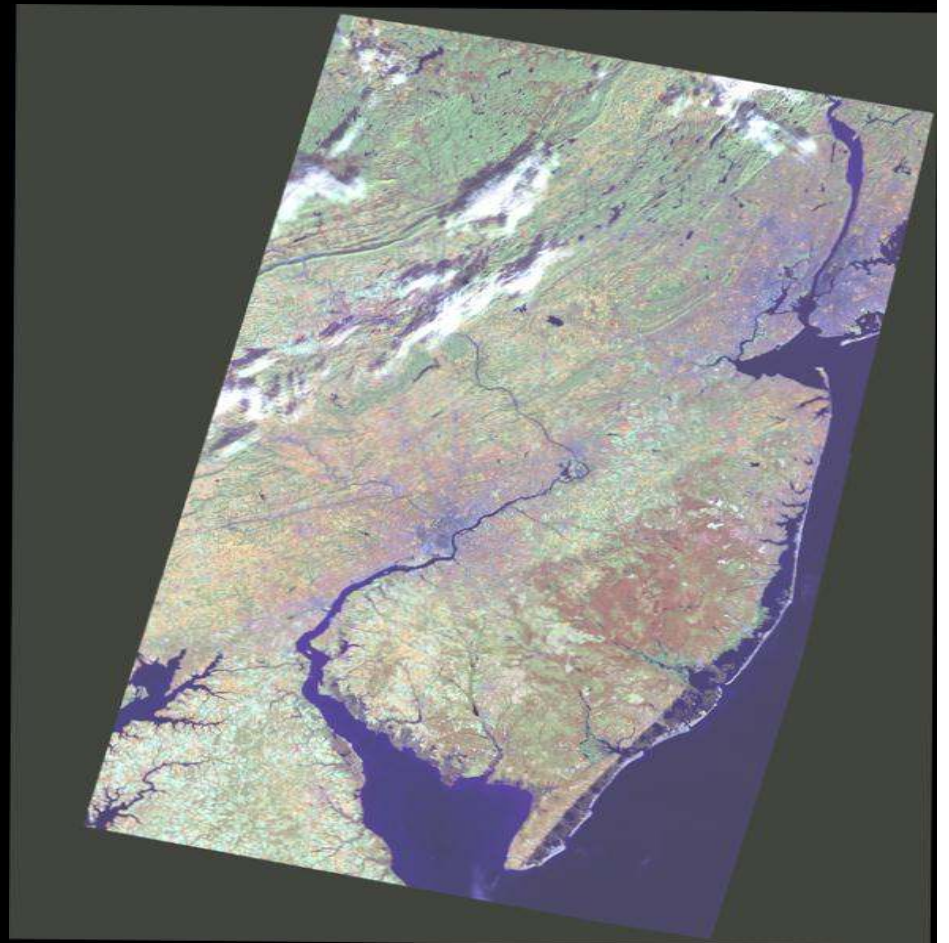


NJ Watershed Watch Network

Danielle Donkersloot
*Volunteer Monitoring
Program Coordinator*

Katherine Axt, Assistant
Monitoring Coordinator



Overview of Today's Discussion

- Volunteering
- Volunteer Water Monitoring in NJ
- Local Volunteer Efforts
- Citizen Scientist efforts beyond Water Monitoring
- Upcoming Events

America's Other Favorite Past Time

Using Independent Sector's estimate \$18.04 an hour, a standard measurement for the value of a volunteer's time, the value of the 8.2 billion hours annually donated by Americans equates to \$147.6 billion, a powerful economic impact of volunteering to the entire nation.

Youth Adult Konnections, August 30, 2006

Cooperative Weather Observer Program

1849 Joseph Henry, Secretary Smithsonian Institution establishes volunteer weather observers network

- By 1890, Congress establishes the **Weather Bureau** and network of volunteer weather observers every 25 miles
- Today, more than 11,000 Volunteer Observers take readings in 50 states.

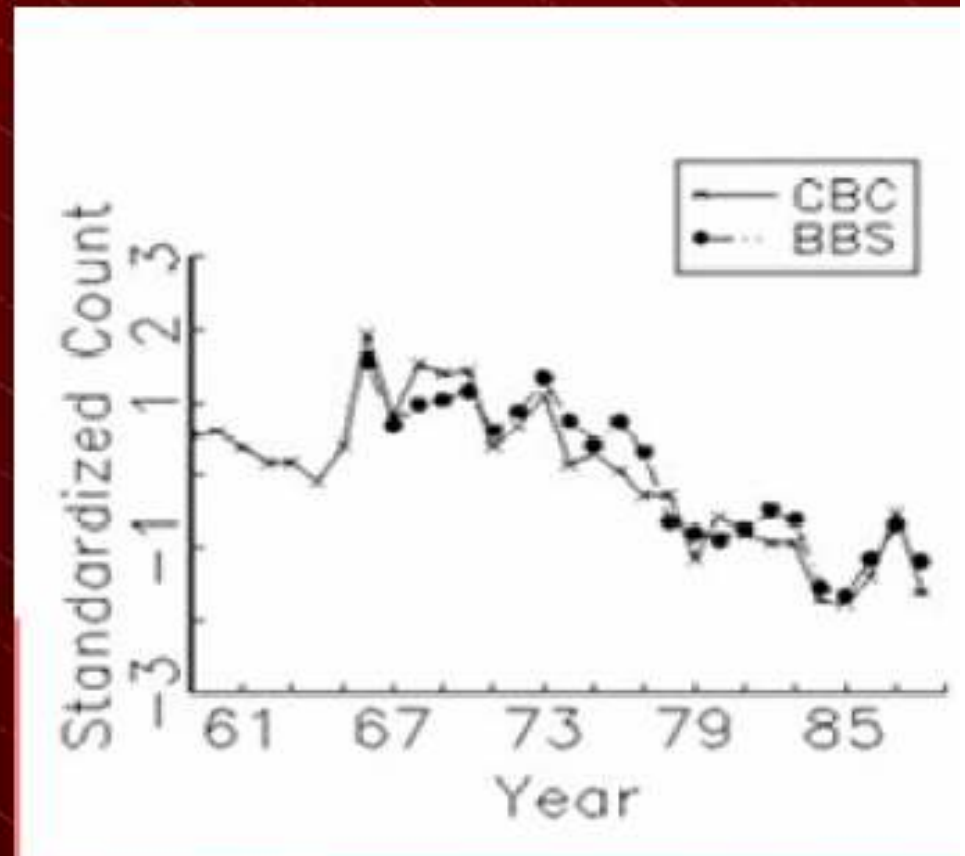


Robert Carlson, Kent University

Audubon Society Christmas Bird Count

“to monitor the status and distribution of bird populations across the Western Hemisphere”

Christmas Bird Count
Breeding Bird Survey
Backyard Bird Count



<http://www.audubon.org/bird/cbc/history.html>

Robert Carlson, Kent University

Mathew Fontaine Maury (1806-1873)

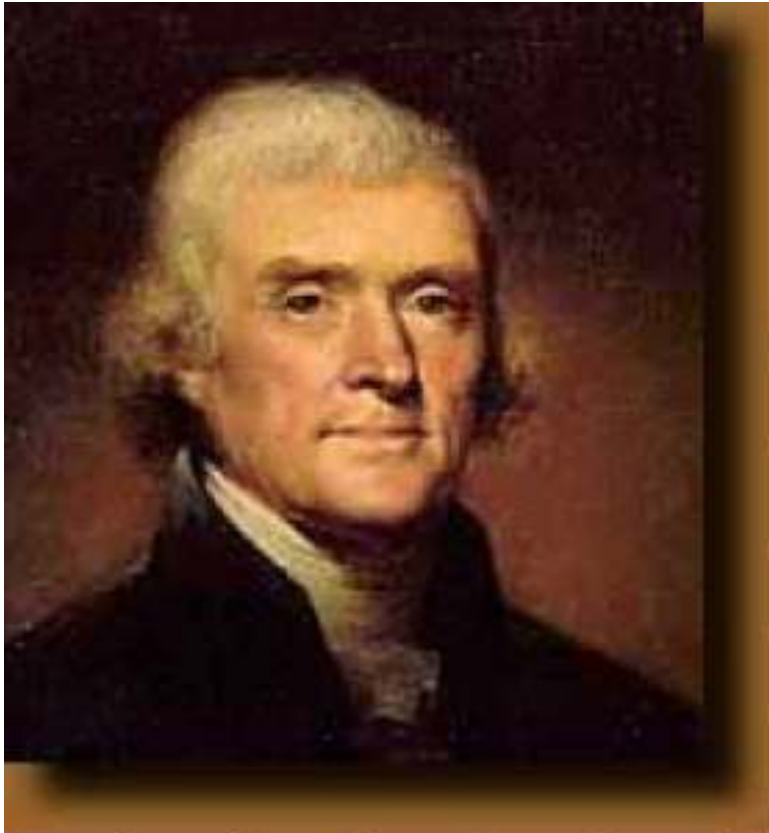


**“Father of Oceanography”
Volunteer Coordinator**

Mapped

- Ocean currents,
- Sea surface temperature
and surface winds

Using data from volunteers



**Thomas
Jefferson
Volunteer
Monitor**

Some Famous Volunteers

**Philadelphia,
Thursday,
July 4, 1776**

Temperature:

6 AM 68

9 AM 72

1 PM 76

9 PM 73



- Population NJ 8.7 million people
- 7,417 square miles
- 1,134.4 persons per square mile

•NJ DEP's latest evaluation *19% of the State's Waters are fully assessed*

•Nationally, *19% of the nations waters are assessed*



NJ Volunteer Water Monitoring Community

- 30 River/Stream Monitoring Organizations
 - 800 active river monitors
 - Over \$347,000 out-of-pocket
- 58 Lake Monitoring Organizations



Myths of Using Volunteer Collected Data

1. Quality Assurance/Quality Control
2. Volunteers have “hidden agendas”
3. Volunteers are not scientists



Reality of Using Volunteer Collected Data

1. We need more data at a higher frequency of collection
2. EPA has been encouraging the use of volunteer collected data since 1988
3. Volunteers want to do it right



Credibility doesn't mean
having the most
exacting techniques. It
means **delivering on**
your promises, no
matter how small or
large they are.

-Meg Kerr
RI River Rescue

NJ Watershed Watch Network

- **Internal Advisory Council**
 - Water Monitoring & Standards
 - Division of Watershed Mgt.
 - Office of Quality Assurance
- **External Advisory Council**
 - Riverkeepers
 - Watershed Associations
 - Volunteer Coordinators



Potential Data Uses

- Education
- Source Track Down
- Local decision making
- NPS Assessment
- TMDL
- Land Use Planning
- Open Space Acquisition
- Monitoring Restoration Efforts
- 303d & 305b Integrated Report
- Watershed Preservation



Defining Data Use

- Both data users & data collectors developed a clear understanding each others goals
- The Council agreed that different data uses required different levels of rigor



AmeriCorps Data





What's the Value in NJ?

The NJ volunteer monitoring community provides the Department with:

\$780,000 annual in services by collecting water monitoring information

\$1.15 million including watershed and water monitoring education



Sources of Data Used for the 2008 Draft Integrated Report

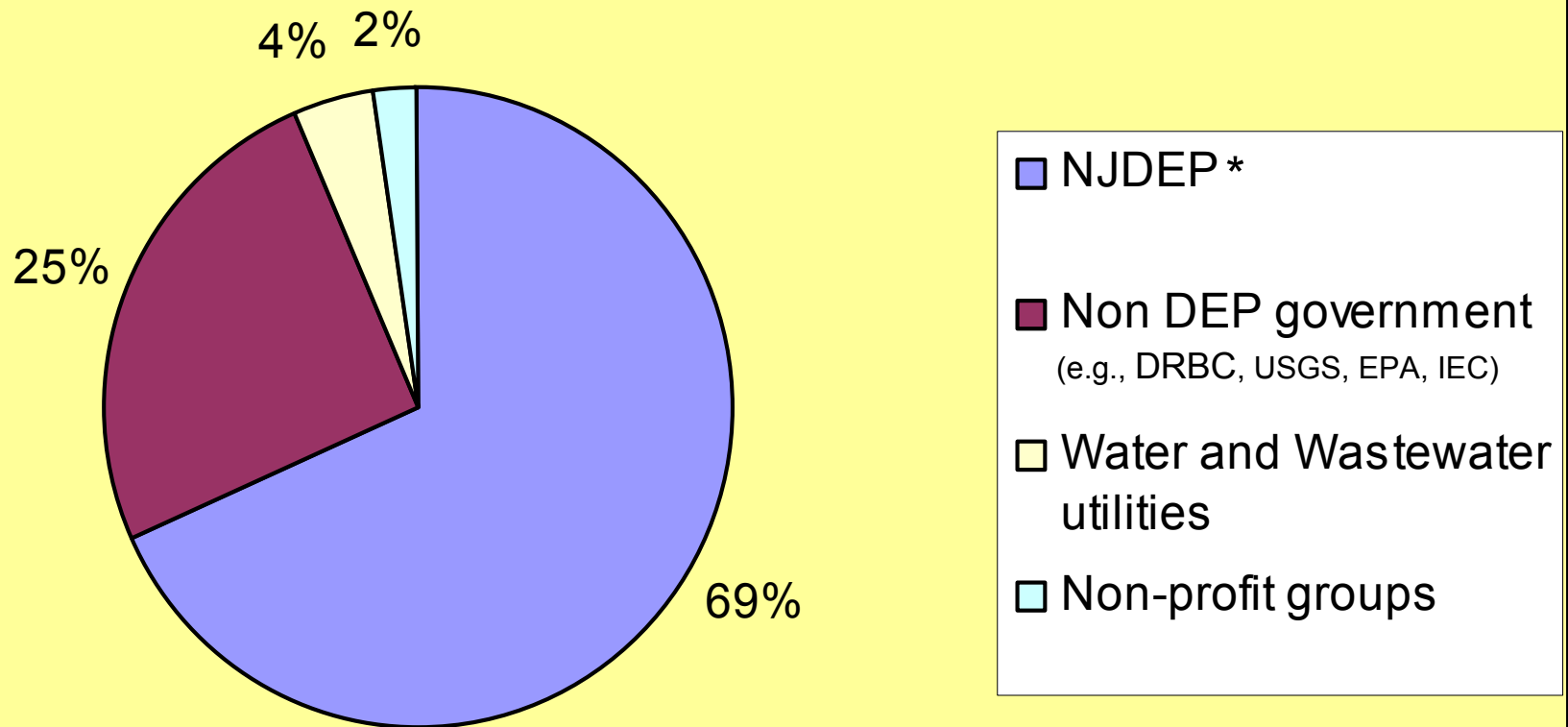
85 volunteer monitored sites were added to
the Report this year

- Pequannock River Coalition
- Pompeston Creek Watershed Association
- South Branch Watershed Association
- Stony Brook Millstone Watershed Association

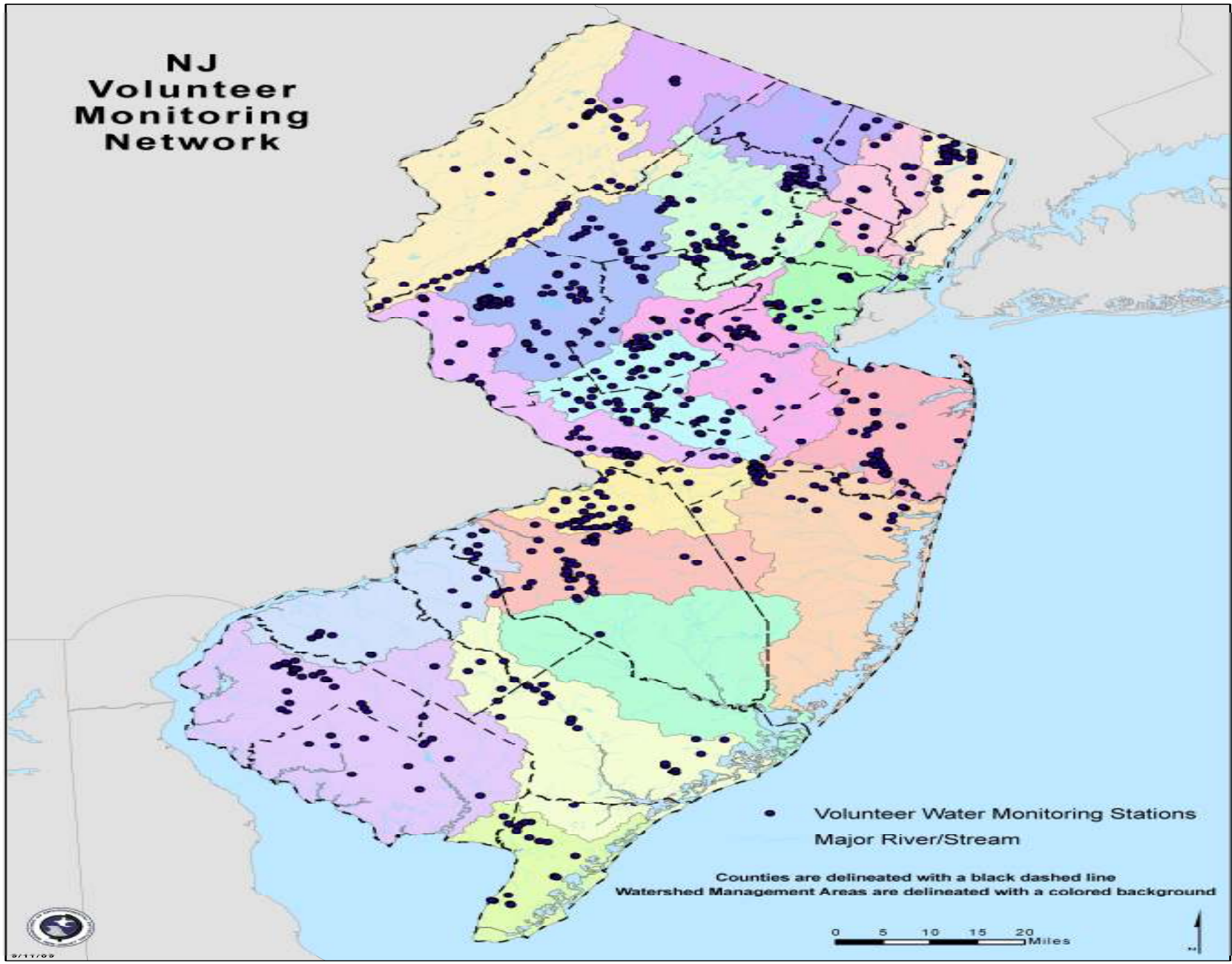


Sources of Data Used for the 2008 Draft Integrated Report

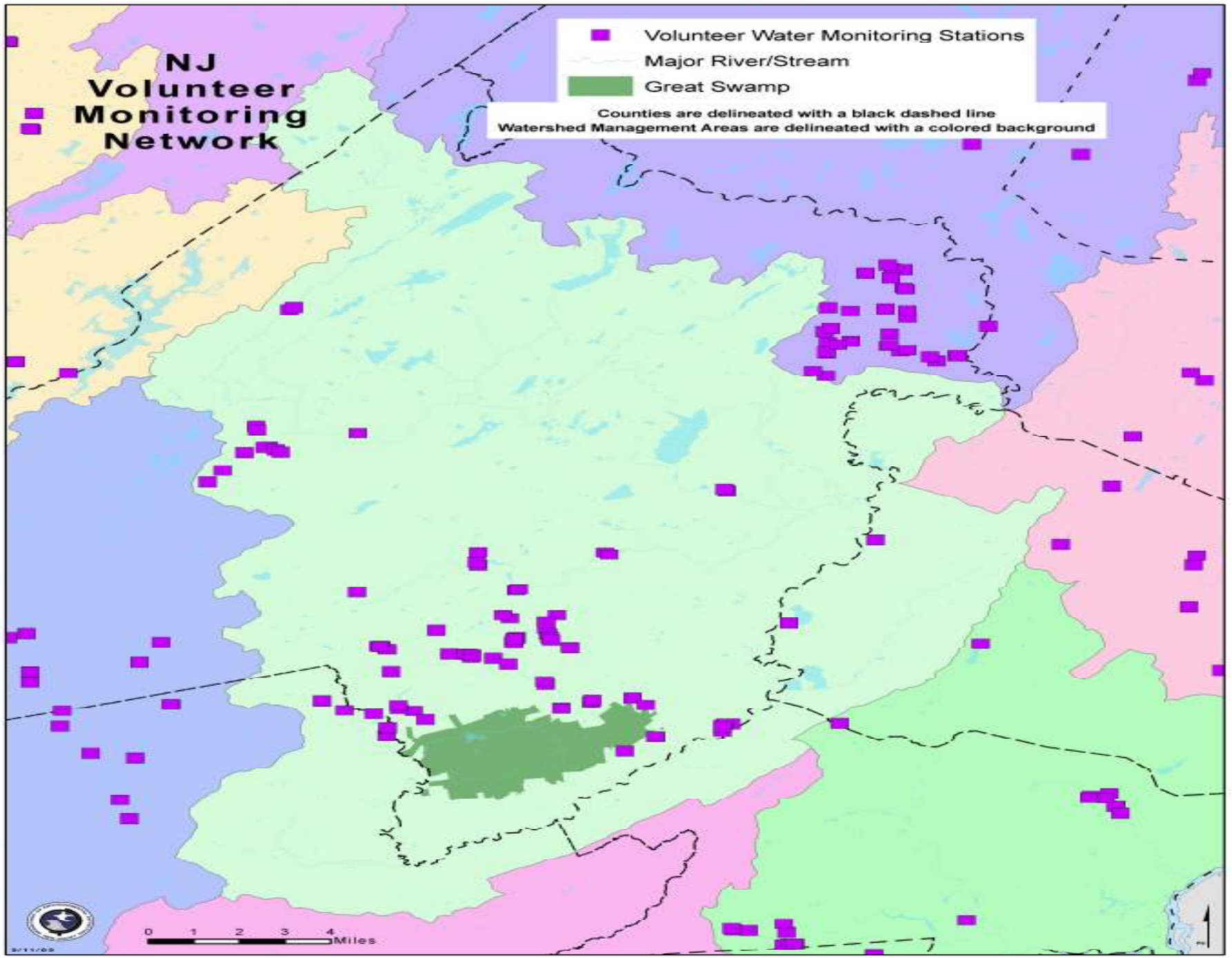
2008 Stations



NJ Volunteer Monitoring Network



07/17/09



Water Related Volunteer Efforts

- Great Swamp Watershed Association
- Hackensack Riverkeeper Inc
- Upper Raritan Watershed Association
- Musconetcong Watershed Association
- South Branch Watershed Association
- Trout Unlimited

Pequannock River

- Pequannock River Coalition
 - Greenway Grows
- River Trails
 - Pequannock River
 - Ramapo River
 - Pompton River





A photograph of a riverbank heavily littered with discarded tires and other debris. The water is murky and greenish-brown. The bank is composed of dark, muddy soil and scattered rocks. In the background, there is a line of green grass. The text "River Clean up Restorations" is overlaid in white on the left side of the image.

River Clean up Restorations



World Water Monitoring Day

Goal of the Project...

*one million people monitoring
in 100 countries by 2012*

- Nearly 15,000 WWMD monitoring kits in 2008
- submit data by Dec 18 to be a part of the study



The Great North American Secchi Dip-In

- **“Snapshot” of transparency in North America**
- **Uniform time span (~2-3 Weeks) in June/July**
- **Same basic method**
- **Trained volunteers**
- **Same person gathering the data, often year after year**



This is Volunteer Monitoring



Robert Carlson, Kent University

CoCoRaHS

Community Collaborative Rain, Hail, Snow Network



The Great Sunflower Project



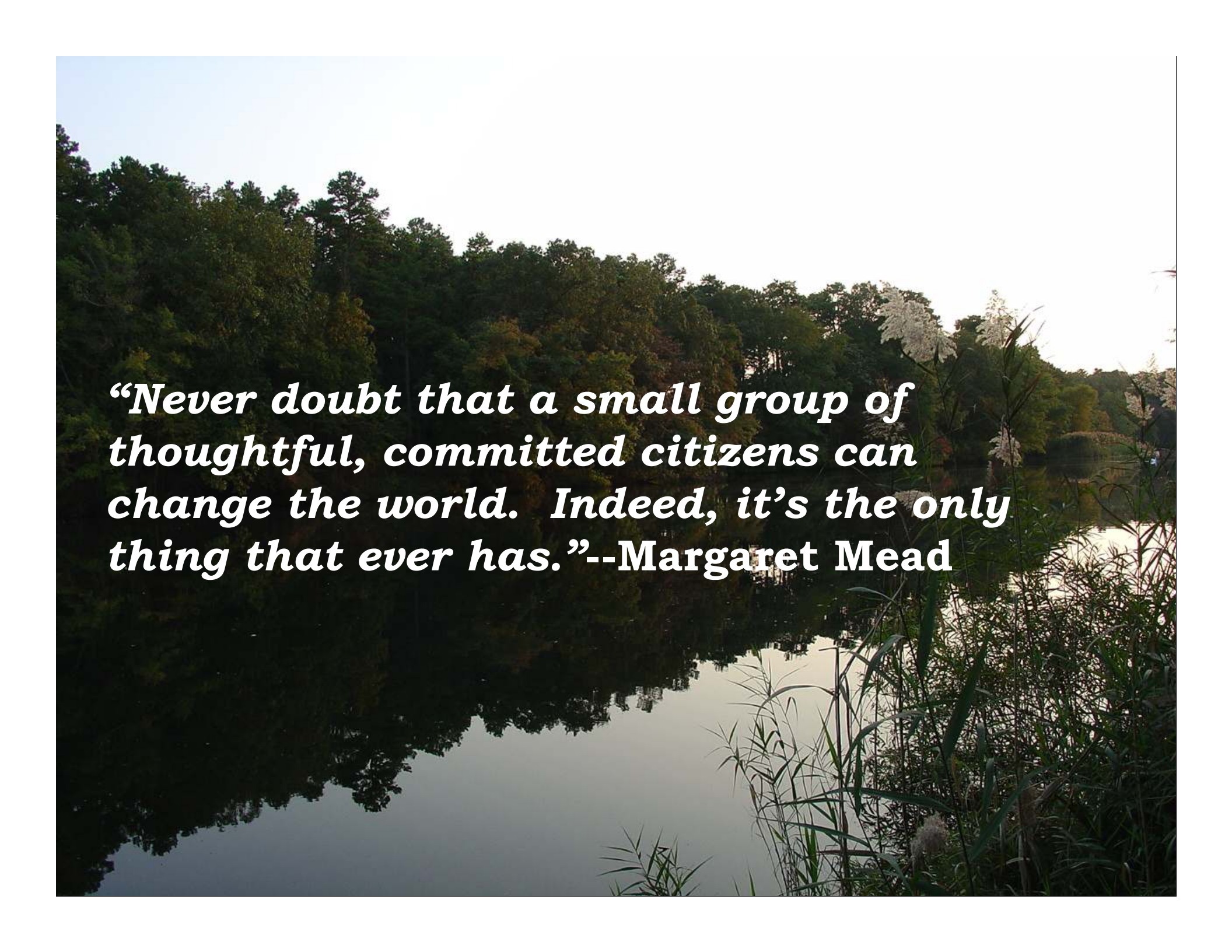
Looking to Volunteer

- National Volunteer Database
 - www.nationalservice.gov

- NJ Volunteer Database
 - www.state.nj.us/state/volunteer

Upcoming Efforts and Events

- World Water Monitoring Day
 - Sept 18-Oct18
- Water Monitoring and Watershed Education Summit
 - Nov 18-19



“Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed, it’s the only thing that ever has.”--Margaret Mead