Components

Monitoring Inventory

Data Reports

Web-based Maps

Link

Link

Link

Link
Status of NJDEP Data Exchanges

- Ambient Water Quality
  - Identified potential participants
  - Submitted financial/legal docs for approval
  - Commented on draft Scope of Work

- Volunteer Monitoring
  - Completed design of system
  - Working on reports and GIS interface
  - Testing: summer/fall 2006
  - Production: fall/winter 2006
Current Approach: EPA distributed database with data entry/reporting tools.

Required users to run Oracle database software

Organizations that couldn’t/wouldn’t run Oracle couldn’t share data with EPA

Very resource intensive to operate, support and improve

EPA will continue this approach through September 2009
Current STORET Data Flow
Water Quality Exchange - WQX

- Future data flow to facilitate data exchange
- No local copies of STORET needed!
- Uses EPA's Environmental Sampling, Analysis, and Results (ESAR) standard, (consistent names and definitions to common data elements used by EPA)
- Standard data formats using Extensible Markup Language (XML)
- XML schemas (groups of data elements) for Chemical/Physical and Biological/Habitat data
- EPA is working towards developing the WQX schema so that multiple data partners can publish to it (e.g. USGS, Pacific Northwest Exchange)
WQX - Continued

- New Web based XML generation and submission tools (works with your text files, based on Web-SIM)
- Data submitted and validated through EPA’s Central Data Exchange (CDX)
- Central Data Warehouse will remain and have new/enhanced reports
- New tools for data analysis
- Web Services for data retrieval of all STORET and WQX data
WQX Data Categories

**ORGANIZATION**
- ORG Description (3)
- ORG Electronic Address (2)
- ORG Phone (3)
- ORG Address (9)
- Total Fields (17)

**PROJECT**
- Project Description (3)
- Project Binary Object (3)
- Total Fields (6)

**MONITORING LOCATION**
- Monitoring Location Identity (4)
- Monitoring Location Geospatial (12)
- Monitoring Location Binary Object (3)
- Total Fields (19)

**MONITORING ACTIVITY**
- Activity Description (16)
- Activity Location (5)
- Sample Description (4)
- Sample Prep (6)
- Subsample Description (2)
- Activity Binary Object (3)
- Total Fields (36)

**RESULT**
- Result Description (17)
- Result Binary Object (3)
- Result Analytical Method (3)
- Result Lab Info (4)
- Result Detection Quantitation Level (3)
- Lab Sample Prep (5)
- Total Fields (35)
New STORET Data Exchange

Exchange Network Node
- Expand to include Biological Results
- XML Submission
- Business Rule Checking
- Receive Error Responses
- Valid Value Checking

Leverage Data Registries
- Approved XML Submission
- Data Context Error Report
- Data Load Confirmation & Summary

web-based XML generation and submittal tool

ORACLE Export
- Support legacy flow during transition to WQX

Web Tools
- New Data Analysis Tools
- Updated STORET Homepage
- WME
- Enviromapper
- Web Services (including WQX-XML out)

- Streamline and Performance Tune
- Leverage Data Registries

New Water Quality Monitoring Data Warehouse

WQX CDS
- WQX Data Parse, Validate, and Load Software

New STORET Data Exchange
WQX Outreach Meetings

- Provide information on WQX
- Get feedback on the WQX Schema
- Discuss transition plans and impacts on the user community
- For current users and non-users of the STORET system
WQX Outreach Session
June 7-8, 2006
EPA Region 3 Headquarters
1650 Arch Street, Philadelphia, PA

Contact Person
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EPA Region 3
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## WQX and STORET Schedules

<table>
<thead>
<tr>
<th>WQX Schedule</th>
<th>STORET Schedule</th>
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<tbody>
<tr>
<td>WQX Outreach</td>
<td>SIM 2.0.2 Release</td>
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<tr>
<td>May – July 2006</td>
<td>May 2006</td>
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<tr>
<td>Finalize Phys/Chem schema</td>
<td></td>
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<tr>
<td>September 2006</td>
<td>Scale down STORET Support</td>
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<tr>
<td>Phys/Chem WQX in production</td>
<td>September 2008</td>
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<tr>
<td>January 2007</td>
<td>No longer accept STORET data dumps</td>
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<tr>
<td>Begin Bio/Habitat WQX pilot</td>
<td>September 2009</td>
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<tr>
<td>Late 2006/Early 2007</td>
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<tr>
<td>Finalize WQX Bio/Habitat Schema</td>
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<tr>
<td>December 2007</td>
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<tr>
<td>Bio/Habitat WQX in production</td>
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<tr>
<td>March 2008</td>
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<tr>
<td>WebTool available for Phys/Chem data</td>
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<tr>
<td>February 2008</td>
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<tr>
<td>Final Web tool, including Bio/Habitat</td>
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<td>July 2008</td>
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Questions/Comments

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  - Angela Witcher, NJDEP Office of Information Resource Management
    - (609) 292-3211 angela.witcher@dep.state.nj.us
  - Paul Morton, NJDEP Bureau of Freshwater & Biological Monitoring
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- **NJDEP Volunteer Monitoring Data Exchange**
  - Peter Tenebruoso, NJDEP Office of Information Resource Management
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  - Danielle Donkersloot, NJDEP Volunteer Monitoring Coordinator
    - (609) 633-9241 danielle.donkersloot@dep.state.nj.us
Questions/Comments

- USEPA WQX and STORET

- Dwane Young, USEPA (202) 566-0616
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- Or Visit: www.epa.gov/storet

- Join the STORET list serve for more information, including monthly conference calls about STORET and WQX:
  http://www.epa.gov/storet/listserv.html