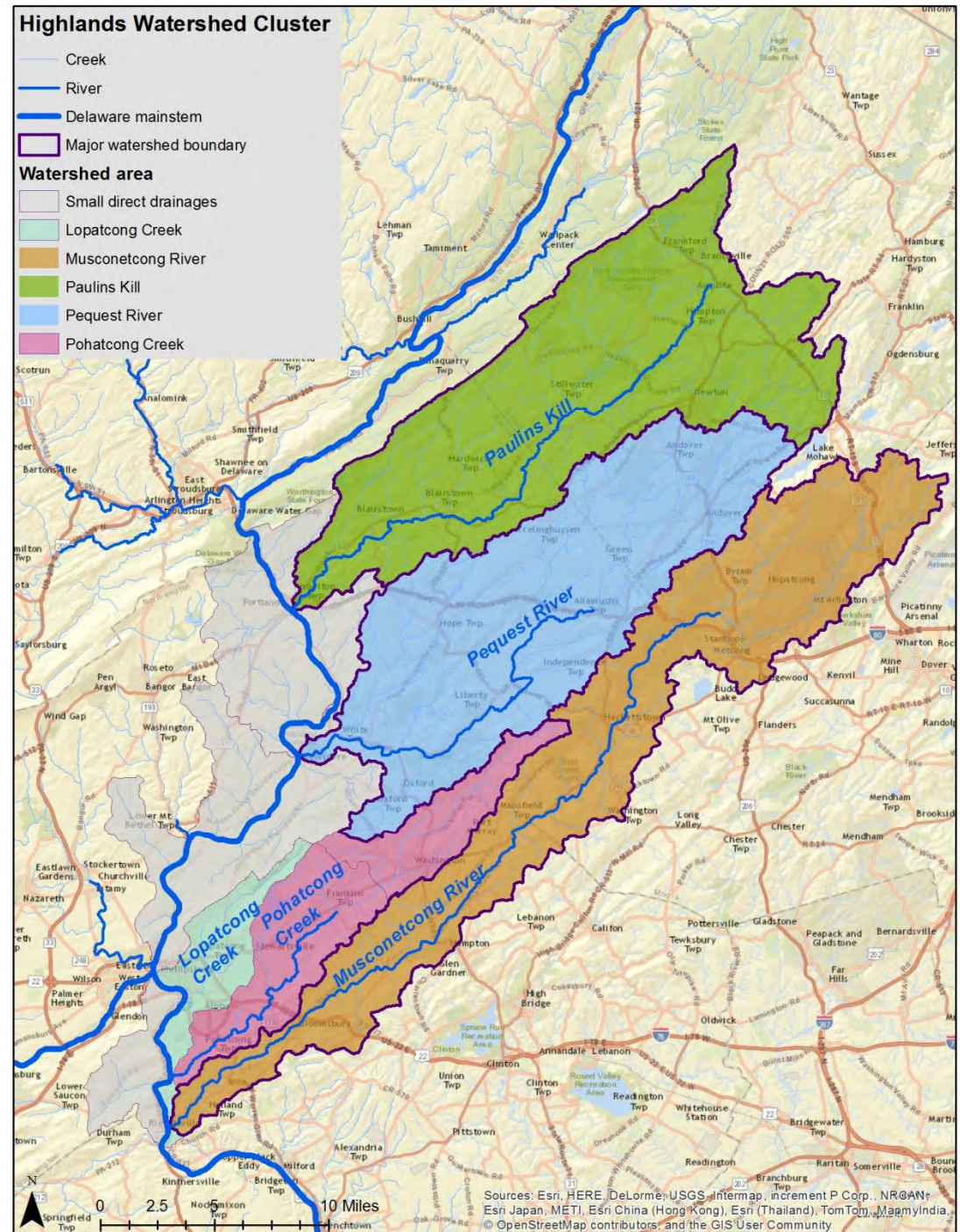


# NJ Highlands Watershed Cluster

- 5 watersheds
- Highlands,  
Ridge & Valley





## Significant resources

- Drinking water for 5.4 million
- Diverse Ecosystems
- Recreation
- Highlands Act protection

# Key Threats to Habitat & Water Quality



Deforested riparian corridor

- Lack of natural riparian habitat
- Loss of forested headwaters

- Phosphorus
- Fecal coliform/E. coli
- Water temperature



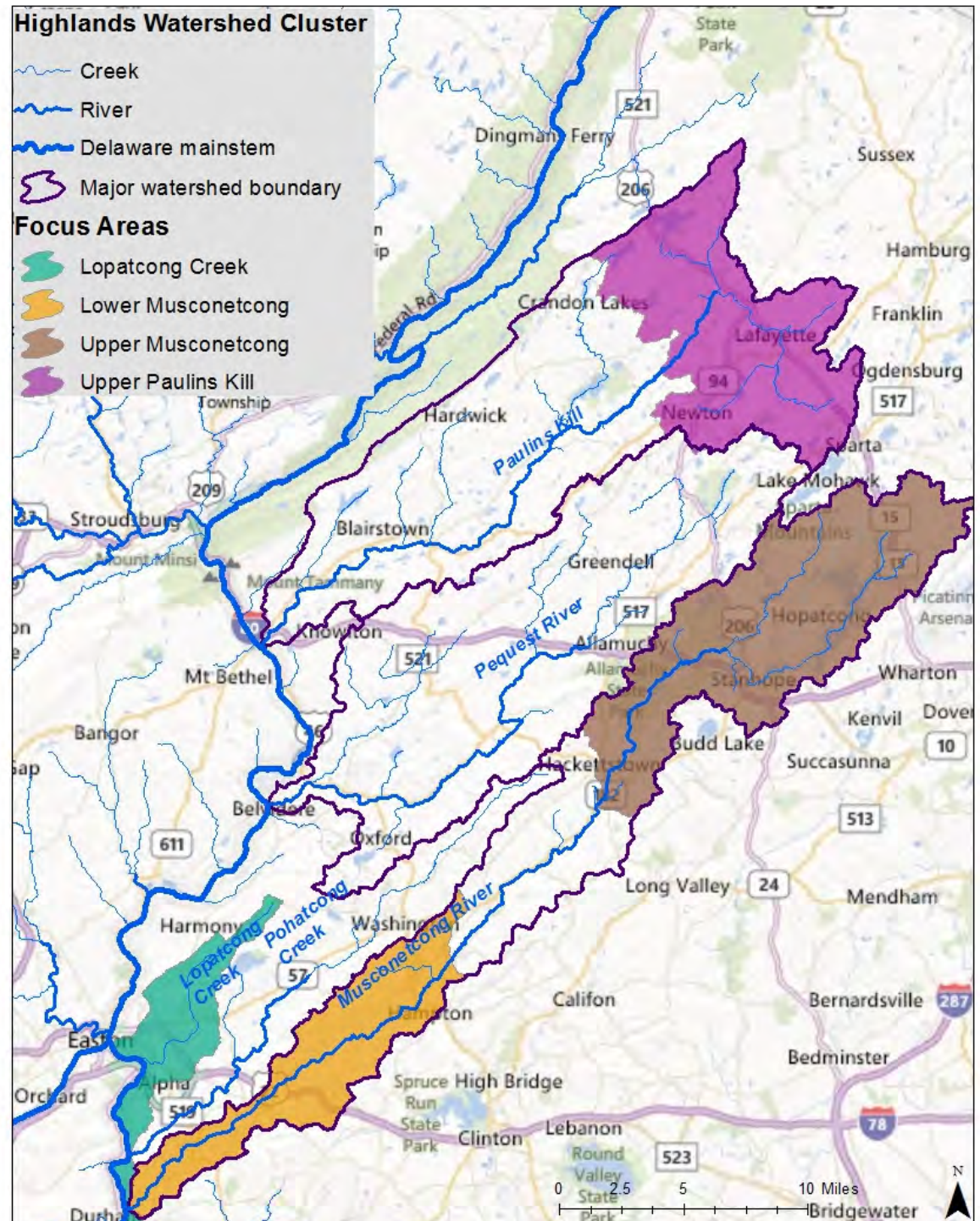
Manure source near a C1 Stream

## Significant effort: many groups participating

- Association of New Jersey Environmental Commissions
- Hunterdon Land Trust
- Musconetcong Watershed Association
- New Jersey Audubon Society
- New Jersey Conservation Foundation
- New Jersey Highlands Coalition
- North Jersey RC&D
- The Land Conservancy of New Jersey
- The Nature Conservancy
- Trout Unlimited
- Trust for Public Lands
- Wallkill River Watershed Management Group



- 4 priority “focus areas”
- Opportunity/ threat
- Capacity & feasibility
- Sustainability / permanence
- Replicability & scalability



# Strategy Selection

- Potential to impact goals
- Feasibility
- Potential leverage & scalability

# Strategies

*Improving the science for restoration*



Erosion in the Lopatcong watershed



# Strategies

## *Land acquisition*

# Strategies

## *Floodplain and forest restoration & management*



# Strategies

## *Agricultural BMPs*



C1 trout production stream

# Strategies

## *Stormwater & septic management*



Upper Paulins Kill stormwater runoff

# Strategies

## *River-Friendly Communities Campaign*



# Strategies

## *River-Friendly Communities Campaign*

The screenshot shows the website for the Lopatcong Creek Initiative. At the top left is the William Penn Foundation logo. The main navigation bar includes links for HOME, ABOUT US, OUR PARTNERS, GALLERY, RIVER FRIENDLY?, GET INVOLVED, and CONTACT. A Facebook icon is in the top right. Below the navigation is a large green arrow pointing right with the text "SELECT IF YOU ARE". Underneath this are six categories with icons: FARMER (tractor), RESIDENT (house), BUSINESS (person), MUNICIPALITY (building), TEACHER (apple), and FISHERMAN (fish). The "RIVER FRIENDLY?" section is highlighted. It contains the following text:

### RIVER FRIENDLY?

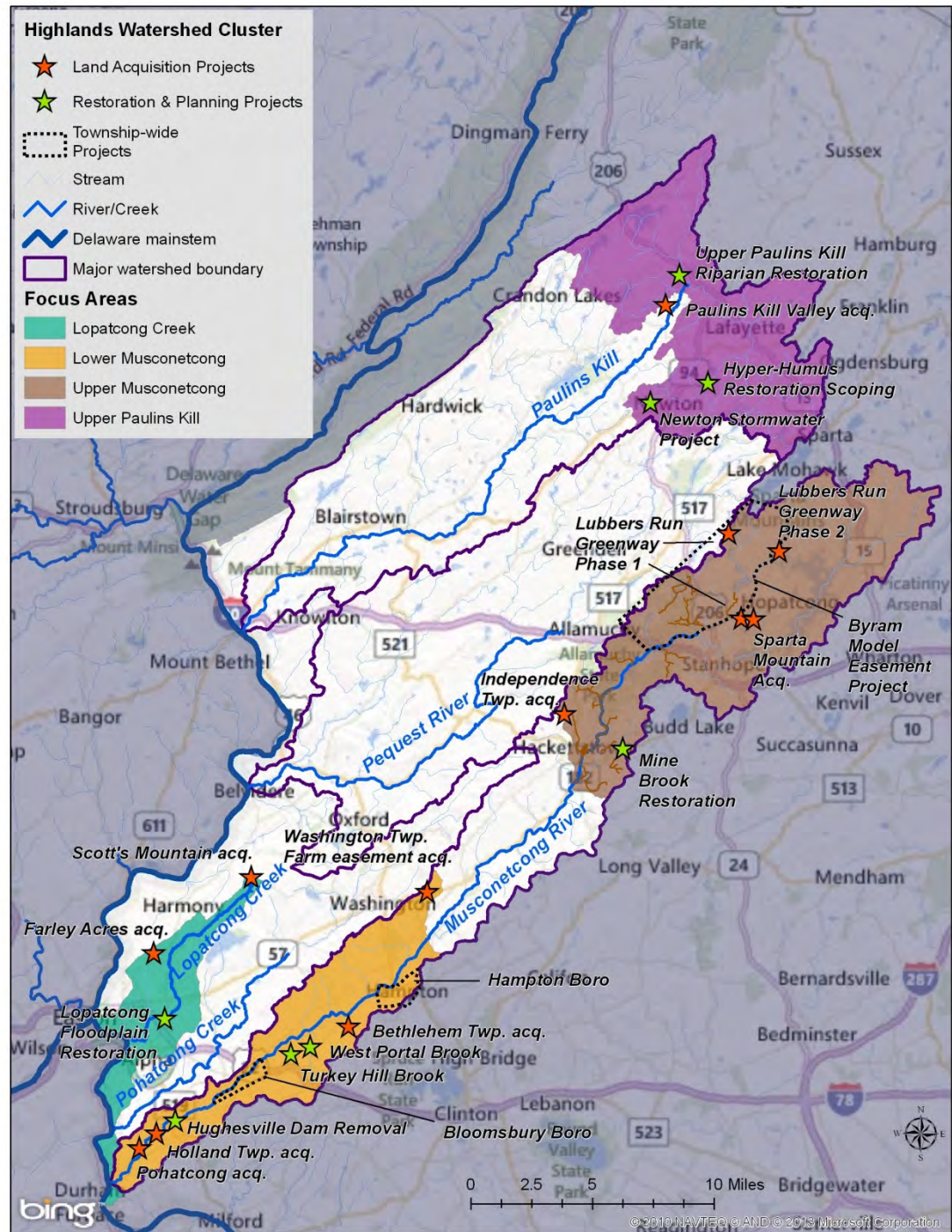
Are you a river-friendly resident? Nonpoint source pollution is a major contributor to the contamination of streams and rivers. It is the result of pollution carried by storm water into our drinking water.

No matter where you live, you live in a watershed, which is the area of land that drains into a common body of water. This means that many of the day-to-day choices you make directly impact on the greater community, good or bad.

Being river-friendly is often a matter of being aware of how our actions affect the water quality of Lopatcong Creek.

Here are some tips on the **small things** you can do to **make a big difference**:

- Over 30 projects proposed
- Over 20 projects underway






# Monitoring

- Water chemistry
  - pH
  - Temperature
  - DO
  - turbidity
- Biologic indicators
  - Macroinvertebrates
  - Freshwater mussels
  - Odonates





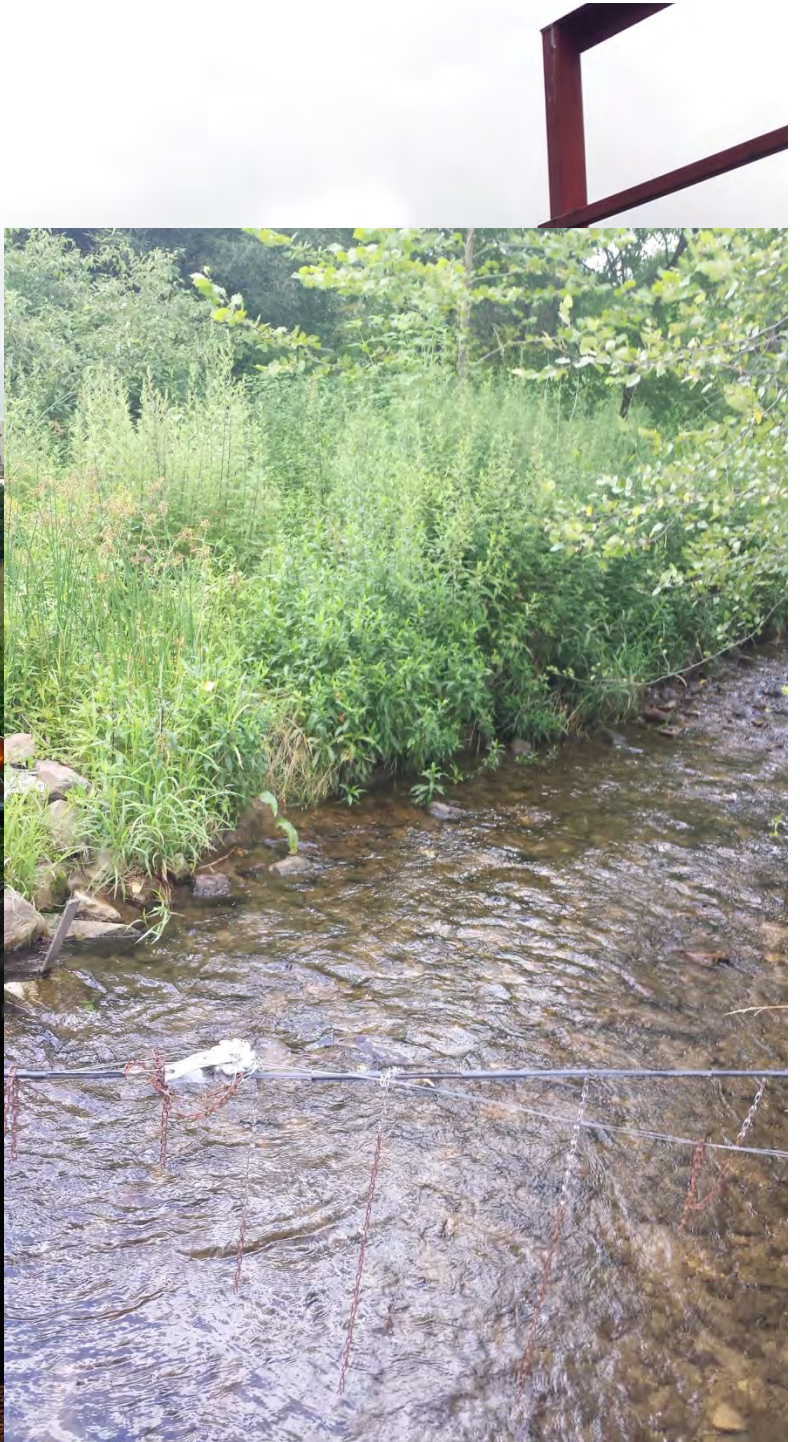
Cluster success:  
the long-term view

# Challenges



- Degree of change needed (pollutant reductions)
- Commitment from many landowners
- Many local government entities
- Lack of state funding for land protection
- Committing to shared investments and strategic collaboration





# Opportunity

- Highlands Act
- Strong governmental investment
- Lots of non-profit partners
- Momentum from recent successes
- On the ground opportunities to implement complementary strategies

# Success

- Intact headwaters and riparian corridors
- Nutrients and bacteria decreasing
- Ability to prioritize action based on pollutant 'hotspots' = high return
- A more educated and engaged citizenry
- Sharing lessons learned will lead to higher project efficiency and effectiveness
- Models that can be replicated basin-wide

