Enhancing the NJ Water Monitoring Community

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NJDEP Water Monitoring and Standards

Presented at: NJ Water Monitoring & Education Summit
Rutgers EcoComplex
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NJ Water Monitoring Events

- **2003-2007** – Volunteer Monitoring Summits
- **2006** – Water Monitoring Technical Workshop
- **2008** – Volunteer Monitoring and Educators Summit
- **2009** – NJ Water Monitoring & Education Summit
  - DEP & NJ Council Co-sponsored
  - Vision of Integrated NJ Water Monitoring Community
DEP

Water Monitoring & Standards
Leslie McGeorge

NJ Water Monitoring Council
Water Quality Data Exchange

Marine Water Monitoring
Bob Connell
- Estuarine & Near shore ocean
- Beach monitoring
- Shellfish water quality
- Ecosystem assessment
- Microbial source trackdown
- Spill response
- Remote sensing

Freshwater & Biological Monitoring
Al Korndoerfer
- Rivers, streams, lakes, groundwater
- Chemical/physical/biological/habitat
- Stressor identification

Water Quality Standards & Assessment
Debra Hammond
- Water Quality Standards – surface & groundwater
- Water Quality Assessment – Integrated Report (305(b) & 303(d))
- Local & volunteer monitoring

NJDEP Water Monitoring and Standards
NJ Volunteer Monitoring Program - Watershed Watch Network (started 2002)

- 29 River/Stream Monitoring Organizations
  - Biological
  - Visual
  - Habitat
  - Chemical
  - Bacteria
  - Physical

- 58 Lake Monitoring Organizations
  - Bacteria
  - Chemical
  - Visual
  - Physical
Volunteer Program - Watershed Watch Network

• Internal NJDEP Advisory Council
  – Water Monitoring & Standards
  – Division of Watershed Management
  – Office of Quality Assurance

• External Advisory Council – Volunteer Program Coordinators from:
  – Riverkeeper Organizations
  – Watershed Associations
Volunteer Program Outcomes

- Training (e.g., field collection, habitat assessment, data integration, benthic macroinvertebrates)
- Technical Assistance - NJ Service Provider Network
- Resource Support – Mini-Grant Program
- Volunteer Monitoring Data System
- Increased quality assured data submissions to NJDEP to meet CWA mandates
- Quality Assurance Tiers
- Annual Summit
NJ Water Monitoring Council

- **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

30 Members - 15 monitoring & research orgs.
- Federal, state, interstate, regional, county government
- Academia & Research Institutions, and Volunteer representation
- 3 meetings/yr

Co-chairs – Leslie McGeorge (NJDEP)
Rick Kropp (USGS NJ Water Science Ctr)
Coordinator – Alena Baldwin-Brown (NJDEP)

Steering Committee – NJDEP, USGS, DRBC

Website
- includes meeting Technical Presentations (e.g., Emerging Contaminants, Nutrients)
- www.state.nj.us/dep/wms/wmcchome.html
NJ Water Monitoring Council

- NJDEP
- USGS/NJ Water Science Center
- USEPA Region 2
- NOAA
- Delaware River Basin Commission
- Interstate Environmental Commission
- Pinelands Commission
- NJ Marine Sciences Consortium
- Passaic River Institute (Montclair State U.)
- Meadowlands Environmental Research Inst.
- Monmouth County Health Department
- NJ Water Supply Authority
- NJ Volunteer Monitoring coordinator
  - Watershed Association representation?
NJ Council Benefits

- Enhanced state water monitoring community partnerships

- Technical information exchange (e.g., field/lab methods, contract labs, assessment methods, data mgt, monitoring parameters)

- Joint project/grant development opportunities to fill info gaps in NJ’s Long Term Monitoring Strategy

- National Water Monitoring Council information exchange (NJ members)

- Increased data submittals for NJ’s Integrated Water Monitoring & Assessment Report
DEP

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NJDEP Water Monitoring and Standards
DEP’s Freshwater Monitoring – Rivers & Streams, Lakes, Groundwater

Ground Water Summit Presentation
- Ground water quality trends & land use impacts

Rivers/Streams Summit Presentations
- Stream water quality & stressor identification
- New benthic indices
DEP’s Marine Monitoring

**Ecosystem Monitoring Presentation**
- Ocean benthic indicators for ecosystem assessment

**Beach Monitoring Presentation**
- Microbial Source Tracking

**Shellfish Water Quality Monitoring**
Water Quality Standards & Assessment (Summit Presentation)

- **Readopted SWQS** – Dec 2009 NJ R

- **Nutrients**
  - New proposal – narrative criteria for all waters (Dec 2009 NJ R)
  - 2009 Nutrient Criteria Enhancement Plan – ([http://www.state.nj.us/dep/wms/bwqsa/nutrient_criteria.htm](http://www.state.nj.us/dep/wms/bwqsa/nutrient_criteria.htm))
  - Nutrient assessment for *wadeable streams* – 2010 Assessment Methods
  - Additional nutrient response monitoring data needed (eg., diurnal DO, benthics)
Data Sources - 2008 Integrated Monitoring & Assessment Report

CWA requirement – all waters assessed for all uses

- <20% watersheds fully assessed for all uses
- 94% watersheds assessed 1 or more use
Vision

One dynamic NJ Water Monitoring Community: growing and learning from each other

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