

EPA's National Wetland Condition Assessment (2011):

New England's Role in the NWCA

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Presentation Overview

- National Water Resource Survey Background
- National Wetland Condition Assessment (NWCA)
- New England's Role in the NWCA

Recent Critiques of Water Monitoring Programs

- General Accounting Office (2000)
- National Research Council (2001)
- National Academy of Public Administration (2002)
- Heinz Center Report (2002)
- Draft Report on the Environment (2003)
- Environmental Integrity Project, Flying Blind (2004)

Bottom Line

- States and Tribes do not have data needed to make decisions
 - Set water quality standards
 - Develop watershed plans and TMDLs
 - Evaluate effectiveness of programs
- Data inadequate for statistically-valid characterization of water quality condition in U.S.

National Water Resource Survey Schedule

	FY07	FY08	FY09	FY10	FY11	FY12	FY13
Lakes	Field	Lab, data	Report	Research	Design	Field	Lab, data
Rivers	Design	Field	Lab, data	Report	Research	Design	Field
Streams	Research	Design	Field	Lab, data	Report	Research	Design
Coastal	Report	Research	Design	Field	Lab, data	Report	Research
Wetlands	Research	Research	Research	Design	Field	Lab, data	Report

Purpose of the Surveys

- Provide statistically-valid, scientifically defensible reports to the public on the condition of U.S. waters
- Answer key questions:
 - What is the extent of waters that support healthy ecosystems?
 - What is the extent of resources affected by key water quality problems/stressors?
 - Is water quality improving?
 - Are we spending pollution control dollars wisely?

National Wetland Condition Assessment



National Wetland Condition Assessment (2011)

Activities

2007-2009	2010	2011	2012	2013
Research	Design	Field	Lab/Data	Report
Scientific issues Policy issues Supplemental data analysis Methods refinement	Target population Indicators Field/ Lab practices Quality assurance plan	Training Site reconnaissance Sample collection Field quality assurance	Lab analysis Lab quality assurance Data entry Data quality assurance	Data analysis Presentations Peer review Final report

NWCA Background

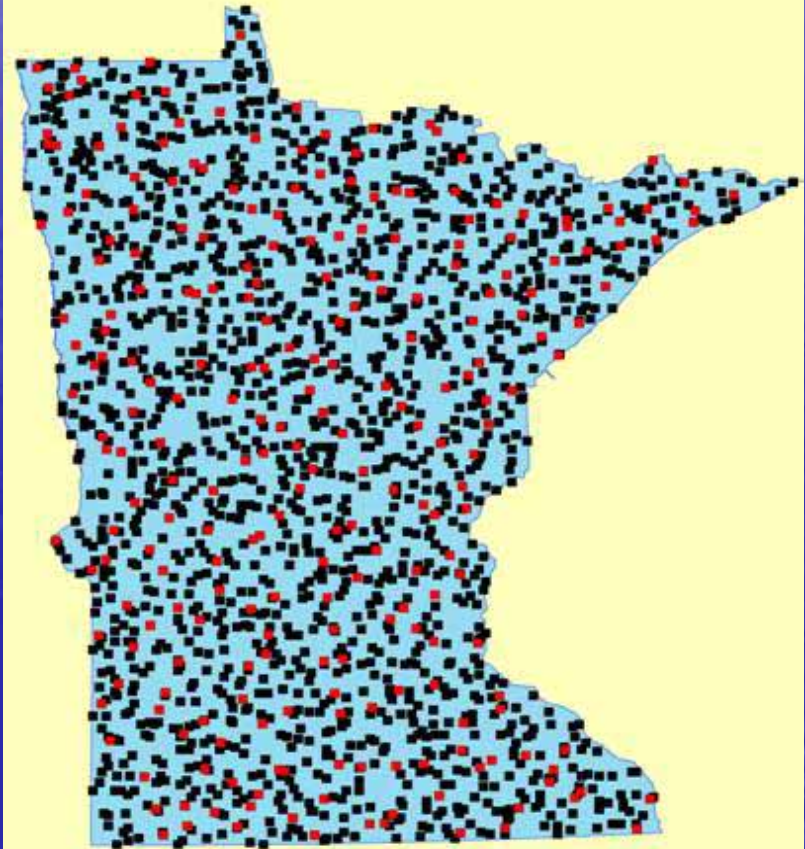
- 1,000 sample points nationally
- Provide States and Tribes \$8.4M in CWA 106 grants to participate
 - \$8,000 per site in lower 48
 - \$400K set aside for AK, HI, territories
- Money is allocated to states and tribes based on number of sampling sites within their jurisdiction



Leveraging NWCA to Implement State and Tribal Intensification Studies

- Additional state and tribal investment
- Intensify sampling throughout state or tribal jurisdiction
- Smaller-scale assessment that informs state-level management and policy needs
- Capture "rare" wetlands of interest not included in the national draw (e.g. vernal pools)

MN Statewide Probabilistic Wetland Quality Survey



NWCA Planning Process

- Planning has started
- Transparent, inclusive process with states and tribes
- Indicators/methods informed by state and tribal experience



Benefits of National Wetland Condition Assessment Information

- First-ever assessment of baseline wetland condition
 - Eventually, track trends in wetland condition
 - Greater national focus on wetland quality
- Compliment FWS Status and Trends Report





Collaboration with FWS



- FWS Status and Trends reports document trends in wetlands acreage
- NWCA will evaluate the ambient condition of the nation's wetlands resources.
- EPA will collaborate with FWS in designing NWCA
 - ensure the national condition assessment most effectively complements the Service's Wetlands Status and Trends Study.
- Together these reports will offer the most comprehensive ecological evaluation

Indicators of Wetland Condition

3 – Level Technical Approach

Level 1 - Landscape Assessment:

Use GIS and remote sensing to gain a **landscape view of watershed and wetland condition**. Typical indicators include wetland coverage (NWI), land use, and land cover.

Level 2 – Rapid Wetland Assessment:

Evaluate the **general condition of individual wetlands using relatively simple field indicators**. Assessment is often based on the characterization of stressors known to limit wetland function. (e.g. road crossings, tile drainage, ditching).

Level 3 – Intensive Site Assessment

Produce quantitative data with known certainty of wetland condition within an assessment area. Used to refine rapid wetland assessment methods and diagnose the causes of wetland degradation. Typically accomplished using indices of biological integrity or HGM function

Reference Condition



Photo by Arthur Popp

Take Home Messages

- Much to achieve in limited timeframe
- Coordination & Cooperation
- Nothing's Perfect
- Wetlands Recognition
- Wetlands Condition



For More Information

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Personal Favorite Take Home Message

“Ask not what the NWCA can
do for you, but what you
can do for the NWCA”!