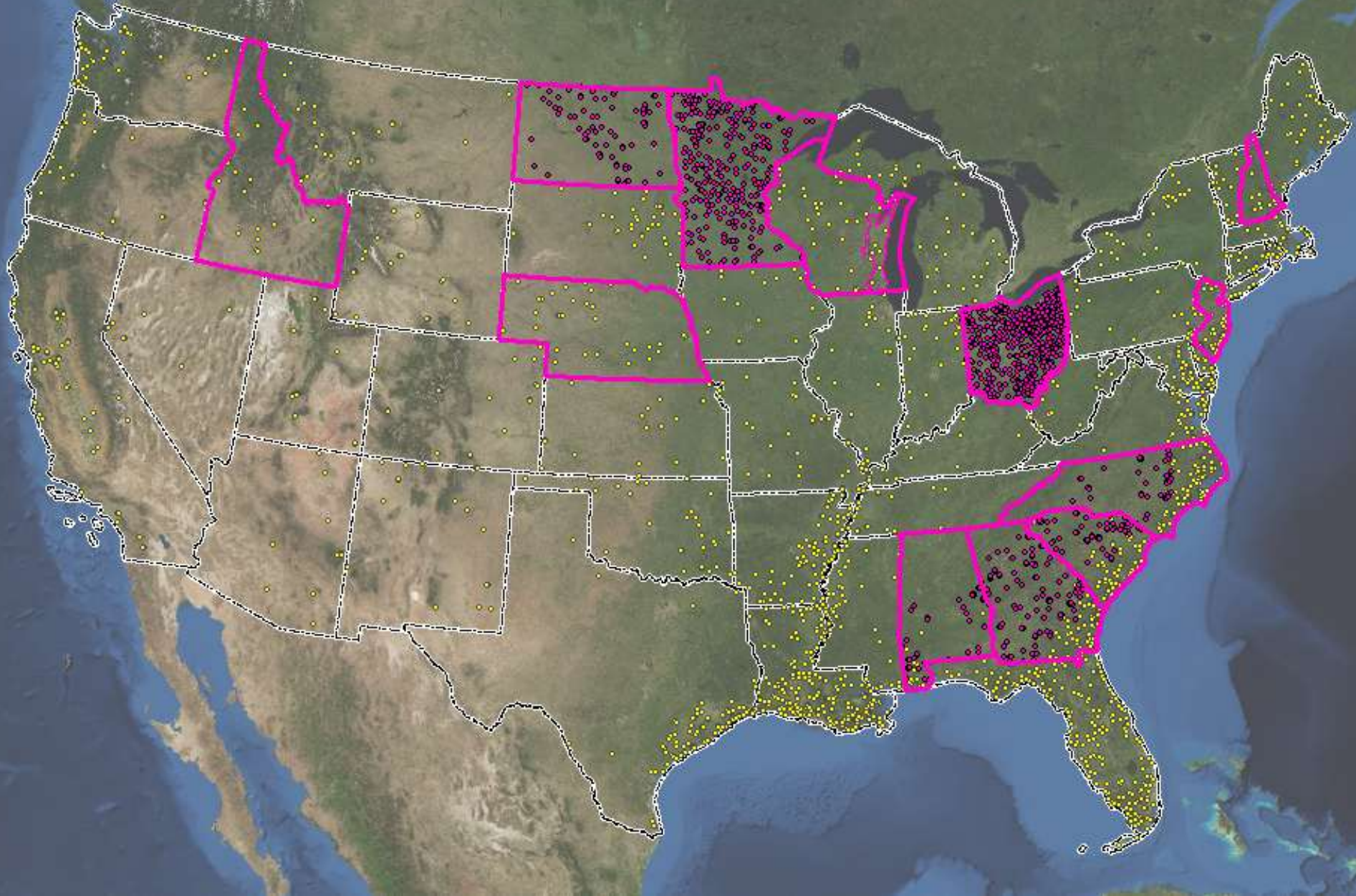# NWCA State and Regional Intensification Studies - Minnesota

NWMAWG Meeting

Dec 7, 2010

NWCA and Intensification Sites

STATE PANELISTS

- Tom Bernthal, WI DNR
- Mike Bourdaghs, MN Pollution Control Agency
- Brian Gara, Ohio EPA
- Ted LaGrange, NE Game & Parks Commission
- Rick Savage, NC DENR
- Kathleen Strakosch Walz, NJ DEP

PANEL TOPICS

- OBJECTIVES, DESIGN & INDICATORS
- SURVEY LOGISTICS
- USE OF DATA & REPORTING
- STUDY CHALLENGES

➢ GOALS & OBJECTIVES OF STUDY

➢ DESIGN

- – Target Population

- – Geographic Scope

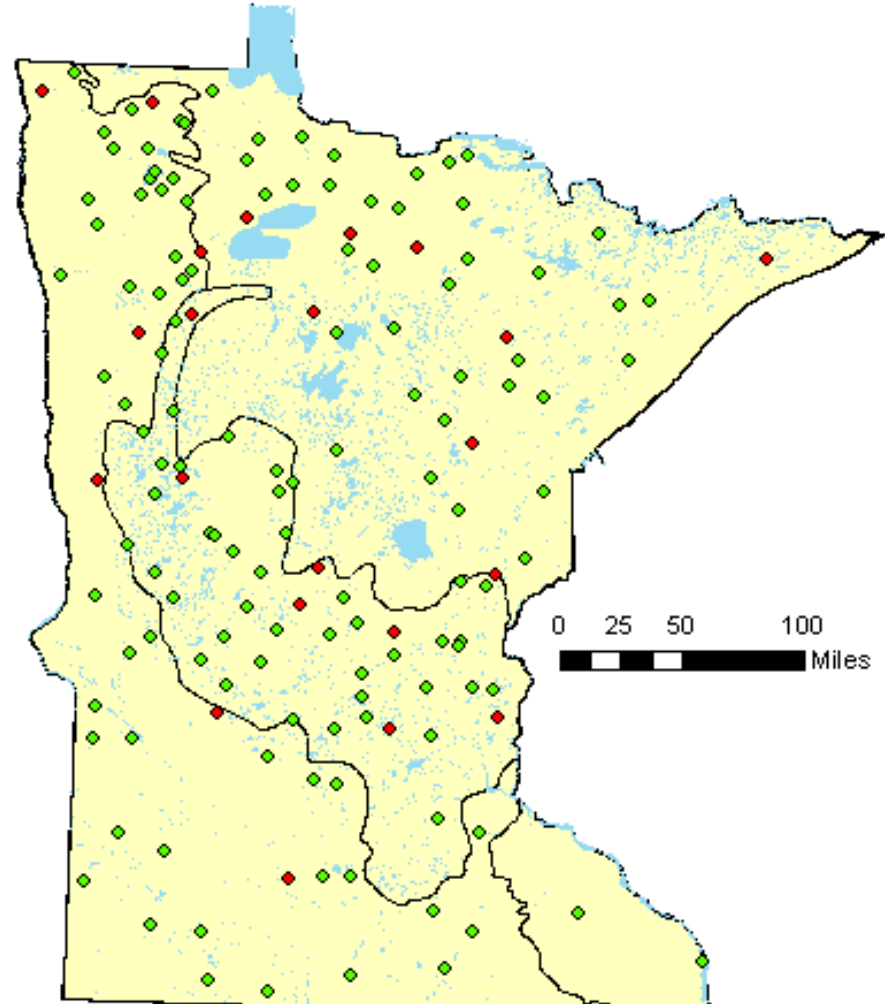- – Sample Frame

- – Number of Sites

➢ INDICATORS

MINNESOTA

➢ Goals and Objectives

   – Status & Trends of wetland condition statewide & by major ecoregion

MINNESOTA

➢ Target population = NWCA
➢ Statewide in scope
➢ Sample frame: MN Status & Trends
  – Similar design to USFWS Status & Trends
  – 1 mi^2 plots
  – 3 year rotation (started 2006)
  – Wetland types (+/-) equivalent to Cowardin classes
➢ 150 Points Statewide
  – 50 points/major ecoregion
  – First 22 = National Points (red)
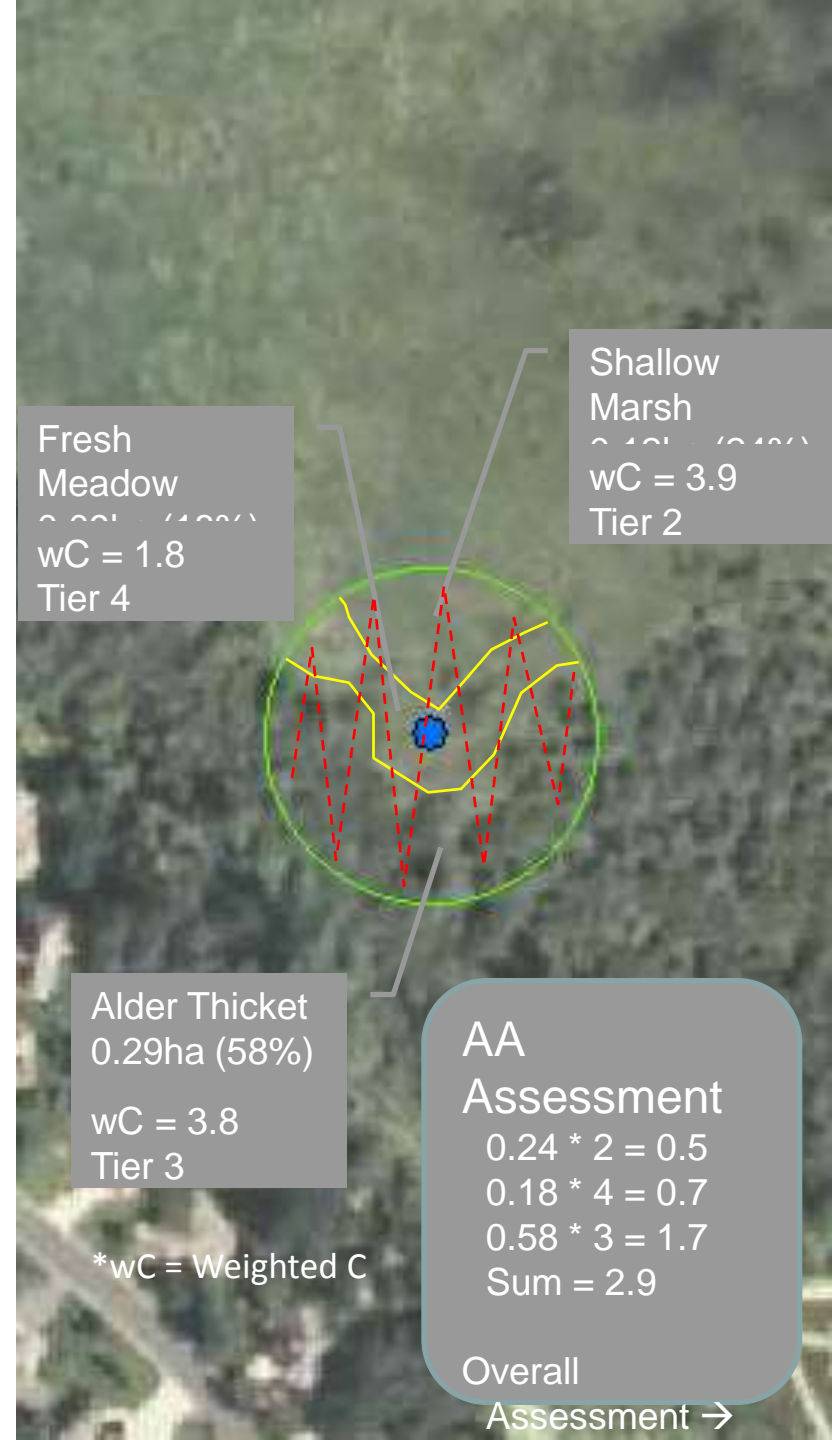 – Next 128 = State Points (green)

MN Wetland Condition Assessment Sampling

Floristic Quality Assessment (FQA)

- Plant communities are basic assessment unit (Eggers & Reed)
- 4 tier calibrated assessment categories/community
- Anticipated completion: spring 2011

Basic Steps...

- Map Communities in AA
- Perform Composite Meander
  - Meander covers all communities in AA but data is recorded separately for each community
  - Record species
  - Estimate cover for each sp./community
- Compute Metrics & Make Community Assessments
- We can then make...
  - Composite AA Assessment
  - Aggregate/Extrapolate Class/Community Extent

Fresh Meadow
0.09ha (18%)
wC = 1.8
Tier 4

Shallow Marsh
0.12ha (24%)
wC = 3.9
Tier 2

Alder Thicket
0.29ha (58%)

wC = 3.8
Tier 3

*wC = Weighted C

AA Assessment
0.24 * 2 = 0.5
0.18 * 4 = 0.7
0.58 * 3 = 1.7
Sum = 2.9

Overall Assessment →

SURVEY LOGISTICS

- ➢ FUNDING
- ➢ PERSONNEL
- ➢ PARTNERS
- ➢ TIME-FRAME

MN LOGISTICS

Funding
- Primary staff = In kind (MN Clean Water Legacy)
- Temporary staff/supplies/travel = 106 Grant

Field Crews
- 3 crews
  o NWCA & 2 state crews
  o 2 permanent & 6 temp staff

Rough 2011 Timeline
- Desktop recon : January-May
- NWCA training : Mid May
- NWCA recon : Late May – Early June
- MNWCA training : Early June
- Sampling : Mid June - August

	NWCA	MN #1	MN #2
RS II	X		
RS II		X	
PCS Temp			X
PC Tech	X		
SW #1	X		
SW #2	X		
SW #3		X	
SW #4			X

USE OF DATA & REPORTING

➢ HOW WILL YOU USE DATA?
   – Assess status and trends (quality, quantity)
   – Integrate into other watershed assessments
   – Inform program management
➢ HOW WILL YOU REPORT DATA?
   – Scientific / public reports
   – Online

CHALLENGES

➤ STUDY CHALLENGES

➤ UNRESOLVED ISSUES

➤ HELP!

MN CHALLENGES

Size
- MN: ~84,000 sq mi / 400 mi N:S / 350 mi E:W
- Water Resource
  - 10.6 million wetland acres
  - 92,000 stream miles
  - 12,000 lakes (> 10 ac/6' deep)
- Remote areas

Red Lake Peatland