

So, You Want to Start a Monitoring Program?

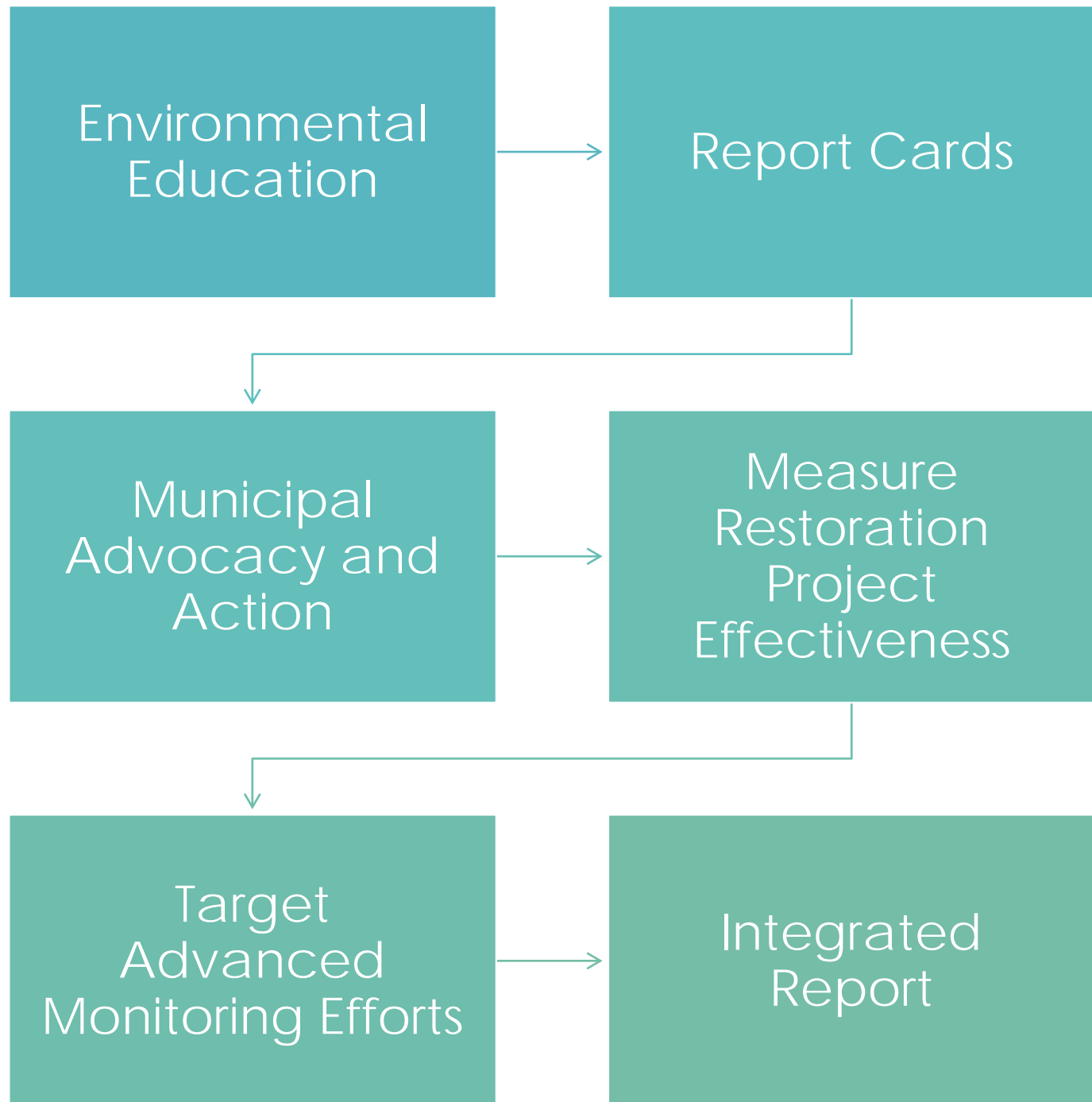
Erin Stretz

New Jersey Watershed Watch Network

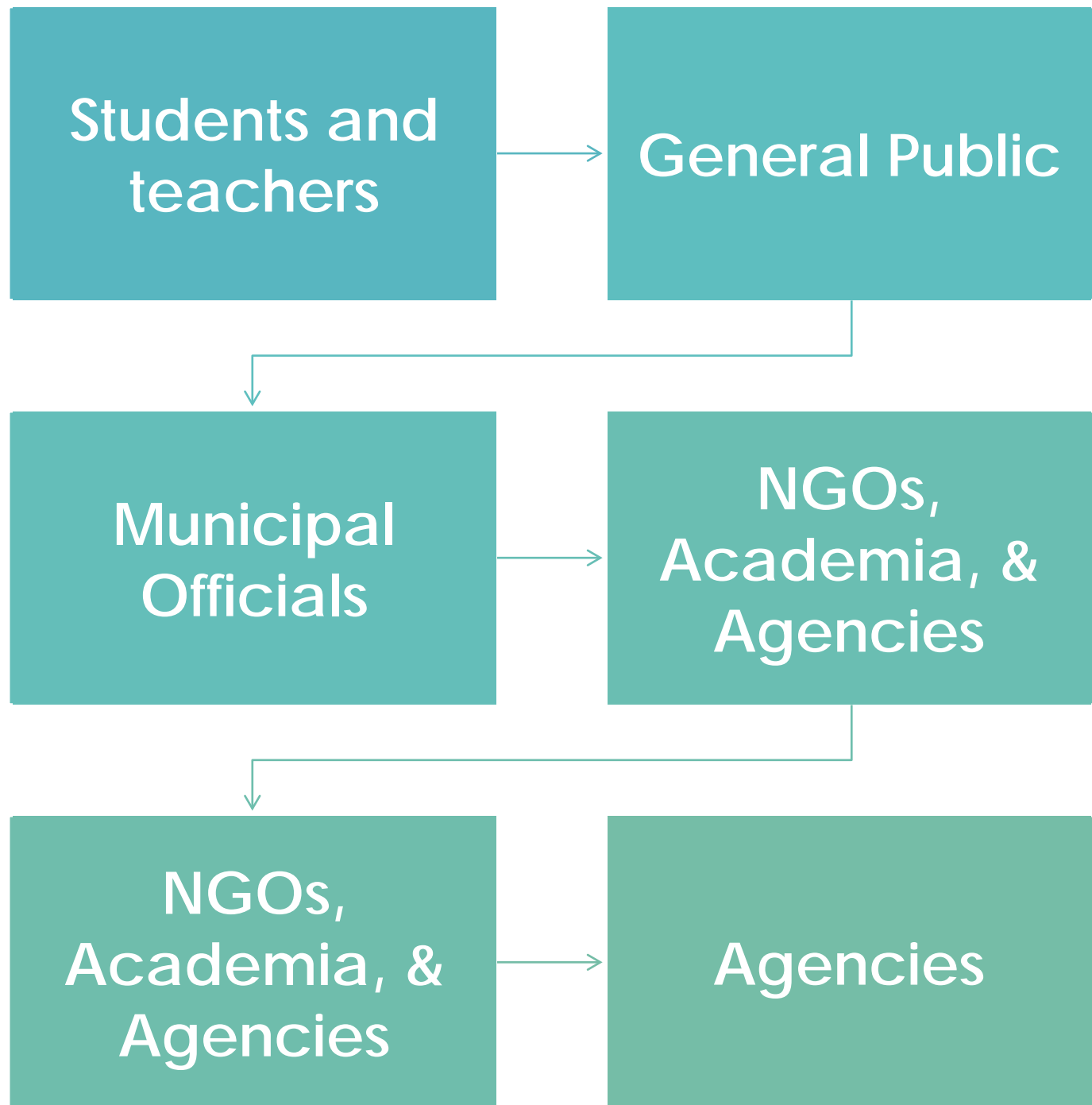
The Watershed Institute



Reasons to Start Monitoring



Who Uses This Data



New Jersey Data Quality Tiers for Community Monitoring Groups



Tier 1
Educational

Tier 2
Targeting

Tier 3
Regulatory

Data Quality Tier One



Requirements:

- Study Design with defined methods, locations, and timeframe

Data Quality Tier Two



Requirements:

- Quality Assurance Project Plan using standard methods, approved by data user

Data Quality Tier Three



Requirements:

- Quality Assurance Project Plan approved by NJDEP, EPA, or USGS
- Certified lab for chemical and microbiological analyses
- Use of NJ-WWN macroinvertebrate method

NJ Macroinvertebrate Collection Methods

	Method 3.1 <i>Good</i>	Method 3.2 <i>Better</i>	Method 3.3 <i>Best</i>
Volunteer Training	Middle	Most	Least
Volunteer Time Commitment	2-4 hours in field	1-2 hours in field 3-4 hours in lab	1-2 hours in field
Equipment Needed	Sampling supplies	Sampling supplies Ethanol Microscope and other lab supplies	Sampling supplies Ethanol ~\$150-250 lab fees per sample

NJ Macroinvertebrate Data Quality Requirements IF YOU WANT YOUR DATA USED BY NJDEP

	Method 3.1 <i>Good</i>	Method 3.2 <i>Better</i>	Method 3.3 <i>Best</i>
How do we know volunteers know how to sample?	Field Audits	Field Audits	Field Audits
How do we know volunteers know how to identify macroinvertebrates?	ID Testing to Order/Family Level, 90% pass required	ID Testing to Family Level, 90% pass required	Not needed

Macroinvertebrate & Habitat Assessments



A Good Starting Point!

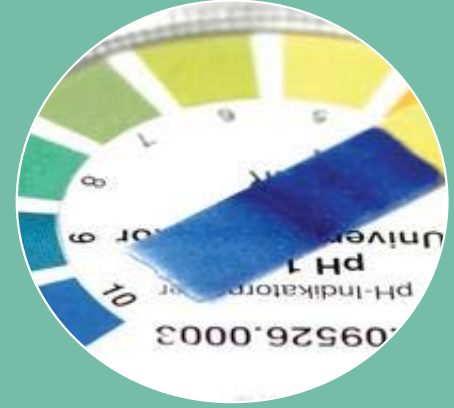
Biological Assessments Bring it all Together



Visual/Physical



Biological



Chemical/
Bacterial



Tier 2 vs Tier 3

Tier 2

- Project-specific monitoring
- Water quality report cards
- BMP effectiveness monitoring
- Targeting installation of BMPs
- Targeting advanced monitoring
- NJDEP Comprehensive Regional Assessments

Tier 3

- All Tier 2 Uses
- Regulatory assessments of water quality standard attainment

QAPPs are required for both tiers, but additional quality assurance measures are typically required for Tier 3 / NJDEP-approved QAPPs

NJ Watershed Watch Network Can Help



NEW JERSEY
WATERSHED WATCH
NETWORK

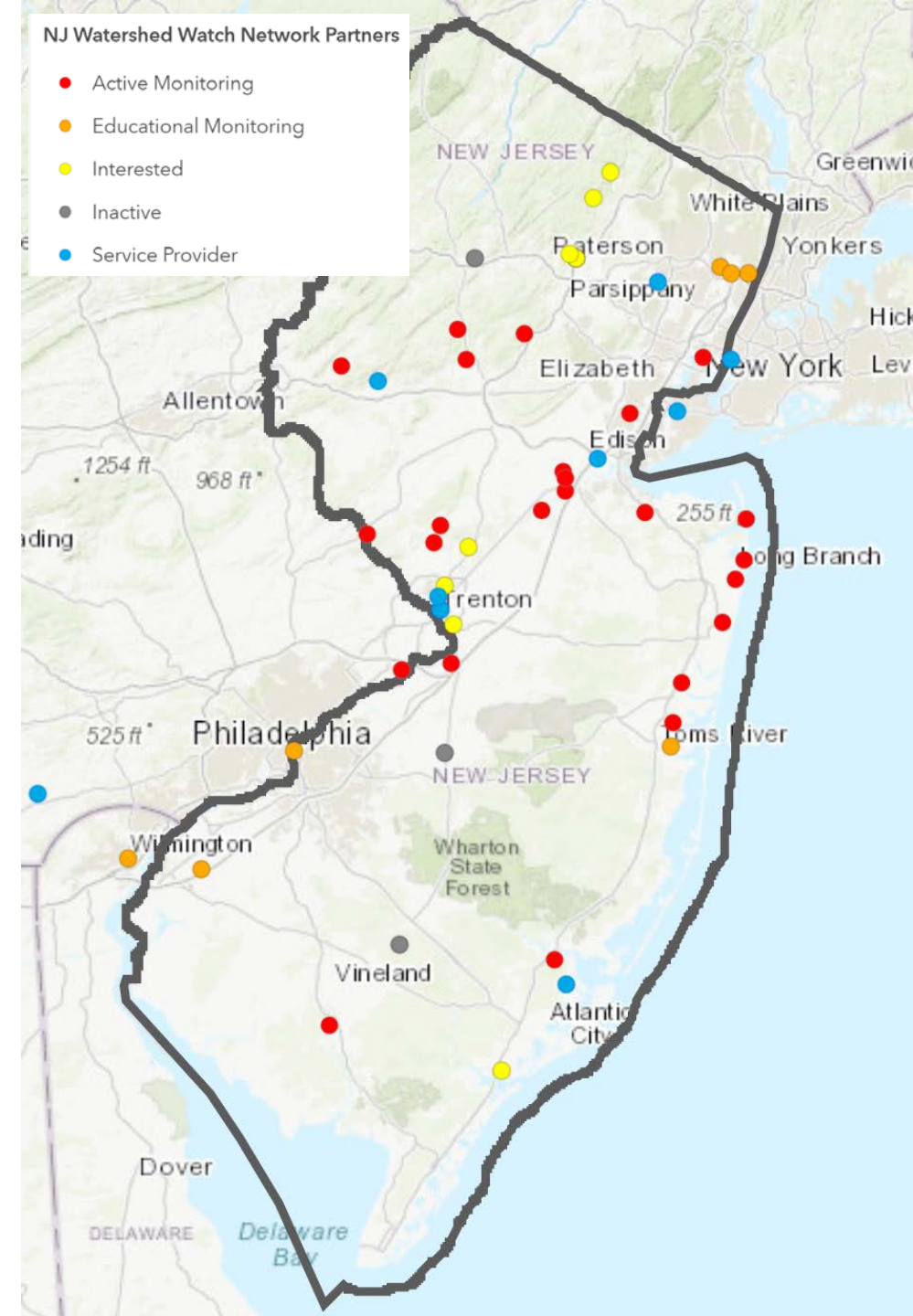


NJ Watershed Watch Network Can Help

- Staff and Volunteer training
- Study design and Quality Assurance
Project Plan development
- Equipment loans
- Small grant funding at The Watershed
Institute

Current NJ Monitoring Network

- 49 Network Participants
 - 31 Active Monitors
 - 8 Interested
 - 10 Service Providers
 - NJDEP
 - BFBM, BEARS, BMWWM, OQA, Americorps Watershed Ambassadors
 - EPA Region 2
 - Interstate Environmental Commission
 - NY/NJ Harbor and Estuary Program
 - Montclair State University: NJ Center for Water Science and Technology
 - Stroud Water Research Center



What do you need to start monitoring?

- Organizational lead
- Volunteers
- Training plan
- List of monitoring sites
- Site reconnaissance and access permission, if needed
- Monitoring equipment
- Study design

Stream School

- 2 day intensive training session for new volunteers
- Streamside sorting and identification to Order/Family (Tier 3.1)
- Habitat/Physical assessment, based on EPA Rapid Bioassessment Protocols
- **NEXT WORKSHOP IN THE SPRING:**
Will you join us?

So, what are you waiting for?

Erin Stretz

estretz@thewatershed.org

njwatershedwatch.org

