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.
“Never send four 22 year olds into the field alone.”
Questions?