

Northeast Coastal Condition Electronic Reporting Website

WHAT WE DO:

- Transfer computational technology to NCA cooperators and other Federal Agency partners
- Promote concepts of “reproducible research” and publication of “compendium” that include: assessments, computational and visualization tools, and the data assessments are based upon.



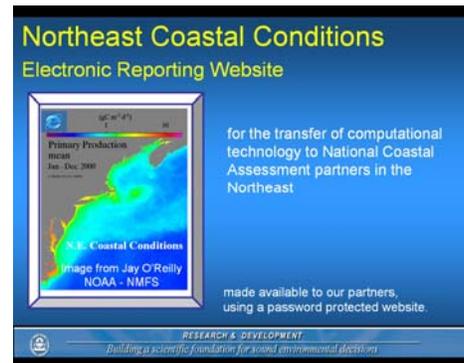
WHY WE DO IT:

- Foster improvements in Quality Assurance for NCA baseline data.
- Facilitate exchange of data and assessment information with cooperating States
- Contribute to improvements in NCA - National Assessments.
- Contribute to improvements in Clean Water Act (CWA) Reporting from States.

HOW WE DO IT:

- Designed the NCA Northeast Coastal Condition Electronic Reporting Website.
 - Password protected link to Northeast information.
 - Accessible from NCA Website

<http://www.epa.gov/emap/nca/index.html>



RESULTS TO DATE:

In the past 16 months:

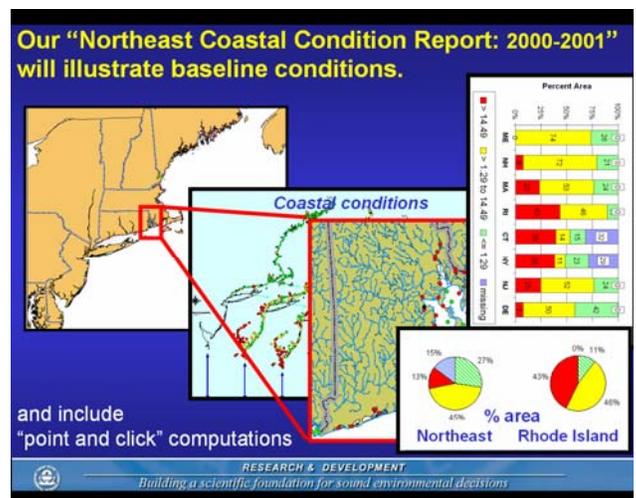
- Electronic transfer of information to our NCA Northeast cooperators:
 - Links to existing National Coastal Assessment Reports, and draft material
 - Assessment tools (allow users to select thresholds for “good, fair, poor”)
 - Excel workbooks for rapid % area calculations by State or waterbody
 - GIS ArcMap projects for rapid visualization
 - Designed statistical analysis “vignettes” to document complicated analyses
 - Sampling Design documentation, including ArcMap projects
 - Access to Working Data (State formats) and regional Summary Data

Adjacent screen shot illustrates concentrations of mercury in estuarine sediments:

Red = % estuarine area in the upper quartile

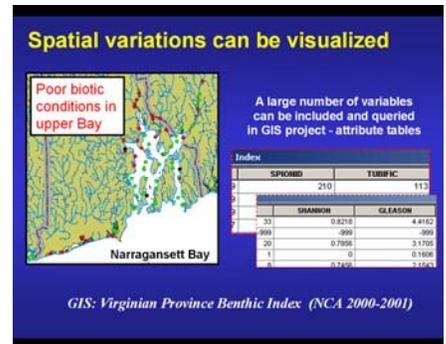
In the Northeast, 13% of the estuarine area is in the upper quartile.

In Rhode Island 43% of the estuarine area is in the upper quartile



Direct technical support to Northeast States in conjunction with other Federal Agencies:

- Demonstrated functionality of website to 11 States (ME south thru MD & VA)
 - used website for data transfer & QA,
 - use of and adaptation of analysis tools by States (Excel workbook calculators, ArcMap project(s))
- How NCA data can be easily used with other information
 - Model output from USGS New England Sparrow Model
 - GIS coverages on impaired waters list

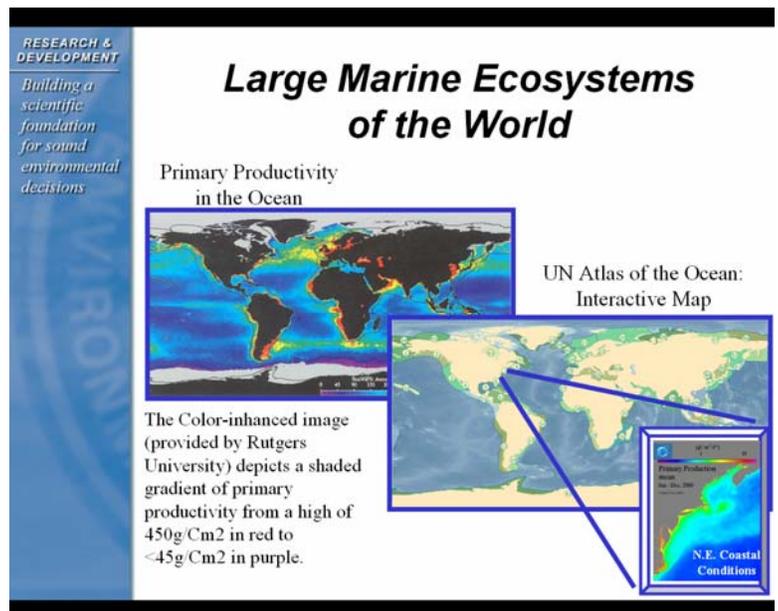


Next Steps:

- Use of computation tools and website in other U.S. coastal regions
- Potential use of website by other Federal Agencies
 - NOAA: NOS & NMFS for reporting on pollution in Large Marine Ecosystems in the U.S.

EXPECTED OUTCOME:

- Others will be able to reproduce and adapt our NCA analyses:
 - Diverse local applications (e.g State level analyses)
 - Comparing targeted sampling data to NCA regional baseline & reference conditions.
 - Using NCA data for reporting on regional pollution in Large Marine Ecosystems, or biogeographic provinces
- Contribute to improvements in restoring and protecting the nation's estuaries (improvement in "outcomes")



Hal Walker (walker.henry@epa.gov)

Walt Galloway (galloway.walt@epa.gov)

Monitoring and Assessment Branch / Atlantic Ecology Division /NHEERL– Narragansett, RI