# Lessons Learned from the 2011 National Wetlands Condition Assessment

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#### **Overview**

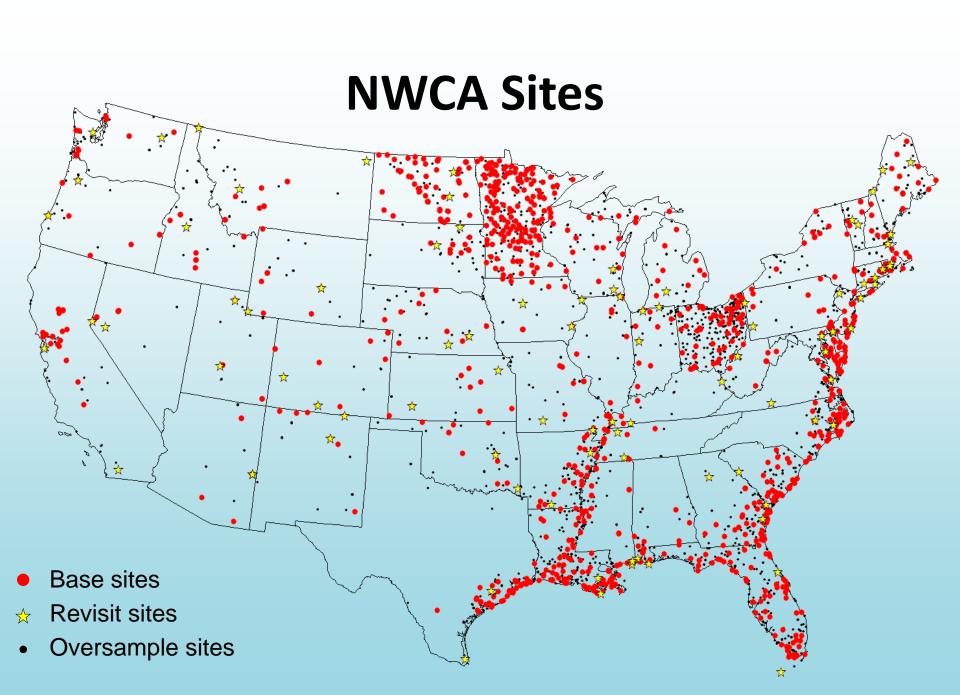
- Description of National Wetland Condition Assessment (NWCA) and Great Lakes Environmental Center's (GLEC) role in the NWCA
- GLEC's challenges in assisting EPA with the completion of a "successful" NWCA:
  - Equipment procurement
  - Field methods training
  - Field sampling and Information Management (IM).
- Lessons learned from the NWCA and previous National Aquatic Resource Surveys (NARS)

#### What is the NWCA?

The NWCA is a statistical survey of the condition of our Nation's wetlands. The NWCA is based on Fish and Wildlife Service (FWS) Status and Trends Classes and is designed to:

- Produce a report that describes the ecological condition of the Nation's wetlands;
- Assist states and tribes in the implementation of wetland monitoring and assessment programs that will guide policy development and aid project decision-making; and
- Advance the science of wetlands monitoring and assessment to support management needs.





#### **GLEC's Role in NWCA**

- Contractor to EPA tasked with the following:
  - Support the development of the QAPP, FOM, LOM, Site Evaluation Guidelines and Quick Reference Guide;
  - Develop and prepare field methods workshop training materials;
  - Conduct field methods workshops;
  - Provide field methods trainers, field crews and auditors;
  - Facilitate the procurement and distribution of sampling supplies for approximately 60 field crews responsible for sampling 1,260 sites;
  - Answer sampling and sample processing questions throughout index period;
  - Replace lost equipment, as necessary;
  - Initiate site and sample tracking; and
  - Other duties as assigned.
  - GLEC had the same role for four previous NARS assessments

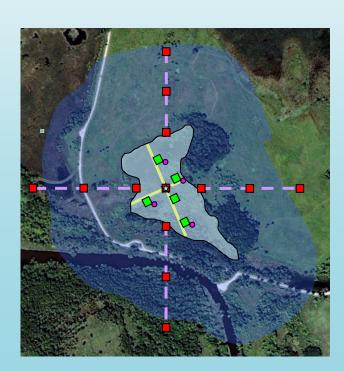
### **Challenges: Equipment Procurement**

- Necessity of equipment versus "it would be nice to have it" and budget considerations
- Number of participating states, tribes and contractors
- State enhance/intensification studies
- Delivery of equipment to field crews



### **Challenges: Field Methods Training**

- Field methods feasibility
  - Time budget (i.e. Can a field crew accomplish all sampling in one day?)
  - Processing samples in the field
  - Geographical considerations and the index period
- Regional field methods workshops
  - Number of participants
  - Location relative to appropriate training wetland



### Challenges: Field Sampling and IM

- Crew sampling
  - Number of crews and sites
  - Sampling schedule
  - Enhancement studies
  - Obtaining access/permission to site
- Shipment of samples to analytical laboratories
  - Remote sites and holding times
  - Alaska
- Tracking of sites and samples





## Lessons Learned: Equipment Procurement

- Finalize the FOM as early as possible so that equipment needs are defined
- Test purchased materials
  - applicability to field methods
  - durability throughout the index period
- Contact vendors ASAP to ensure adequate manufacture time
- Always have additional materials available for field crews





# Lessons Learned: Field Methods Training

- A "proof-of-concept" study is invaluable
  - Solidify intricacies in FOM methods
  - Must be completed before the train-the-trainer workshop to ensure that methods are accurate and complete
  - Reduces "last minute" changes that complicate the field effort
- Adaptive training is imperative, but the same message must be relayed across the country
- Require a "practice" day during the field methods workshop
- Avoid the addition of new parameters once field crews have been trained
- Stick to the protocols and ask questions

# Lessons Learned: Field Sampling and IM

- Develop a meaningful site access strategy and implement it for all sites (i.e. site reconnaissance)
- Crews (particularly contractor) should seek local knowledge when possible
  - State resource agencies
  - Property owners
- Importance of Field Logistics Coordinator



### Field Logistics Coordinator

#### Important duties during NWCA

- Immediately review submitted status and tracking forms for potential errors and omissions
- Weekly cross check between the status and sample portions of the tracking database to identify samples that may be being held longer than the designated holding period
- An open line of communication was established between the FLC and the analytical laboratories to determine if the samples are arriving in good condition.
- FLC followed up with field crew to provide corrections and help avoid similar issues with future samples
- Contact teams directly with corrections or questions. Providing immediate feedback to teams should result in a continually diminishing amount of errors.



