

# Monitoring Issues Status Report

ASIWPCA Monitoring Standards  
and Assessment Task Force

March 2, 2009



# Two Issues for Discussion

- States' efforts to improve national assessments of water quality conditions.
- Development of NEST indicators



# States' efforts to improve national assessments of water quality conditions.

- Follow up from discussions with OMB in October.
- Effort led by Andy Fisk of Maine.
- Collaborative effort including Connecticut, Florida, Minnesota, New Jersey, Ohio, Utah, Virginia, and ORSANCO.

# Key Points of Presentation

- National Surveys do not provide actionable information to states.
- National Surveys as designed do not provide an accurate picture.
- There is a critical need to build states' monitoring capacities; the national surveys do not help in this.

# Key Points of Presentation

- There are better ways to collect information on national water quality conditions.
- It is possible to build states' capacities and assess national conditions.
- The states are prepared to work with EPA to accomplish these objectives.

# Key Sections of Presentations

- Background
- ASIWPCA Position
- Concerns with NARS protocols
- Concerns with NARS Results
- Proposed alternative approach – concentrate on assessment method.
- Recommendations

# RECOMMENDATIONS

- Redesign National Monitoring Survey to build state capacity in monitoring and assessment
- Create assessment tools that build a valid national assessment of water quality
- Better incorporate state monitoring strategies in assessment of U.S. waters
- Eliminate mandate for state-scale probabilistic surveys

# Presentations

- February 20: EPA OWOW staff
- February 26: OMB staff

# Summary/ Status

- Ongoing discussions with EPA
- Sympathetic reception from OMB; indications that discussions will continue
- Mandate for states to adopt probabilistic networks has been stayed.

# Next Steps

- Continue discussions with EPA; focus on issues raised in these discussion.
- Await further discussions with OMB.

# NEST

National Environmental Status  
and Trends



# Some Background

- Several National Academy of Sciences studies
  - *Nature's Numbers: Expanding the National Economic Accounts to Include the Environment* (1999)
  - *Ecological Indicators for the Nation* (2000)
- Heinz Center reports in 2002 and 2008
  - 6 sectors of the environment; representatives from govt, industry, NGOs, academia
  - More than 100 indicators National Environmental Status and Trends
- 2004 GAO Report: *Environmental Indicators: Better Coordination Is Needed to Develop Environmental Indicator Sets that Inform Decisions*
- USGS issued Circular 1223, *Concepts for National Assessment of Water Availability and Use*
- EPA issued draft *Report on the Environment*

# CEQ, OSTP, OMB Policy Memo

*The pilot project is designed to test the vision for the NEST Indicators. It will demonstrate the collaborative interagency processes that will be used to select and implement indicators and will improve the consistency and interoperability of data. In addition, a national forum will be convened to identify the topics and questions that should be addressed by the indicators of water availability. (17 Jun 2008)*

# Characteristics of NEST Indicators

*NEST Indicators are envisioned to be a set of high quality, science-based statistical measures of selected conditions of our environment and natural resources. They address topics that are sufficiently important and cross-cutting to warrant the acquisition of data using measurement methods and statistical designs that are consistent across the entire country and repeated regularly over time.*

# Who is Involved?

- Participating departments/agencies
  - Dept of Agriculture (FS & NRCS)
  - Dept of Commerce (NOAA)
  - Dept of the Interior
  - EPA
  - Ex-Officio
    - CEQ & Office of Federal Environmental Executive
    - OSTP
    - OMB
- National Forum to engage stakeholders
  - State agencies and other interested Federal agencies
  - NGOs
  - The science community

# Why Have a National Forum?

- Hear the views of stakeholders
  - What are the most important questions where information is needed to make better policy?
  - Focus on water quantity and quality
  - Welcome information on other resources
- Identify potential non-Fed contributions
  - To the policy dialogues at multiple geo-spatial scales
  - To the data and data management needed for better dialogue
  - To the estimation and reporting processes to create indicators that will better inform policy dialogue

# 4 Key Products of NEST Project

- Desirable attributes of high-level environmental and natural resource indicators
- Set of core policy-related questions that guide indicator creation/selection for water availability
  - Frame broad, high-level policy questions & issues
  - Reflect enduring, recurring interests
- Initial set of indicators for water availability (5 to 7)
  - Results of an initial test of data interoperability and the ability to report on them
  - Recommended changes to existing programs at the participating agencies to improve reporting
- “After Action Review” of institutional collaboration and any recommended changes to improve institutional capacity

# NEST Timeline & Milestones

- Finish the pilot test by Oct/Nov 2009
  - Review current situation and ongoing projects/processes (Aug 08)
  - Initial description of indicator attributes and framework (Nov 08)
  - First National Forum (Feb 09) to identify key questions
  - Second National Forum (Jun 09) focus on water indicators
  - Final report on water availability indicator test (Sep 09)
  - Final recommendations (Oct 09)
  - “After Action Review” (Nov 09)
  
- “Keep the pedal to the metal throughout transition”

# ASSERTIONS

- ❖ Need information to manage well – to identify and quantify problems, to understand links to sources, to assess effect of controls
- ❖ Need consistent information across jurisdictions to manage common problems across places, states, watersheds (horizontal consistency)
- ❖ Need aggregated (“rolled up”) information to manage problems affecting broad areas and multiple jurisdictions, and to manage national programs (vertical consistency)


# ROAD MAP Recommendations

- ❖ Congress should formally establish a national system of indicators
  - Involve all parties in selection
  - Use to drive key monitoring actions
  - NOT all indicators / monitoring included
- ❖ Executive branch should move ahead in advance
- ❖ Congress and executive branch should provide greater funding, including transition funds
- ❖ States should participate as full partners


- ❖ Not everything needs to be consistent, rolled up
- ❖ If you plan for multiple uses and needs, the likelihood of getting a system to meet those needs goes up (and vice versa)
- ❖ (or) United we stand, divided we have only our own data....
- ❖ A larger system may not meet ALL needs, but the current one doesn't either.
- ❖ The demand for accountability and efficiency won't go away
- ❖ The scale of problems – especially as exacerbated by climate – will increase.

# Vision for NEST

Hands-on involvement by states, NGOs, business, etc. in federally-coordinated effort  
Work topically (waters, species, land cover, etc.)  
Address key needs and priorities (i.e., optimize over several objectives) as defined by key stakeholders  
Identify needed resources



## “STARTER SET”

- ❖ Nitrogen, phosphorus
  - ❖ Sediment
  - ❖ Contaminants
  - ❖ Flow regime
  - ❖ Linked to local information (land cover, etc)
  - ❖ Physical condition
  - ❖ Biological condition (inc. natives, non-natives)
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# Some State Concerns

- Use of Indicators
  - High level policy makers or wider audience?
- Incorporation of State data
  - Could represent additional burden on states
  - Exclusion of state data would result in inaccurate representation of conditions
- Limited opportunities for participation by non Federal agencies
  - One more Forum in June; final product in the fall.