



National Environmental Status and Trends (NEST) Indicator Project: **A Look Ahead**

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Outline of Today's Presentation

- Status report on NEST Project
- Highlight key products and milestones ahead
- Launch into review of NEST web site



What is NEST?

- Latest incarnation of ongoing national-level interest in having a national set of environmental indicators spanning the science-policy interface
 - Trace our lineage back to 1992 UNCED Conference through multiple national and international activities associated with sustainable development and sustainable natural resource indicators
 - 15-year thread of interest by OSTP, CEQ, and OMB in accurately and timely reporting on current environmental conditions and trends important to national and regional environmental policy makers
- NEST was launched in June 2008 to pilot test institutional relationships for developing environmental indicators, using water as the pilot
 - CEQ, OSTP, OMB represent Executive Office of the President
 - USDA (FS & NRCS), Interior (USGS), EPA (ORD & OWP), NOAA



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)*



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



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.

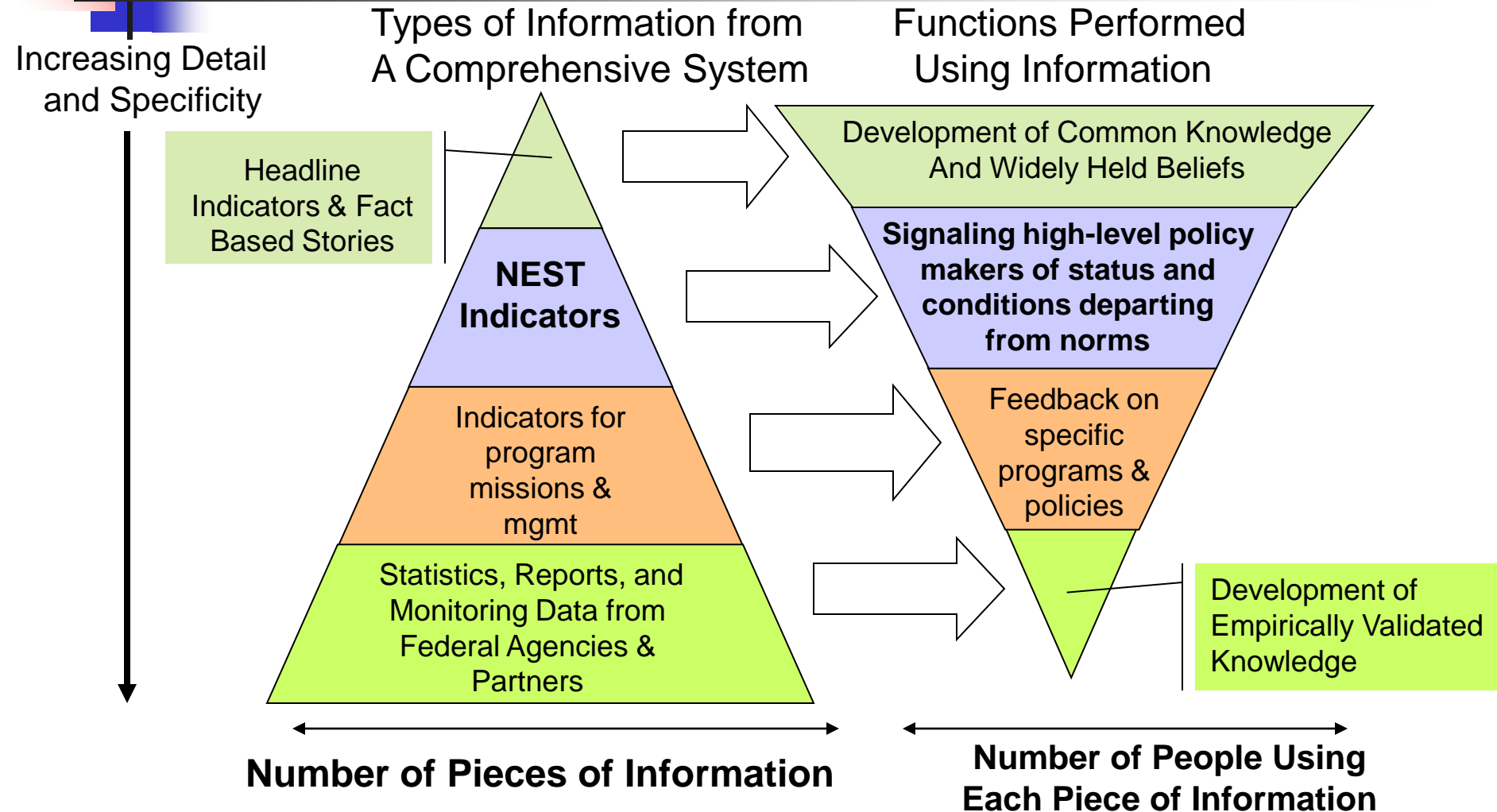
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| ☑ <i>High quality</i> | ☑ <i>Science based</i> |
| ☑ <i>Statistical measures</i> | ☑ <i>Consistent methods & statistical design</i> |
| ☑ <i>Selected conditions</i> | |
| ☑ <i>Important, cross-cutting topics</i> | ☑ <i>Regularly repeated</i> |



Desirable Attributes

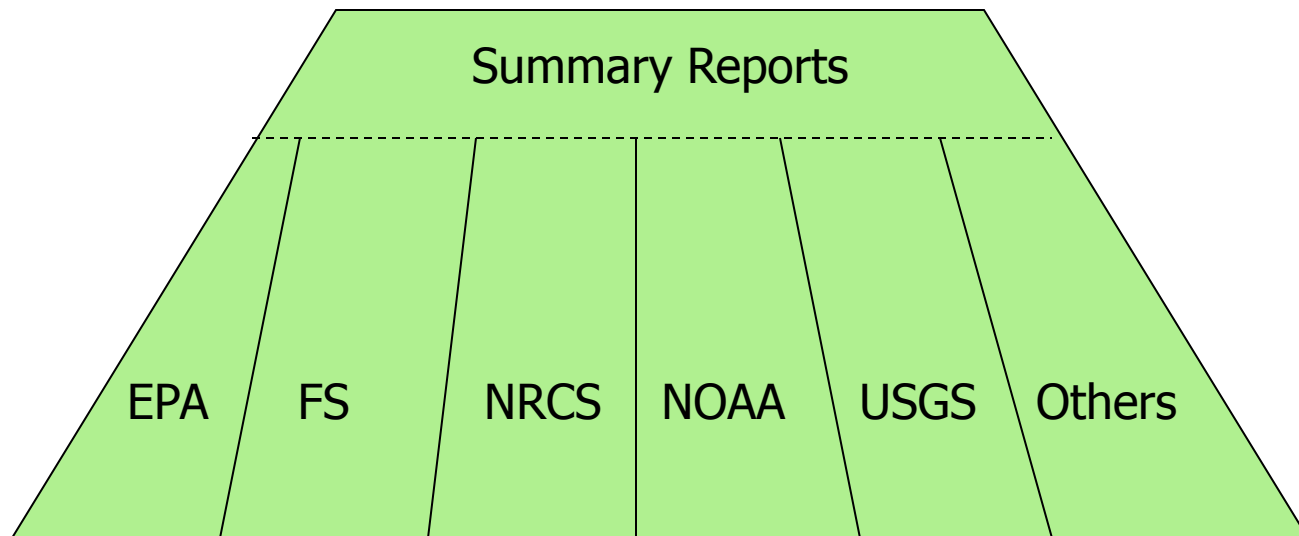
- Could be called “screening criteria” or “essential characteristics”
- Function is to help separate “suitable” indicators from “unsuitable” indicators
- Essential that they be useful across resource sectors
 - Helpful for the water pilot project, but not limiting for other resource sectors (e.g., air, forests, croplands)
- Emerging attributes, in addition to those specified in the CEQ/OSTP/OMB policy memo, include:
 - ***Policy-relevant***, not just by scientists for other scientists
 - ***Early-warning signals***, not an exhaustive, comprehensive list
 - ***National and high-level regional meaning***, scalable ↓ ↑
 - ***Leading indicators***, not lagging indicators

Types of Information and Functions

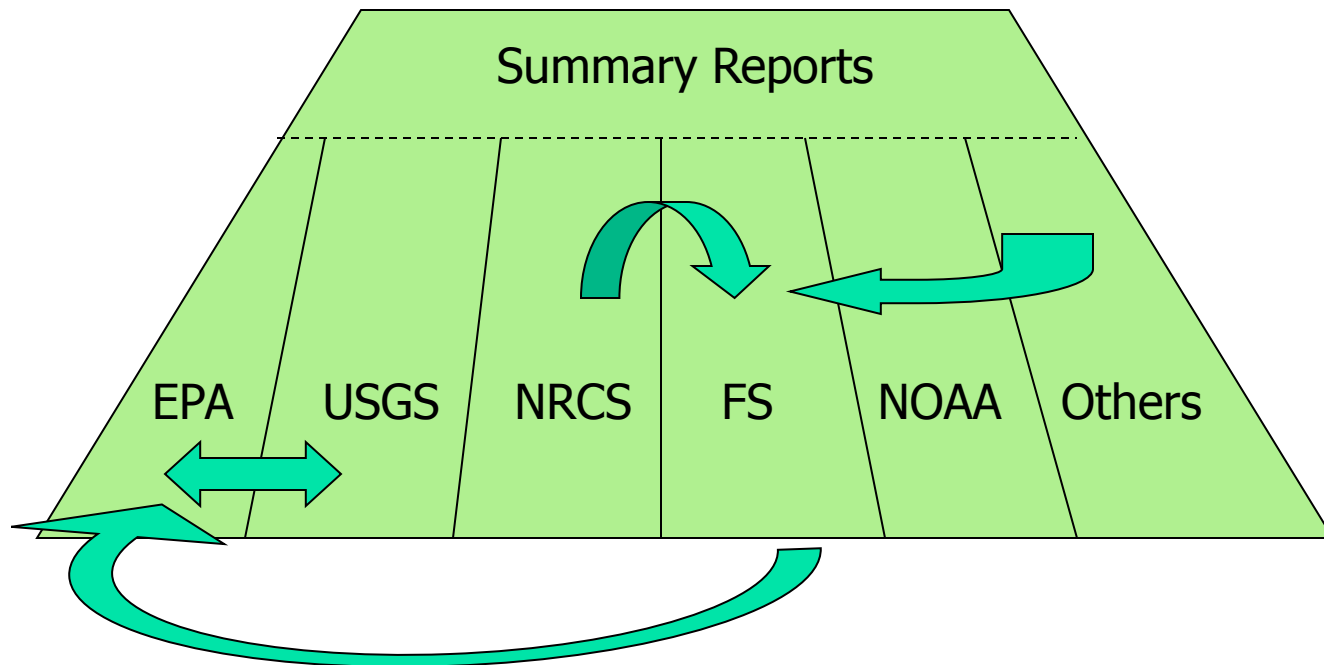




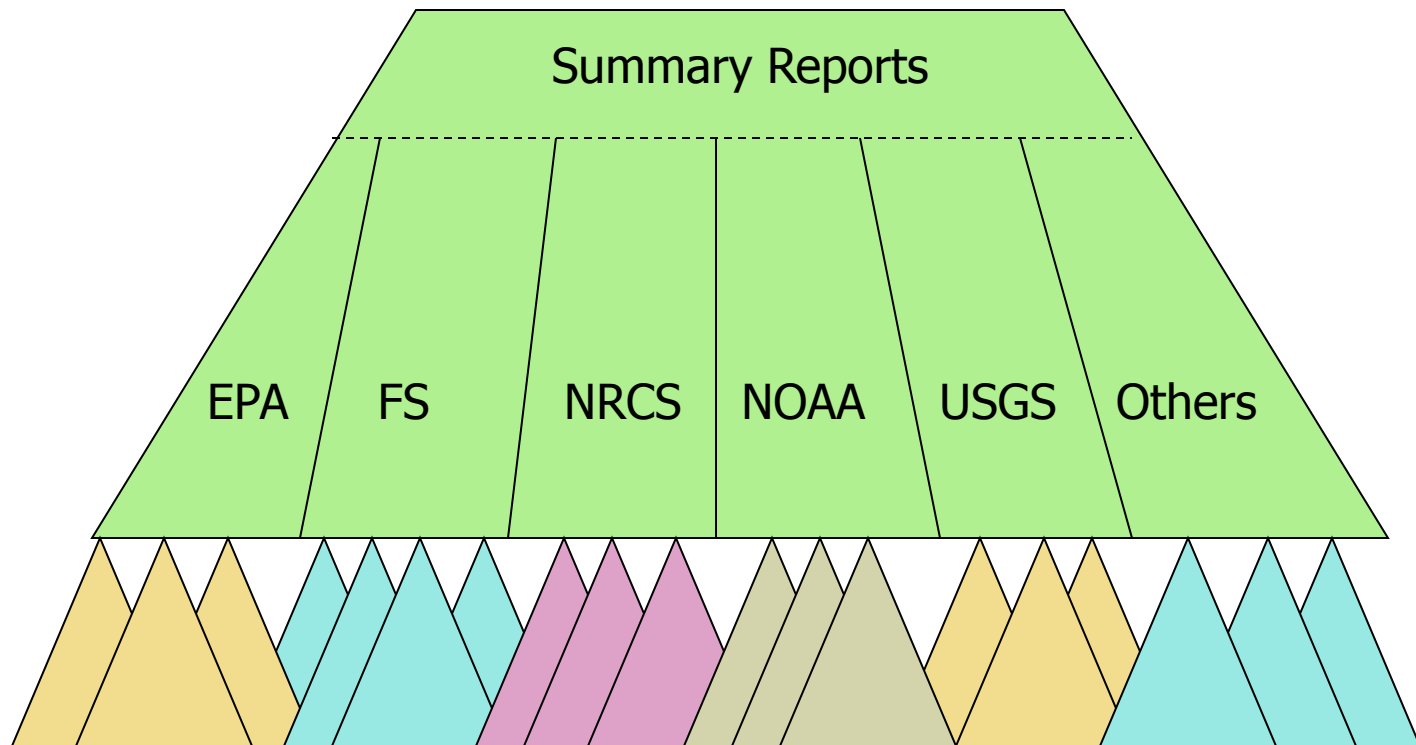
The Foundation is I&M Program Data



Data Exchange is Increasing Inter-operability Not Fully Achieved

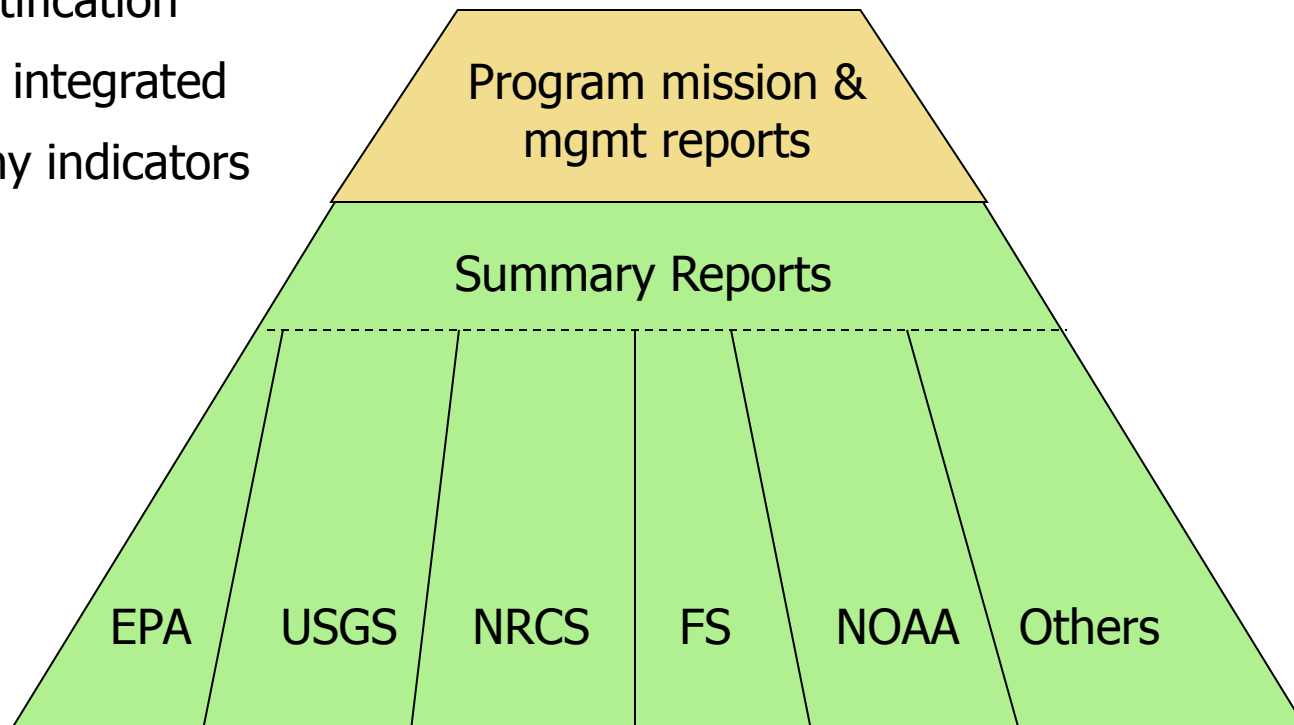


Sub-National I&M Activities & Programs Support the National Programs



Mission & Management Reports are Useful, But ...

- Oriented to program budget justification
- Not well integrated
- Too many indicators





Core Policy-relevant Questions

- NEST is deliberately as question-driven approach
 - Need help identifying & validating the questions
 - At State, Regional/sub-national, and National scales
 - National policy interest exists in State & Regional/sub-national issues
 - Questions of recurring interest to high-level policy makers
 - Seeing a time-series of data is important
 - Not “one offs”
- NEST EMT has refused to get into the scientific “weeds” at this point
 - Aim was to use so-called “indicator elements” to illustrate that key policy-relevant questions have multiple facets/dimensions
 - ***Are we including the right facets to provide information for a reasonably broad, cross-cutting, set of interests?***



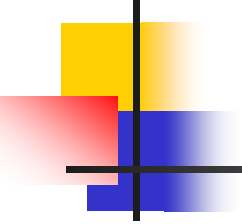
Initial Set of Indicators

- White House originally envisioned a “white paper”
- EMT envisions a “web site”
 - Maps, not tables or single numbers (e.g., not indices)
 - Ability to display regional variation is vital to White House
 - Periodically refreshed through “web harvesting” of data updates from linked sites
- Some concerns EMT wants to address
 - Federal agencies/orgs retain “brand” for their products
 - Gaps in data; for desired indicators, for specific locations
 - Inconsistencies; limiting credibility
 - Ability to leverage ongoing state inventory and monitoring data



After Action Review

- NAPA and DASP concerns about ability to “play nicely in the sandbox”
 - EMT senior officials committed to disproving that
 - Interoperability of key Federal information systems was a key DASP concern
 - Improving consistency across the landscape is desired
- Spend 60 days at the end of the project to
 - What was the mission?
 - What was the plan?
 - What did we do? Did we follow the plan?
 - What worked?
 - What didn't work? What should be done differently next time?

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- Questions for clarification?
 - Next up ➔ the NEST web site