/HAPET

Wetlands of Minnesota



Mississippi River Headwaters, Itasca State Park

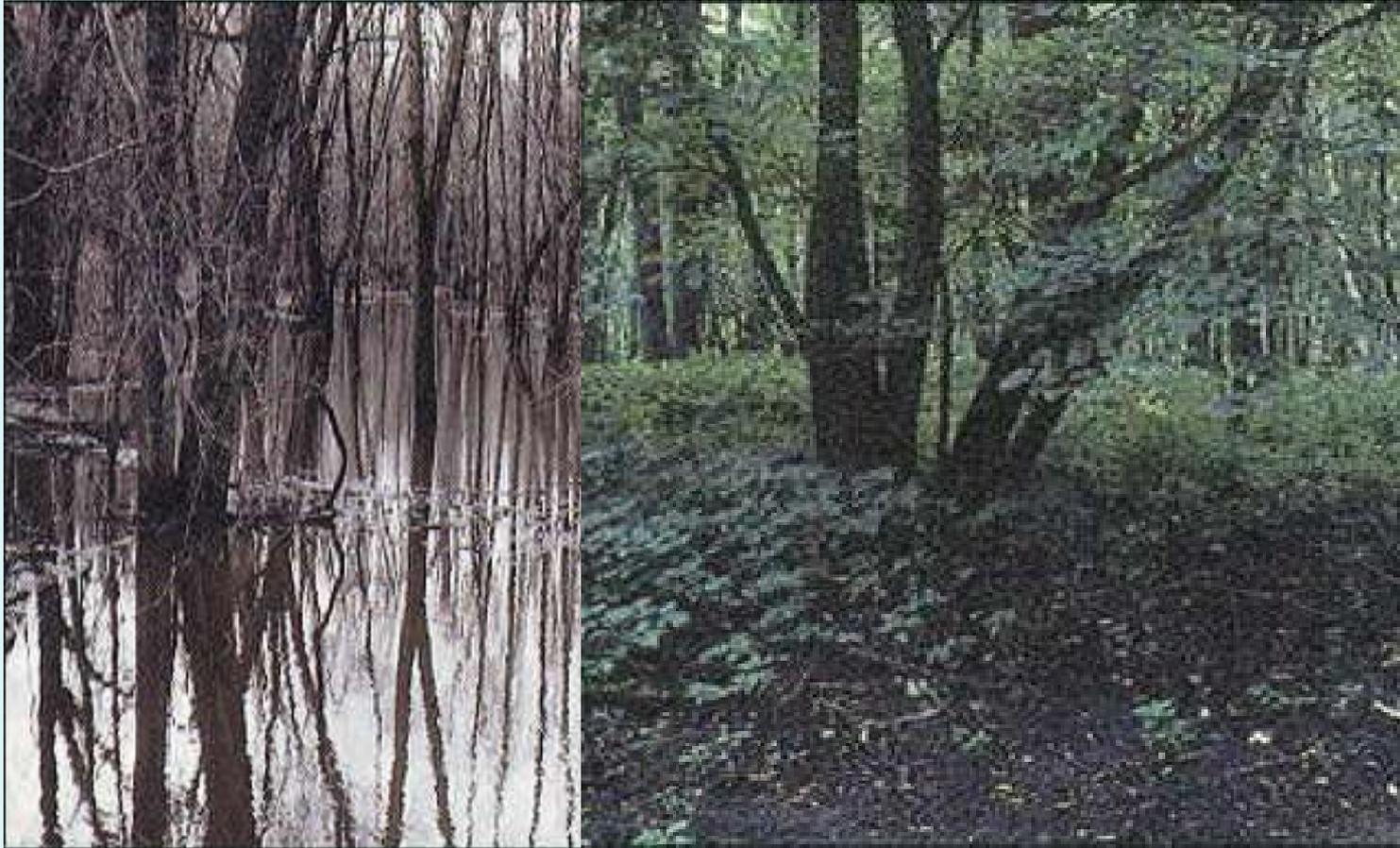


Type 1 -Seasonally Flooded Basins





Type 1 - Floodplain Forest



Type 2 - Wet Meadow



Type 2 - Sedge Meadow



Type 3 -Shallow Marsh



Type 4 - Deep Marsh



Type 5 - Shallow Open Water



11. 8. 2001

Type 6 - Shrub Carr



Type 7 - Hardwood Swamp





Type 8 - Bog

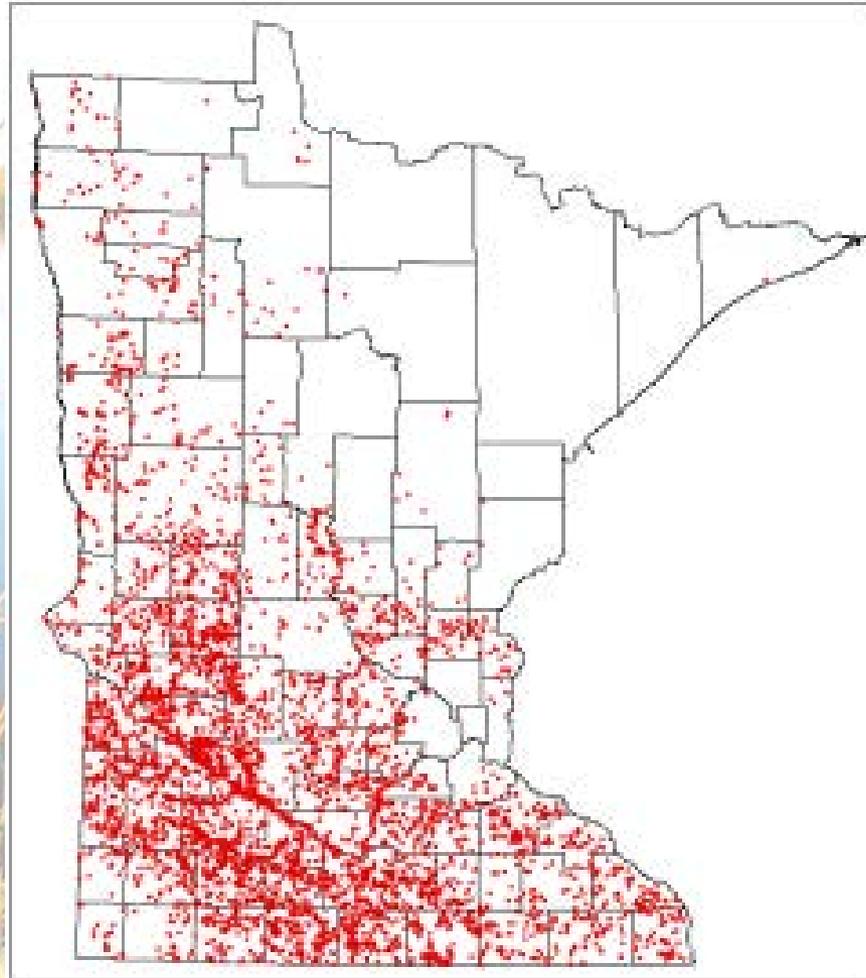




Minn. Stat. 103F.505 **Reinvest in Minnesota Resources Law.**

It is state policy to encourage the restoration of wetlands and riparian lands and promote the retirement of marginal, highly erodible land, particularly land adjacent to public waters, drainage systems, wetlands, and locally designated priority waters.

Reinvest in Minnesota (RIM)



5,500 easements over 218,000 acres



Reinvest in Minnesota (RIM)

Wetlands Reserve Program (WRP)

Partnership

- ✓ *Annual sign-ups.*
- ✓ *\$1.6 federal leveraged for every \$1 state.*
- ✓ *Minnesota received almost 20% of the nation's WRP funds in 2008-10.*

The premier private lands wetland restoration program in the nation

RIM-WRP Partnership



before.....



NRCS
BWSR
SWCDs

before.....



Ducks Unlimited

after!



MN Waterfowl Association

after!



Landowners!



RIM-WRP Partnership



BEFORE

AFTER





2008 Constitutional Amendment
(Article 11 – Section 15): three-eighths of one percent sales tax for 25 years to supplement clean water, habitat, parks and trails and arts and culture projects.

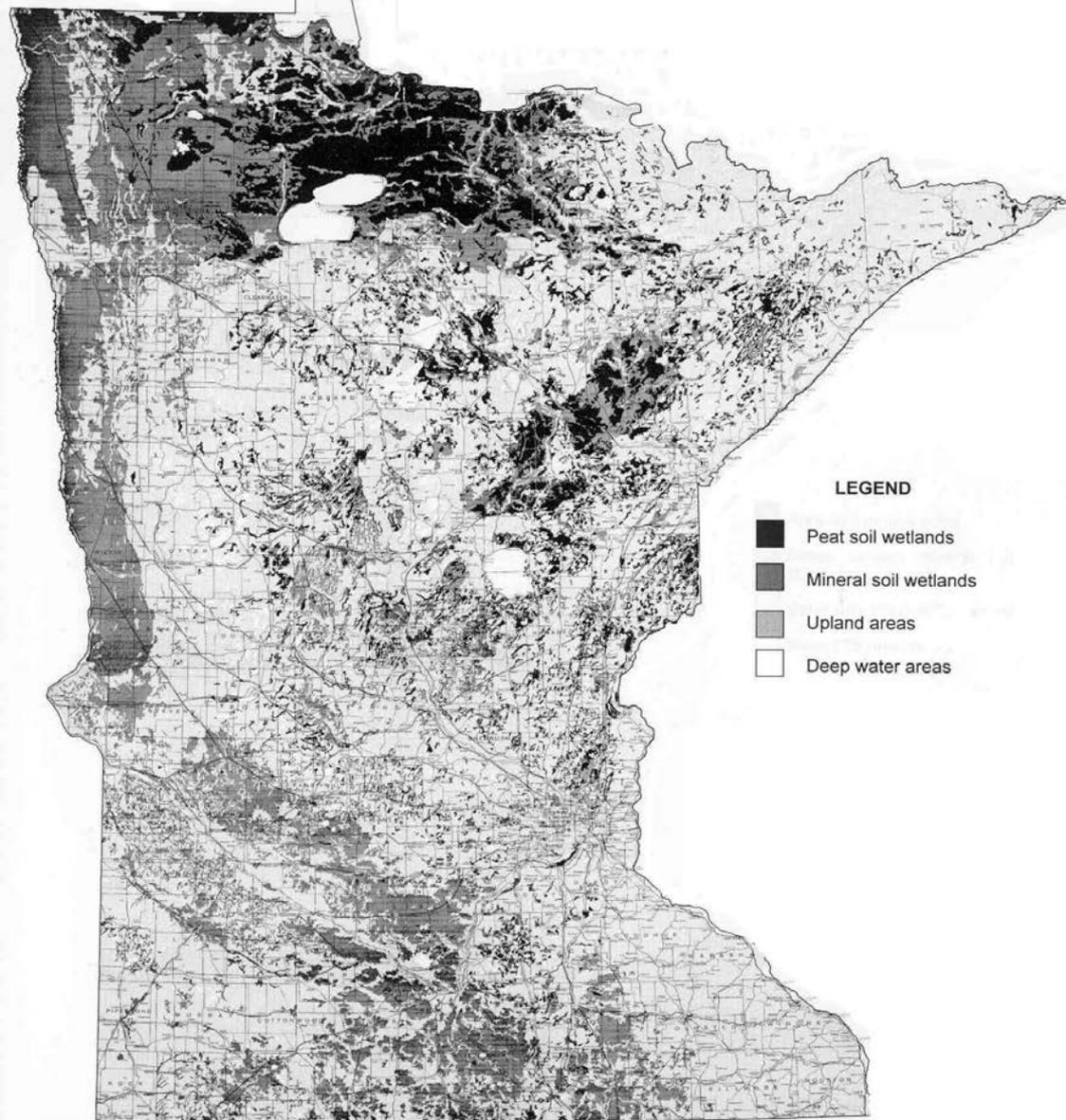


Minnesota Wetland Conservation Act ...
The legislature (1991) finds that it is in the
public interest to:

- Achieve no net loss in the *quantity, quality and biological diversity* of Minnesota's existing wetlands;
- Increase the quantity, quality and biological diversity of Minnesota's wetlands;
- Avoid direct or indirect impacts from activities that destroy or diminish the quantity, quality and biological diversity of wetlands; and
- Replace wetland values where avoidance is not feasible and prudent

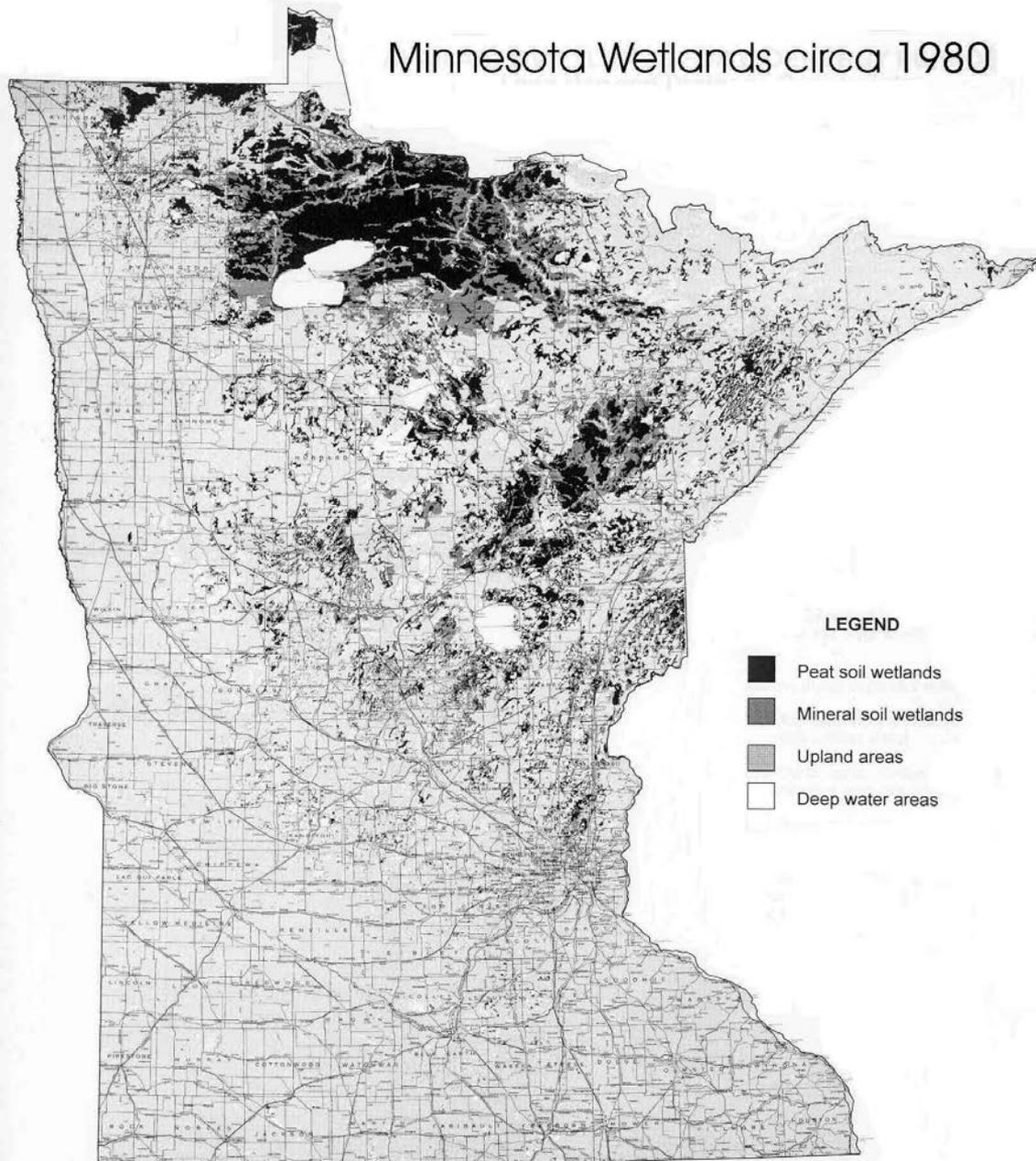


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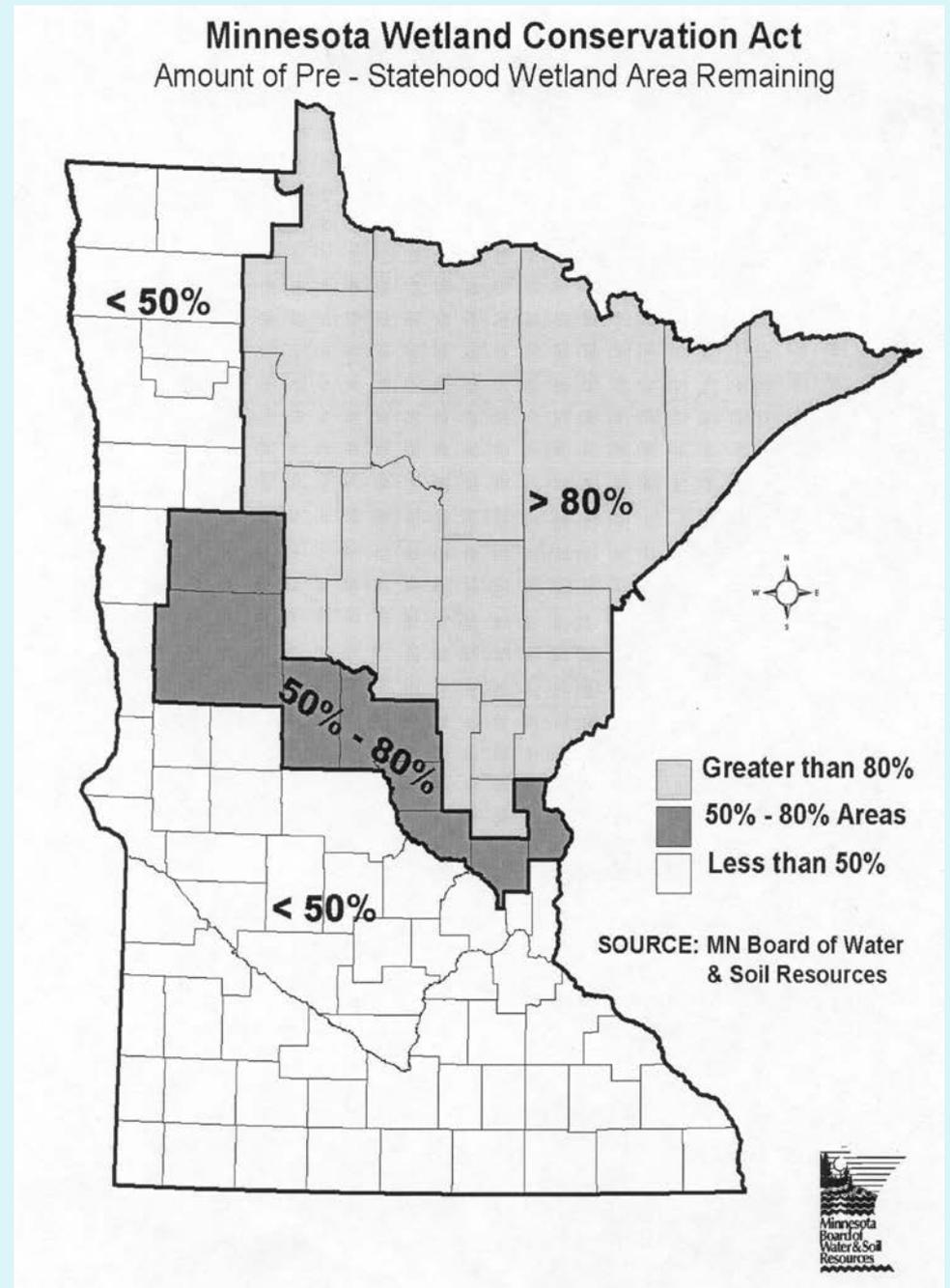
Source: Anderson & Craig, 1984

Minnesota Wetlands circa 1980



Source: Anderson & Craig, 1984

Wetland Conservation Act- Laws and rules note regional differences





Minn. Stat. 103A.202 **WETLAND POLICY.**

The legislature finds that it is in the public interest to preserve the wetlands of the state to conserve surface waters, maintain and improve water quality, preserve wildlife habitat, reduce runoff, provide for floodwater retention, reduce stream sedimentation, contribute to improved subsurface moisture, enhance the natural beauty of the landscape, and promote comprehensive and total water management planning.



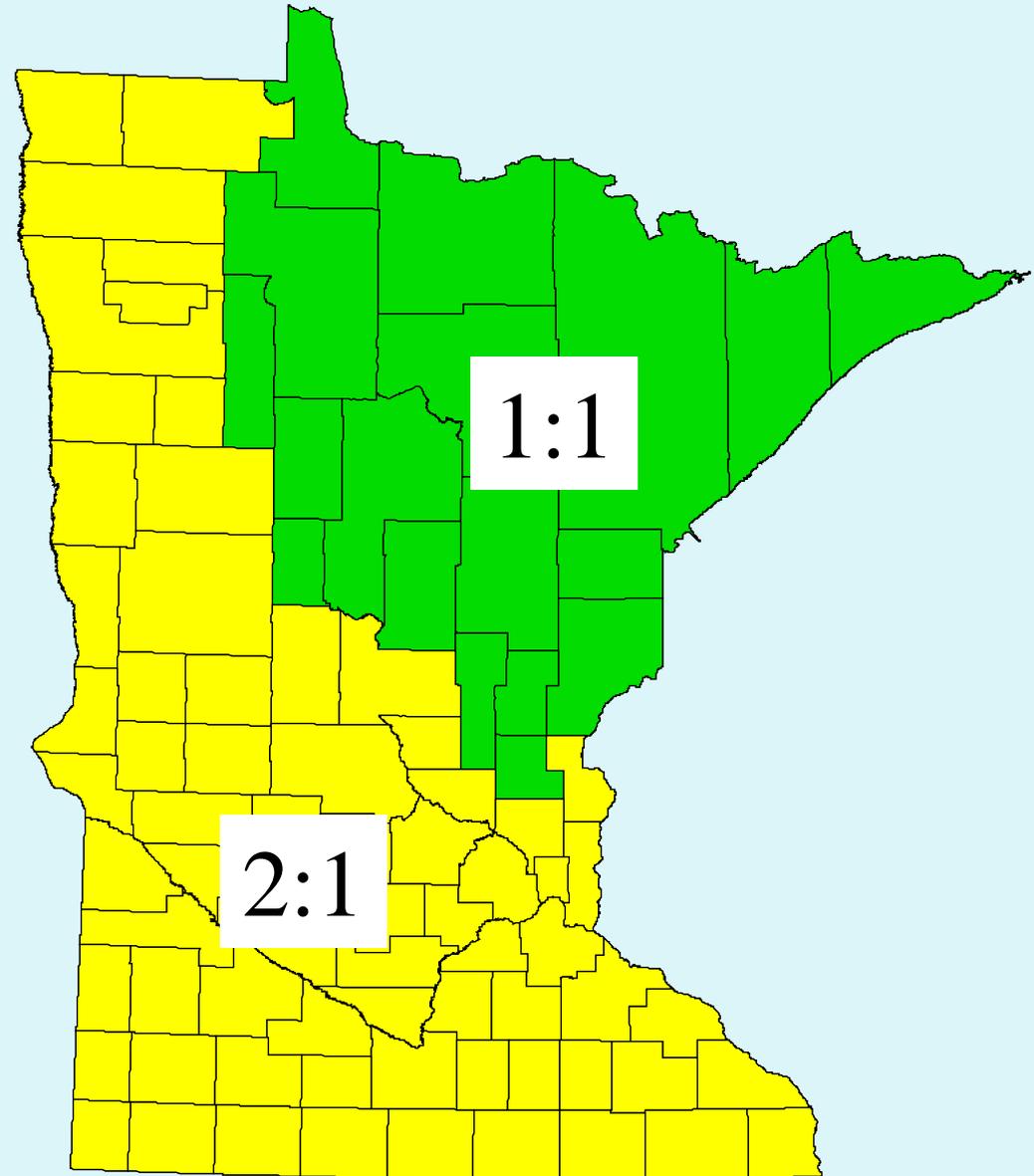
WCA - Sequencing

- **Avoid** direct or indirect impacts
- **Minimize** the impact
- **Rectify** the impact
- **Reduce** or eliminate the impact over time
- **Compensate** for the impact by replacement

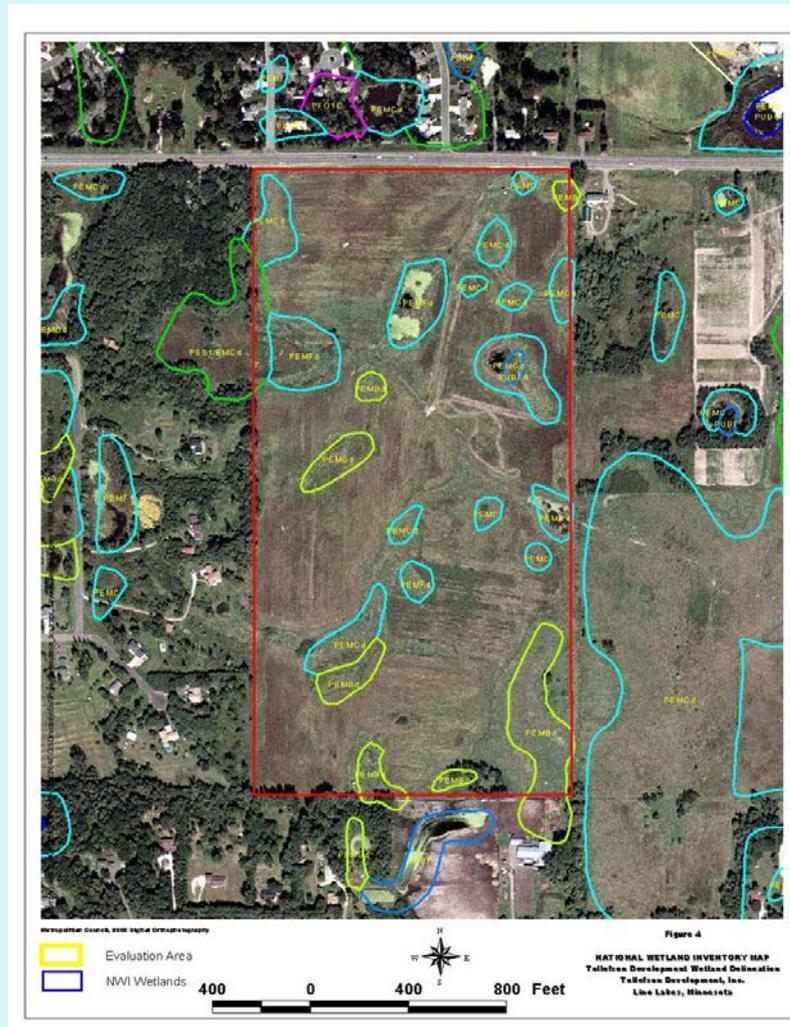
Minn. Stat. 103G.202 **WETLAND REPLACEMENT**

Wetlands must not be drained or filled, wholly or partially, unless replaced by restoring or creating wetland areas of at least equal public value under a replacement plan.

Wetland Replacement Ratios



National Wetlands Inventory Digital Map on aerial photo



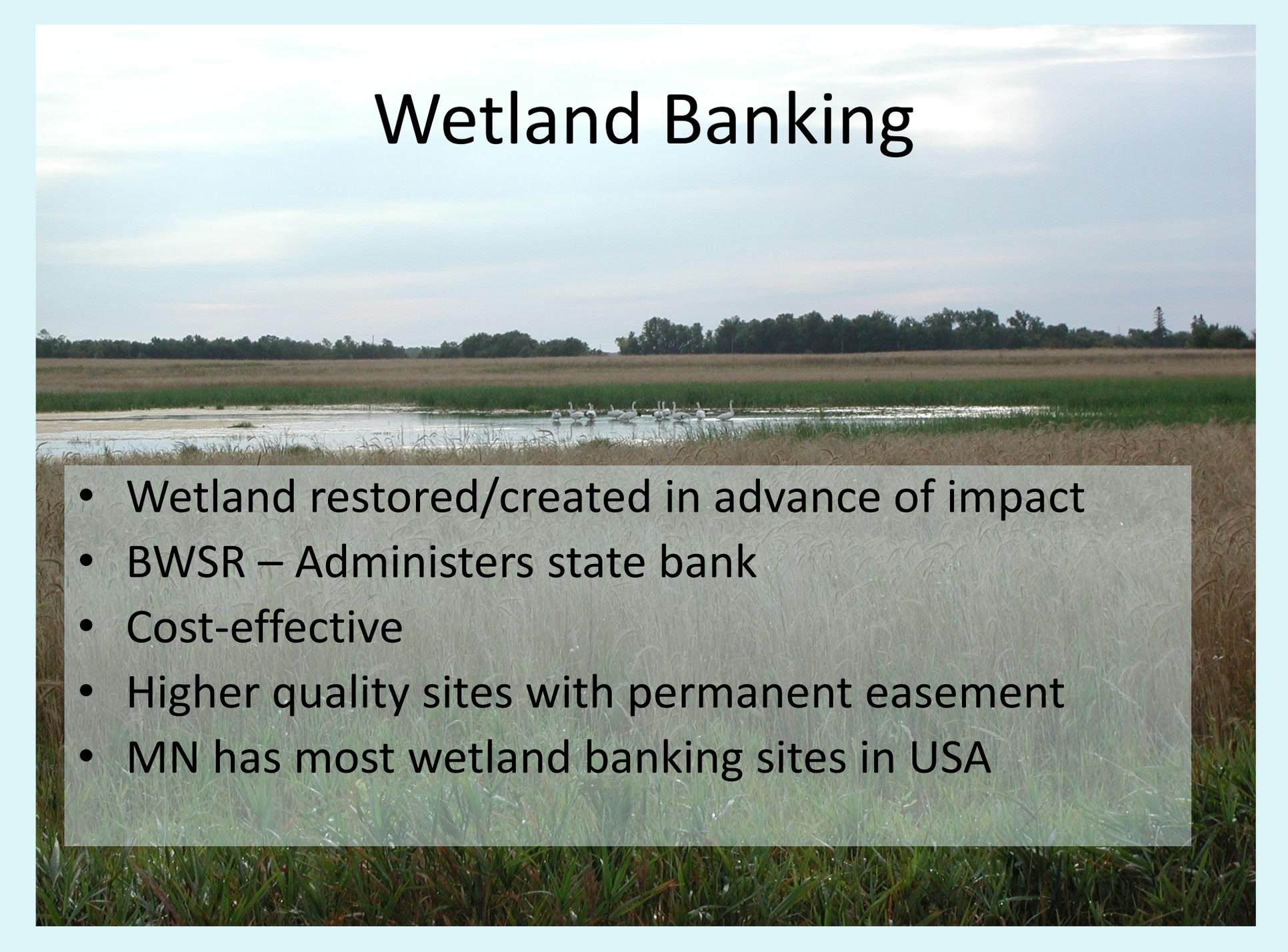
Field Review

Technical Evaluation Panel (TEP)

- Local Government Unit
- BWSR (State)
- SWCD
- (Federal – USCOE, USDA-NRCS)



Wetland Banking



- Wetland restored/created in advance of impact
- BWSR – Administers state bank
- Cost-effective
- Higher quality sites with permanent easement
- MN has most wetland banking sites in USA

Issues: Declines in Wetland Quality - Sedimentation



Issues: Declines in Wetland Quality

- Nutrients



Issues: Mississippi River/Lake Pepin Sedimentation Impairment



Dakota Habitat Alliance

Dakota County Soil and Water Conservation District
4100 220th St. W., Suite 102, Farmington, MN 55124
651-480-7777 or www.dakotaswcd.org



The Dakota County Soil and Water Conservation District (SWCD) organized the Dakota Habitat Alliance (DHA) to bring together local fish and wildlife organizations and others responsible for managing natural resources or water quality. The goal of the DHA is to cooperatively advocate, establish, and maintain wildlife habitat and natural resources. The SWCD works to facilitate communication among the members, prioritize local projects, and provide education and outreach activities.



DHA accomplishments include restoring a 210-acre prairie adjacent to the South Branch Vermillion River in Castle Rock Township (above left and lower left), maintaining existing wildlife habitat structures (below right), purchasing equipment such as tree planters or native prairie seed drills (above right), and supporting a 5th grade outdoor education event. The DHA actively seeks opportunities to leverage funds for improving fish and wildlife habitat while furthering local water quality goals.



Members:

- Dakota Ringnecks Chapter - Pheasants Forever
- Mississippi Longtails Chapter - Pheasants Forever
- Dakota Great Swamp Chapter - Minnesota Waterfowl Association
- Southern Dakota County Sportsmen's Club
- Twin Cities Chapter Trout Unlimited
- Spiral Spurs Chapter National Wild Turkey Federation
- Dakota County
- Vermillion River Watershed Joint Powers Organization
- Minnesota Department of Natural Resources
- University of Minnesota
- Cannon River Watershed Partnership
- Friends of the Mississippi River
- Minnesota Department of Transportation



Information and Contacts

Thank you!

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- rep.rick.hansen@house.mn

