



NJ's Water Monitoring Coordinating Council

Leslie McGeorge, Administrator
NJ Department of Environmental Protection
Water Monitoring and Standards

National Water Quality Monitoring Council Meeting
Salt Lake City, UT
March 10, 2009

Overview



- **Formation, Mission & Goals**
- **Organization & Members**
- **Technical Topics**
- **Outcomes/Benefits**
 - **NJ Water Quality Data Exchange**
- **Challenges**
- **NWQMC Assistance**



NJ Water Monitoring Council

– *Vision, Mission, Scope*

Initiated: USGS & NJDEP

Formed: October 2003 on World Water Monitoring Day

Vision: provide water information foundation for management of aquatic environment

Mission: coordination, collaboration and communication of ambient water quality/quantity data to support effective environmental management

Scope: biological, chemical and physical conditions of surface and ground waters, freshwater, estuarine, & marine waters



NJ Water Monitoring Council – Goals

Facilitate water monitoring technology transfer

Promote collaboration – monitoring & assessment

Enhance data compatibility and exchange

Develop support for monitoring

ID water info & research needs

Promote water info. dissemination





NJ Council - Organization

Co-chairs – Leslie McGeorge (NJDEP)

Rick Kropp (USGS NJ Water Science Ctr)

Coordinator – Alena Baldwin-Brown (NJDEP)

Steering Committee – NJDEP, USGS, DRBC

Meetings - 3 x/yr & subcommittees

Process - Informal, consensus-driven body

www.state.nj.us/dep/wms/wmcchome.html



NJ Water Monitoring Coordinating Council

Measuring What Counts for Clean & Plentiful Water

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The New Jersey Water Monitoring Coordinating Council, established on October 24, 2003 as part of NJ's celebration of World Water Monitoring Day, serves as a statewide body to promote and facilitate the coordination, collaboration and communication of scientifically sound, ambient water quality and quantity information to support effective environmental management.

[CHARTER](#)[MEMBERS](#)

The Council will address the biological, chemical, physical and ecosystem aspects of water monitoring, including surface and ground waters, freshwater, estuarine, and marine environments in New Jersey.

[TECHNICAL TOPICS](#)[MEETING INFORMATION](#)

For more information on the NJWMCC contact:

[EVENTS](#)

Leslie McGeorge, Co-Chair, NJDEP/Water Monitoring & Standards
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[ACTIVITIES](#)

Rick Kropp, Co-Chair, USGS/NJ Water Science Center
Rkropp@usgs.gov

[RELATED LINKS](#)

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NJ Council - Membership

- 30 members – w/monitoring networks or research
- State (DEP) & Federal Agencies (USGS, EPA, NOAA)
- Interstate Agencies (DRBC, IEC)
- Academia & Research Institutes
- Regional Commissions
- County Government
- Water Supply Authorities
- Volunteer Monitoring





New Jersey Water Monitoring Council Members



NJ Council – Technical Data Exchange

Technical meeting topics:

- Emerging contaminants
- Data management/exchange
- Nutrients
- Biological monitoring
- Estuarine, ocean & beach monitoring
- Fish & shellfish tissue monitoring
- Pathogen monitoring & source trackdown
- Continuous monitoring
- Water quantity
- Local/volunteer monitoring





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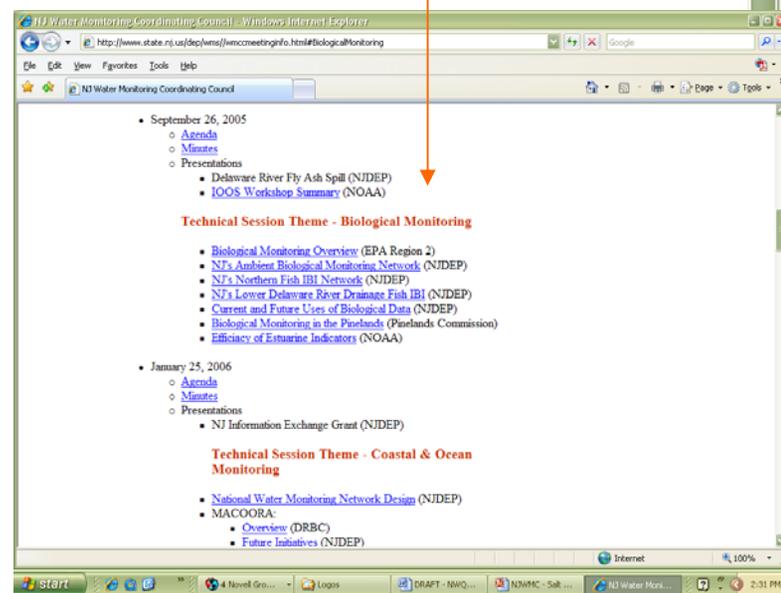
RELATED LINKS

Technical Topics

Click on any of the technical presentation themes below to see the presentations from that particular NJ Water Monitoring Council meeting.

- [Biological Monitoring](#)
- [Coastal and Ocean Monitoring](#)
- [Continuous Monitoring: Part 1 and Part 2](#)
- [County, Local and Volunteer Monitoring](#)
- [Emerging Contaminants: Initial Presentations and Update](#)
- [Fish and Shellfish Tissue Monitoring](#)
- [Integrating National, Regional and State Monitoring Efforts](#)
- [Nutrient Monitoring and Assessment](#)
- [Pathogen Monitoring and Recreational Use Assessment](#)
- [Water Quality Data Management/Exchange: Part 1 and Part 2](#)
- [Water Quantity](#)

Biological Monitoring Presentations



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NJ Water Monitoring Council: Outcomes/Benefits

- Est. of **NJ water monitoring community**, linked to assessment
- Building **inventory** of monitoring activities
- Collaboration - **gov't and academia** (e.g., development of coastal indices)
- Communication of **national tools & initiatives** to the state/local level (e.g. NEMI)
- Input to **NJ's Long Term Monitoring & Assessment Strategy**

Long Term Strategy

NEW JERSEY
WATER MONITORING &
ASSESSMENT STRATEGY
(2005-2014)



Water Monitoring and Standards Program
NJ Department of Environmental Protection
Bradley M. Campbell, Commissioner

September 2004

NJ Water Monitoring Council: Outcomes/Benefits - cont

- **Joint project/grant development** - DE Bay & NY Bight IOOS proposals
- Increased comparable **data** for assessment and reporting under CWA (Integrated Report)
- State **Water Monitoring Workshop** - 2006
- Increased **technology transfer** among ambient water monitoring community
- **Data Exchange** - WQDE System Development w/ Council members

2006 Workshop

NJ Water Monitoring and
Assessment Technical Workshop

April 20, 2006

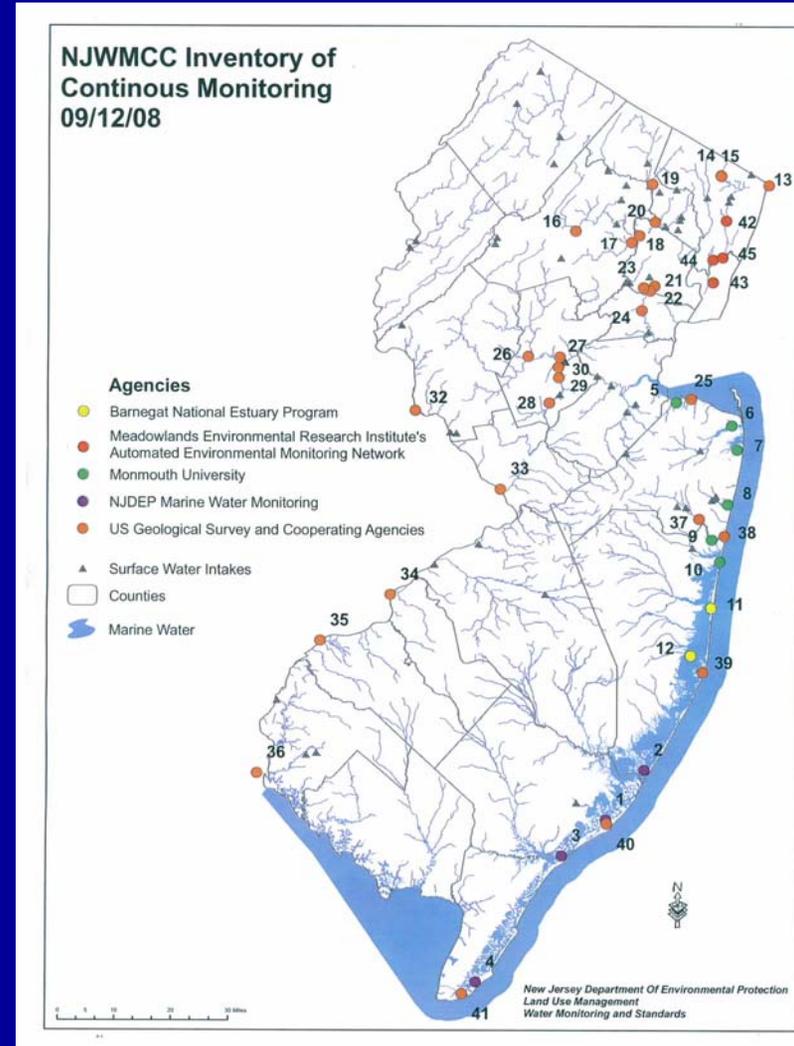


*Integrated Monitoring to Enhance
Water Resource Management*

Rutgers EcoComplex
Columbus, NJ
9:00 a.m. - 5:00 p.m.

NJ Water Monitoring Council: Outcomes/Benefits

Inventory Example:
Continuous Monitoring –
freshwaters and coastal
waters



Data Exchange Project Goals

- Develop up-to-date, searchable **inventory** of ambient wq monitoring
- **Integrate** ambient wq monitoring data into NJDEP's enterprise data mgt system (NJEMS)
- Make NJ's ambient wq monitoring data more **accessible** to the public
- **Exchange** ambient wq monitoring data with **USEPA** via EPA's Central Data Exchange (CDX)



Paul Morton, Water Program –
Project Lead



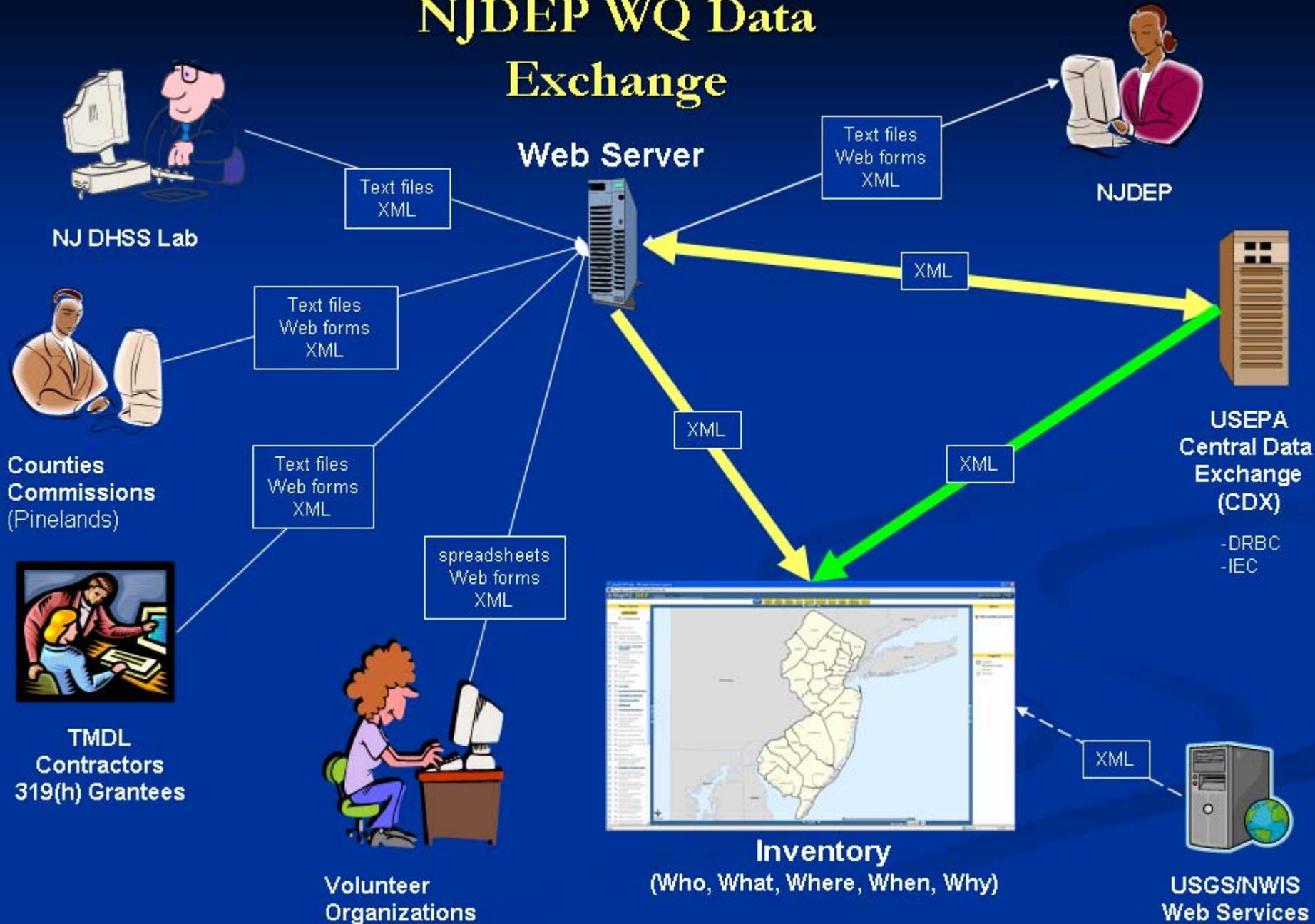
Funding: **National Environmental Info.
Exchange Network Grant**

WQDE Project Partners

- NJ Water Monitoring Council
- NJDEP
- NJ DHSS Laboratory
- Local / County Governments
- Volunteer Monitors
- USEPA
- USGS



NJDEP WQ Data Exchange

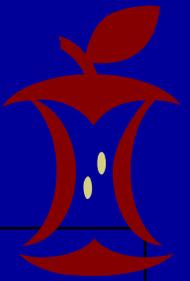


Potential WQDE Data Sources :

- NJDEP ambient water quality
- Federal (USGS, USEAP, NOAA)
- Interstate Commission (DRBC, IEC, etc.)
- TMDL contractors
- 319(h) grantees
- NJ Harbor Discharger Group
- Nutrient site-specific studies
- NJPDES permit modifications
- Ambient data from spill/incident investigations
- NJ Water Purveyor raw water monitoring

Metadata submittal required (e.g. QA/QC plans and approval status), as data of known high quality needs to be used for regulatory purposes

Core WQDE Components



WQX Module on **E2**

Web based solution for importing data
Both Web forms and batch file loading

Data **Validation**

historical range checks,
characteristic unit pairing, and
logical checks

NJ Water Monitoring **Inventory** and **Data Portal**

Web based mapping of monitoring locations & results

Outbound Data **Transmission to EPA/CDX**

Potential Participants

- Inventory only
- Inventory + data submitted to NJDEP
- Inventory + data submitted to EPA/WQX or USGS/NWIS

Potential Users

- Inventory only – text-based query or geospatially retrieve info down to project-level (who, what, when, where & why)
- Inventory + data – in addition to above, retrieve monitoring results

NJ Water Monitoring Council: Challenges

- Dedicated funding for basic Council operations, workshops, etc
- Maintaining staff resources to support Council
- Sustaining some memberships (e.g., county health dept reps)
- Lack of consolidated source of monitoring and assessment info. from which to draw info. for members
- Lack of interaction with other existing State/Regional Councils

Assistance Needed from National Water Quality Monitoring Council

- Advocate for **continuing federal resources** to support State/Regional Councils (e.g. add \$5K/yr to State/Interstate Supplemental 106 grants?)
- Work to est. **nat'l water monitoring community** – regular communication w/State Council contacts:
 - tools (e.g., NEMI)
 - training/outreach materials
 - NWQMC info (e.g., meeting minutes, presentations)
- Provide opportunities for **interaction** among State/Regional Councils (e.g., routine conf. calls)

Assistance Needed from National Water Quality Monitoring Council – cont.

- **National Council reps** - assist/advise State Councils
- **Maintain sessions on State/Regional Councils** at Nat'l WM Conferences & provide travel funds for Council reps
- **Continue assistance with monitoring & assessment methods, and comparability evaluations**
- **Data exchange** assistance