

New Jersey's Approach to Using Volunteer Monitoring Data

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Summary

- Changing the stereotypes of volunteer collected data
- Partnerships
- Assessing your data users needs
- Assessing needs of volunteers
- Future Efforts

Myths of Using Volunteer Collected Data

A background photograph showing a riverbank with tall reeds and several people. One person in the foreground is wearing a dark jacket and looking towards the water. Another person is visible further down the bank, and a third person is partially visible on the right. The scene is outdoors and appears to be a natural setting.

- Quality Assurance and Quality Control
- Volunteers have “hidden agendas”
- Volunteers are not scientists

Reality of Using Volunteer Collected Data

- We need more data at a higher frequency of collection
- EPA has encouraged use of volunteer collected data
- Volunteers want to do it right

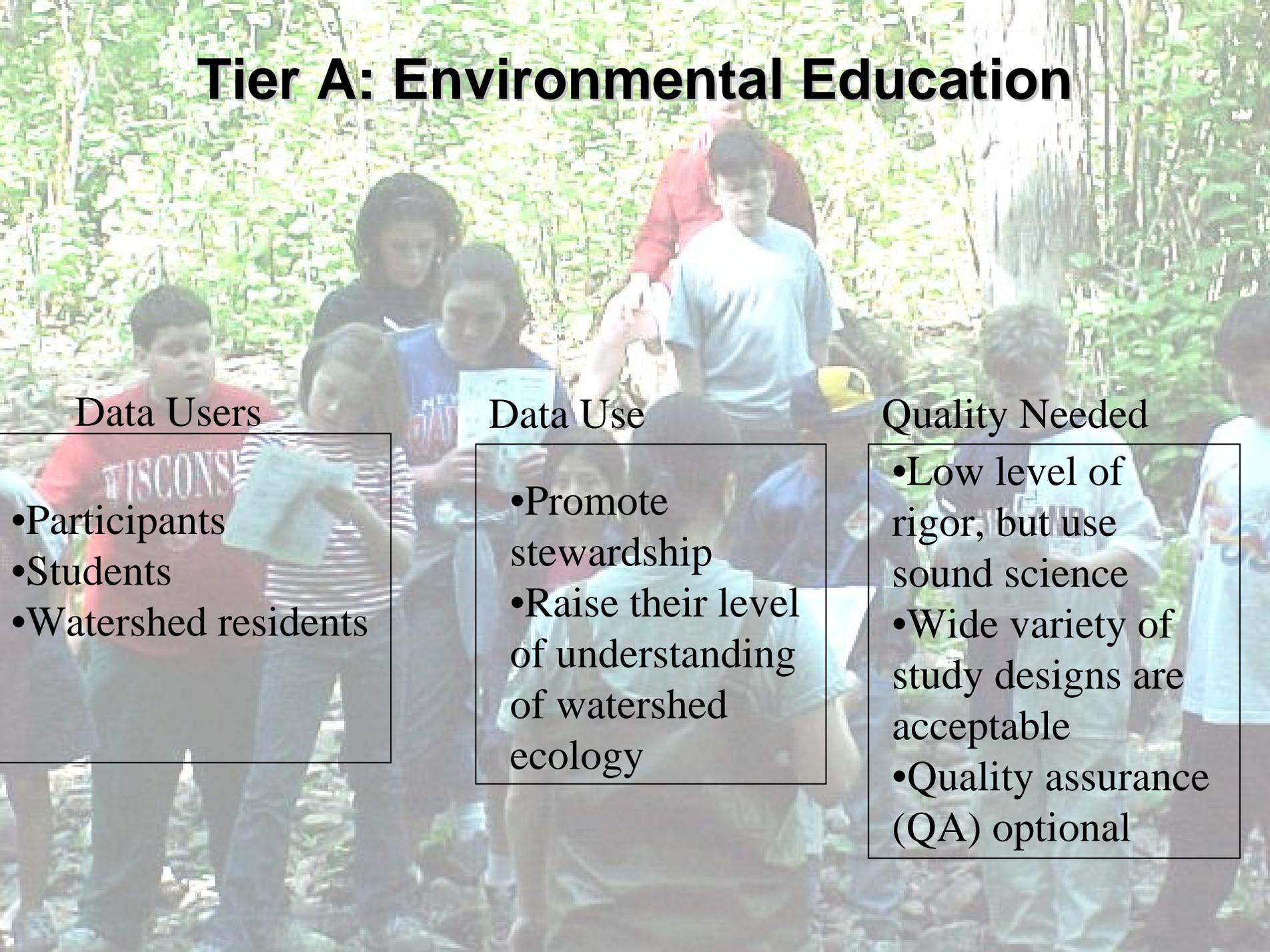
The Tiered Approach

- Allows for volunteers to pick their level of monitoring involvement based on:
 - Intended purpose for monitoring
 - Intended data use
 - Intended data users

Options for Involvement

- Tier A: Environmental Education
- Tier B: Stewardship
- Tier C: Community Assessment
- Tier D: Indicators/Regulatory Response

Tier A: Environmental Education



Data Users

- Participants
- Students
- Watershed residents

Data Use

- Promote stewardship
- Raise their level of understanding of watershed ecology

Quality Needed

- Low level of rigor, but use sound science
- Wide variety of study designs are acceptable
- Quality assurance (QA) optional

Tier B: Stewardship

Data User

- Participants
 - Watershed residents
 - Landowners
- Local decision makers (optional)

Data Use

- Understanding of existing conditions and how any changes over time
- Screen for and identify problems and positive attributes

Quality Needed

- Low to medium rigor
- Variety of study designs is acceptable
- Training Formal/Informal
- Internal QAPP recommended

Tier C: Community &/or Watershed Assessment

Quality Needed

Data Users

- Local decision-makers
- Watershed association
- Environmental organizations
- Possibly DEP

Data Use

- Assess current conditions
- Track trends
- Source track down of Nonpoint source pollution

- Medium/high level of rigor
- Data needs to reliably detect changes over time & space
- QAPP approved & on file w/ intended data user.
- Training required

Tier D: Indicators & Regulatory Response

Data Users

- NJDEP
- Local decision-makers
- Watershed associations
- Environmental organizations

Data Use

- Assess current conditions and impairments
- Supplement agency data collection
- Research
- Evaluate best management practices (BMP) measures

Quality Needed

- High level of rigor
- Study design & methods need to be equivalent & recognized by agencies using data
- Training required
- QAPP approved by Office of Quality Assurance & data user, annual recertification
- Possible audit

Internal Advisory Committee

- Fresh Water and Biological Monitoring
- Division of Science and Research
- Division of Watershed Mgt.
 - TMDL team
 - 319 team
 - NPS team
 - Watershed Area Managers
- Office of Quality Assurance

Watershed Watch Network Advisory Council

- **NGO, Volunteer Monitoring Program Coordinators**
- **Office of Quality Assurance**
- **Bureau of Fresh Water and Biological Monitoring**
- **Meadowlands Environmental Research Ins.**
- **Rutgers Co-op Extension**
- **Delaware River Basis Commission**
- **EPA Region 2**
- **Others as needed**

NJDEP Data Users

- **Watershed Area Managers**
- **Water Assessment Team**
- **Modeling Team**
- **NPS Program**
- **319 Program**
- **TMDL Program**
- **Other Programs or Divisions within the DEP in need of data**

Potential Data Uses

- **Education**
- **Problem Identification**
- **Local Decisions**
- **Research**
- **NPS Assessment**
- **Regulatory Response**
- **Watershed Planning/Open Space acquisition**
- **Identification of “action now” projects**
- **Monitoring the success/failure of restoration projects**

Addressing Data Quality Issues

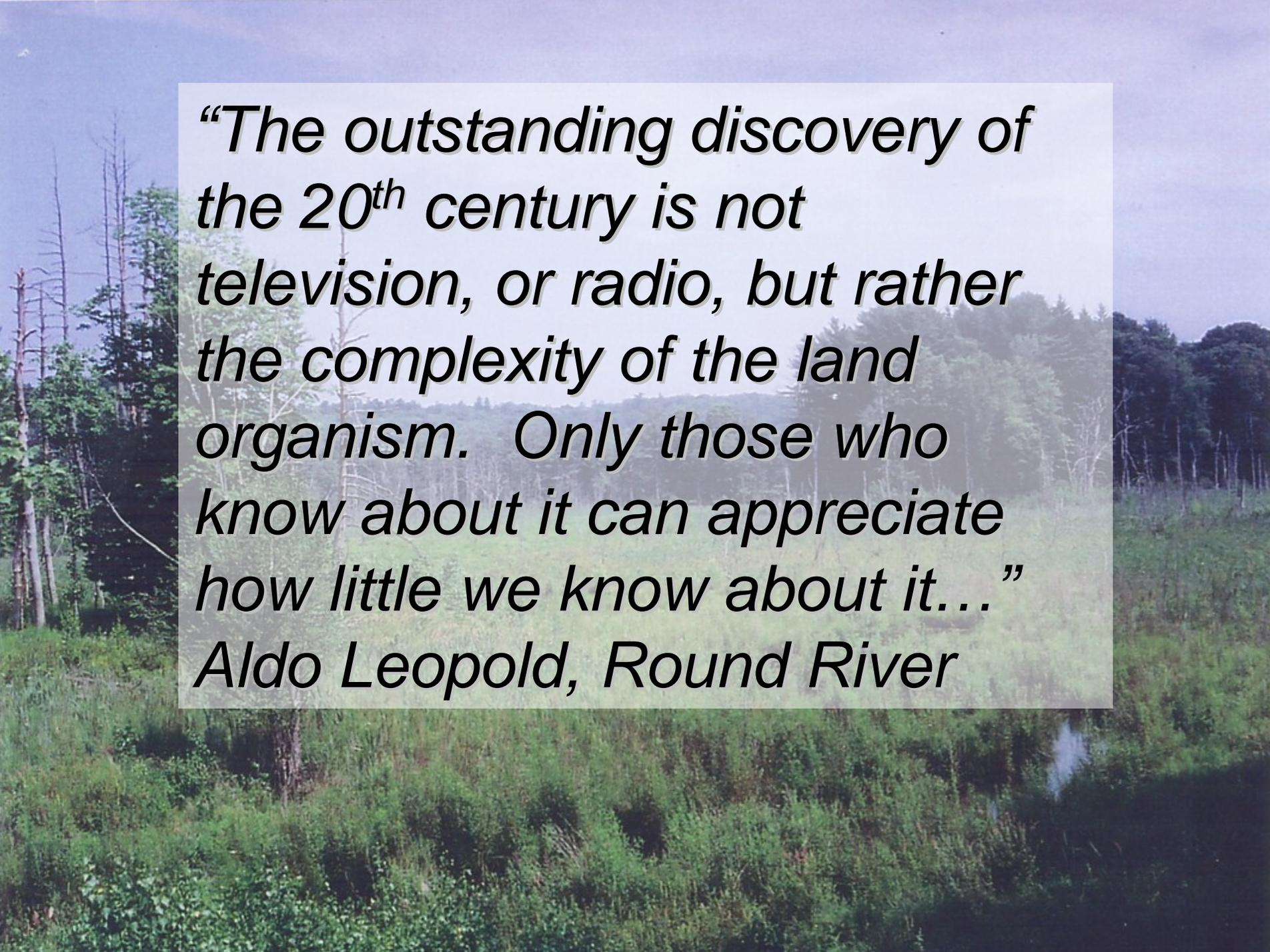
- **Quality Assurance criteria for each Tier**
- **Coordinator & data users review the QAPP or study design of the monitoring group**
- **Program specific training and support**
- **Communication, communication, communication**

Next Steps

- The Tiers are a Living Document
 - Individual Volunteer Monitoring Programs will be assigned to each Tier
 - Data users will be assigned to each Tier
 - Criteria for data submission will be defined for each Tier

Next Steps

- Service Provider Network
 - Trainings and Workshops will be hosted throughout the State for groups and associations.
- *Individual attention* will be given to groups that would like to gear up to be classified in a Tier.

A scenic landscape featuring a river in the foreground, a dense forest of tall trees in the middle ground, and a grassy hillside in the background. The sky is a clear, pale blue. The text is overlaid on a semi-transparent white box in the center of the image.

“The outstanding discovery of the 20th century is not television, or radio, but rather the complexity of the land organism. Only those who know about it can appreciate how little we know about it...”
Aldo Leopold, Round River