Presented at:

Environmental Monitoring and Assessment Program
Great River Ecosystems
Biological Indicators Workshop
October 24-26, 2006
Holiday Inn - Duluth, Minnesota

Information Management/ Quality Assurance

EMAP-GRE Indicator workshop

October 24-26, 2006

"Information Superhighway (management) is really an acronym for 'Interactive Network For Organizing, Retrieving, Manipulating (Metrics), Accessing And Transferring Information On National Systems"

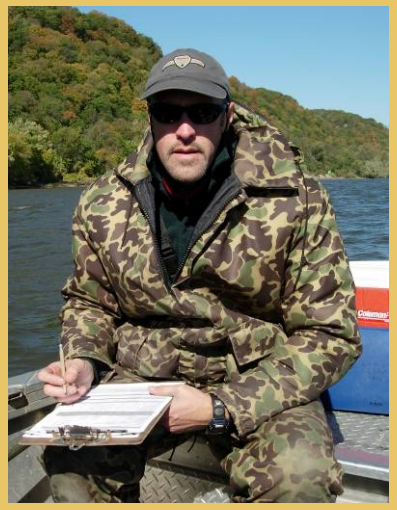
-Kevin Kwaku

SWIM: Surface Water Information Management

- In practice since the beginning of EMAP
- Hosted by USEPA-WED Corvallis, OR
- Managed by CSC under contract with EPA
- Developed intranet website for controlled data distribution and information sharing in 2000
- Currently houses around 50 projects
  - EMAP: MAIA, MAHA, West, WSA and GRE
  - Many regional studies

Procedures

- Data collection
- Data entry
- Verification
- Validation
- Metric calculations
- Analysis
- Sample tracking
- Public service



Verification

- Proof 100% of your sites field data entry in the electronic database.

- Correct any other mistakes you notice: misspellings, missing data, etc.

Data Validation

- Indicator lead responsibility
- Evaluation of records for consistency
- Review of quality control information
- Summarizes deviations from methods and identifies impact
- Summarizes sample information

Metric calculation

- Part of SWIM
- Ensures the most current data is used
- Uses code to efficiently run calculations
- Makes metric available to all partners

Status

- 2004
  - Field data validation nearly completed
  - Metric calculation
  - Lab data
- 2005
  - Field data validation underway
  - Lab data
- 2006-Reference condition
  - Field entry underway
  - Samples are moving to our labs

Data Use Policy

Adapted from EMAP IM Plan (EPA/620/R-99/001a)

- To ensure the integrity of EMAP-Great River Ecosystem (GRE) data and analyses

- **Preliminary datasets (raw datasets):**
- Under development, not fully reviewed, not yet ready for public release.
- Used only for program promotion and exploratory purposes by the EMAP-GRE *investigators*.

- **Completed datasets (validated datasets):**
- Pass extensive QA and review procedures, ready for publication
- *Completed datasets* can be used for publication of reports, journal articles, book chapters, or other formats requiring high-quality data.

- **Public datasets:** released for public use *after* the hold back period.

Reference:
Hale, S., J Rosen, D Scott, J Paul, and M Hughes. 1999. EMAP Information Management Plan: 1998-2001.Office of Research and Development. Washington DC EPA/620/R-99/001a, b

Data Use Policy

- All EMAP-GRE datasets used in publication shall be identified with a citation similar to "Some or all of the data described in this article were produced by the U.S. Environmental Protection Agency through its EMAP (Environmental Monitoring and Assessment Program) http://www.epa.gov/emap/."

- EPA indicator leads expect to collaborate with partners on the analysis of EMAP-GRE data.

Where does the data go after EMAP-GRE?

- Growing impression that the data is never delivered- what are we doing about it.
- Examples of EMAP data being served
- EMAP-GRE public service of the data

Current databases for EMAP

- SWIM
- EMAP public data server
- STORET/WQX

EMAP web page data server

EMAP Data Set Search Engine

This screen is designed to access environmental metadata. The entire set of data sets can be retrieved by pressing the submit button. Searches can be focused by specifying values for one or more of the fields below. Fields with lists of items will accept multiple selections by holding down the *Ctrl key*. When multiple items are selected for a field i.e., Data Group, records that match any, not all, of the selections will be returned. When items are selected from multiple fields i.e., Data Group and Geographic Keywords, records that match all of the selections will be returned. To start a new query, press *Ctrl R* or the Reset button to refresh the screen.

Data Group:

SCCWRP, SOUTHERN CALIFORNIA BIGHT PILOT PROJECT
USEPA, AGROECOSYSTEMS
USEPA, CAROLINIAN PROVINCE
USEPA, EMAP-MID-ATLANTIC INTEGRATED ASSESSMENT
USEPA, EMAP-WEST

General Keywords:

% LIPIDS
% MOISTURE
% SAND
% SILT/CLAY
% SOLIDS

Geographic Keywords:

ALABAMA
ALBEMARLE-PAMLICO SOUND
ARKANSAS
ARROYO COLORADO RIVER
CALIFORNIA

Year: YYYY

Submit | Reset | Help

EMAP Home | Comments | Site Map | Search | EPA Home

Current EMAP databases

- SWIM
- EMAP public
- data server
- STORET/WQX

Future of STORET

- WQX

EMAP-GRE Public service

- STORET as promised
- SWIM
- EMAP website