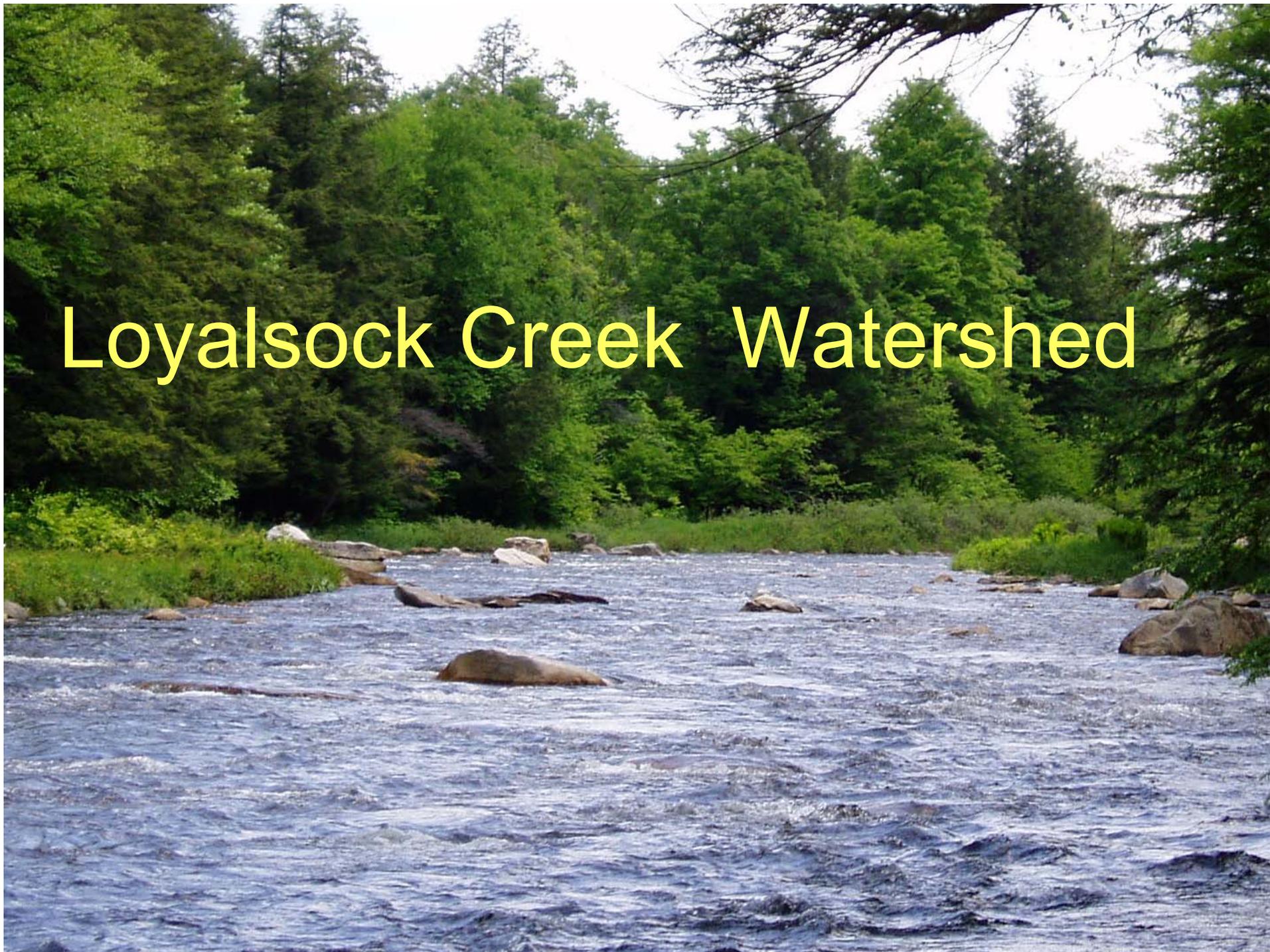


Loyalsock Creek Watershed





**Presented by: Jim Rogers, Theresa Black,
Don Muraco, and Todd Hillegas**

Overview of the Project

- Purpose
- How sites were evaluated
- What was found
- Tributaries
- Conclusion
- Acknowledgements

Purpose

- The study was to identify and document the overall physical health of the Loyalsock Creek Watershed and its major tributaries such as:
 - Elk Creek
 - Hoagland branch of Elk Creek
 - Little Loyalsock
 - Lopez Creek
 - Mill Creek (Montoursville)
 - Mill Creek (Warrensville)
 - Ogdonia Creek
 - Plunketts Creek
 - Wallis Run

Physical Assessment

- Identify:
 - Erosion concerns
 - Land and gravel bars
 - Locations of bridges, roads and dams
 - Riparian evaluation
 - Invasive plant species identification

Site Evaluation

- High bank angle
- High bank height
- High root density
- High particle size



Site Evaluation



- Moderate bank height
- Moderate bank angle
- High density of roots
- Moderate particle size

Site Evaluation

- Low bank height
- High bank angle
- High density of roots
- Moderate particle size



Additional Evaluations

- Soil texture
 - Clay, Sand, or Loam
- Stream alignment
 - Straight, Moderate, or Sharply Curved
- Vegetation
 - Weeds, Trees, or Crops
- Stream Gradient
 - No riffles, balance of riffles and pools, & mostly riffles
- Adjacent land usage

Tour of the Upper Loyalsock





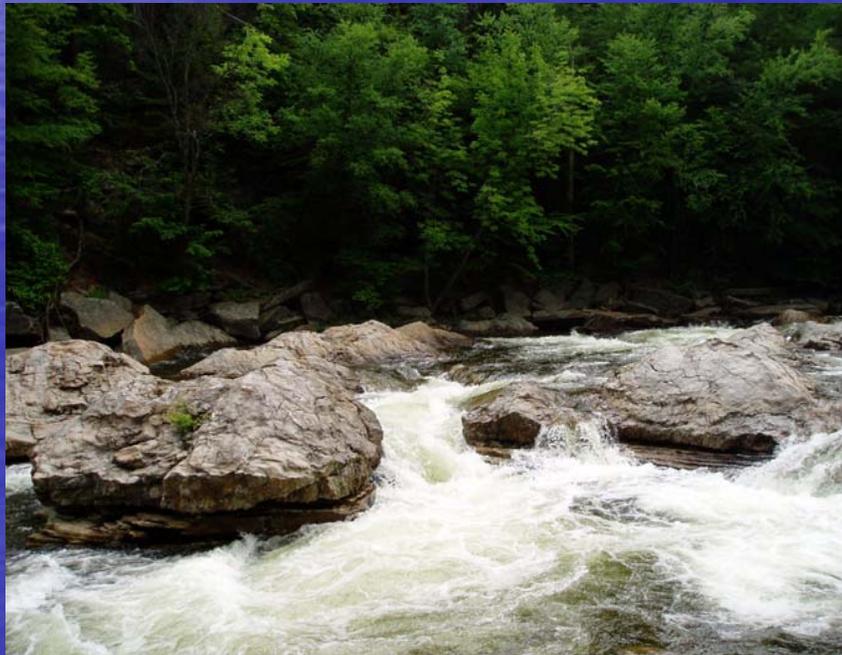
























The Lower Loyalsock

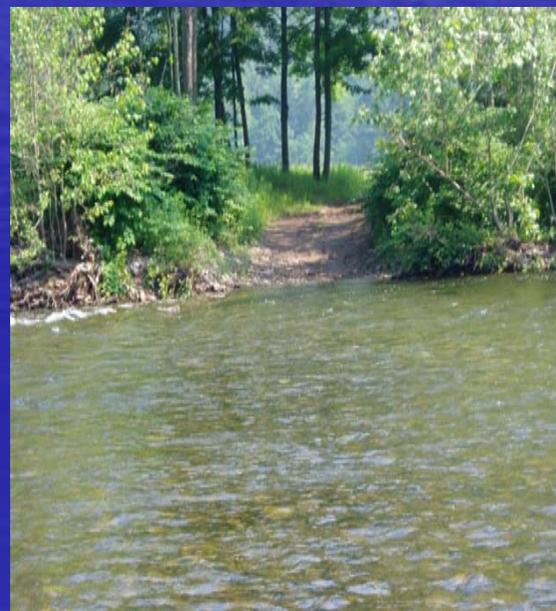
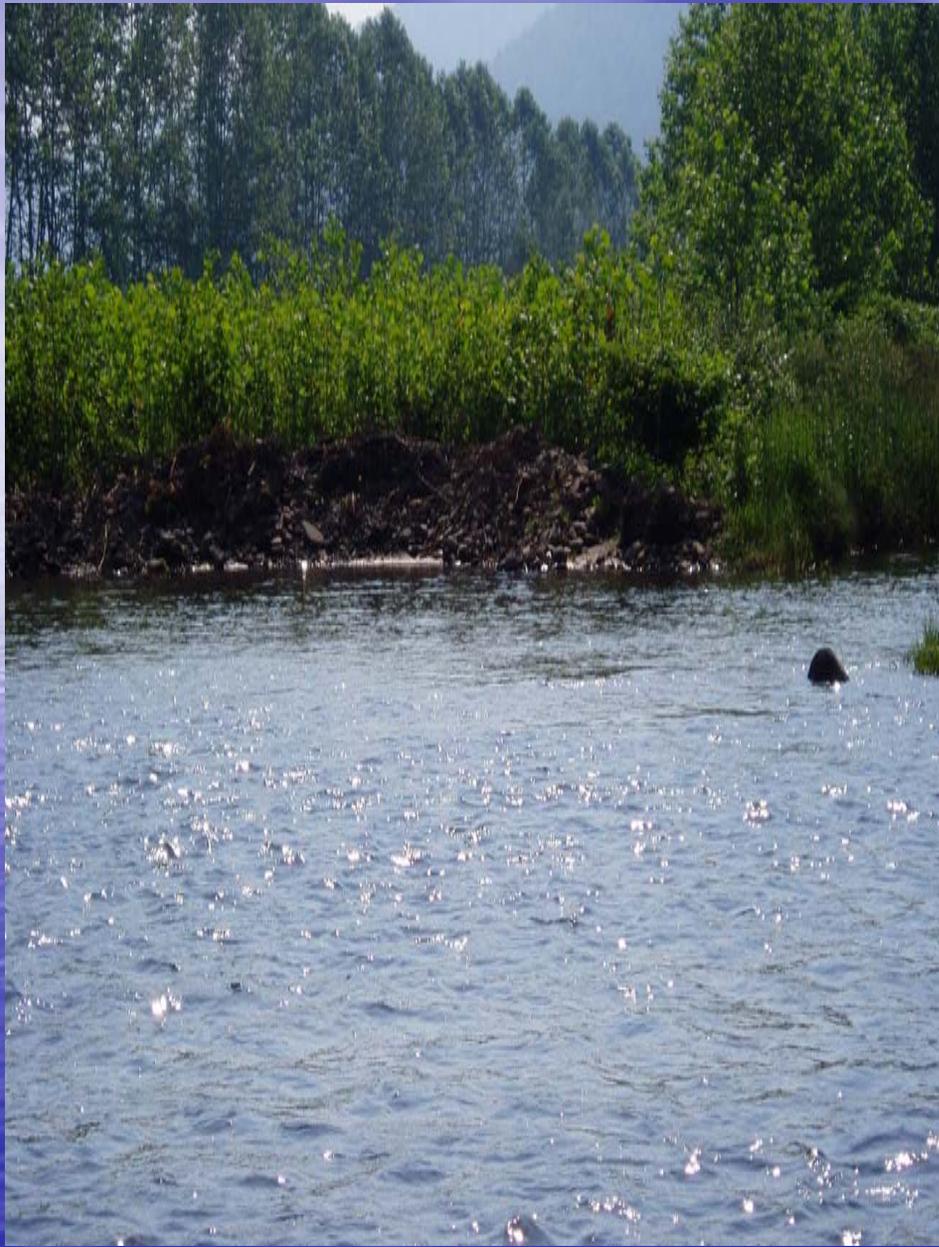


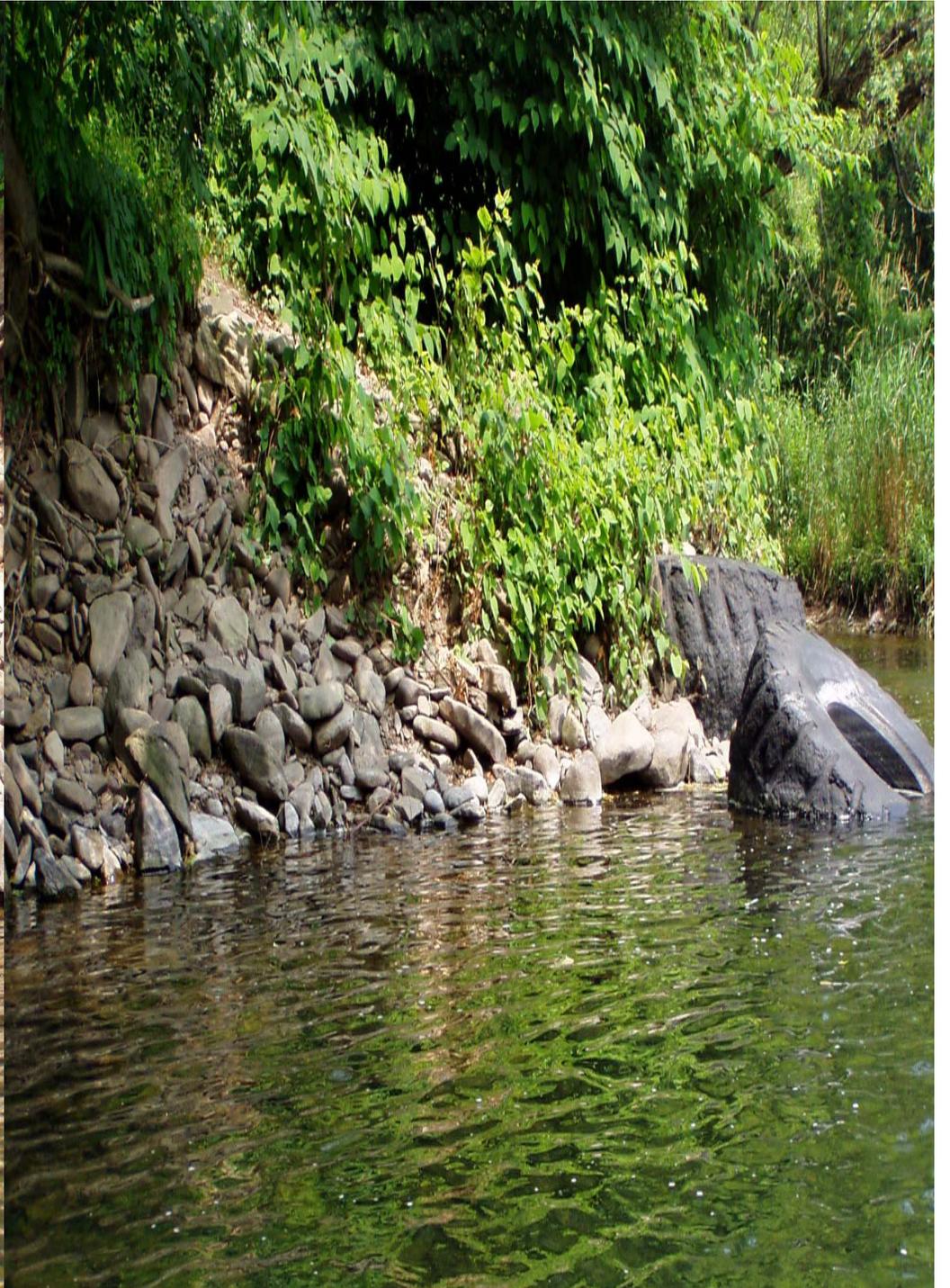






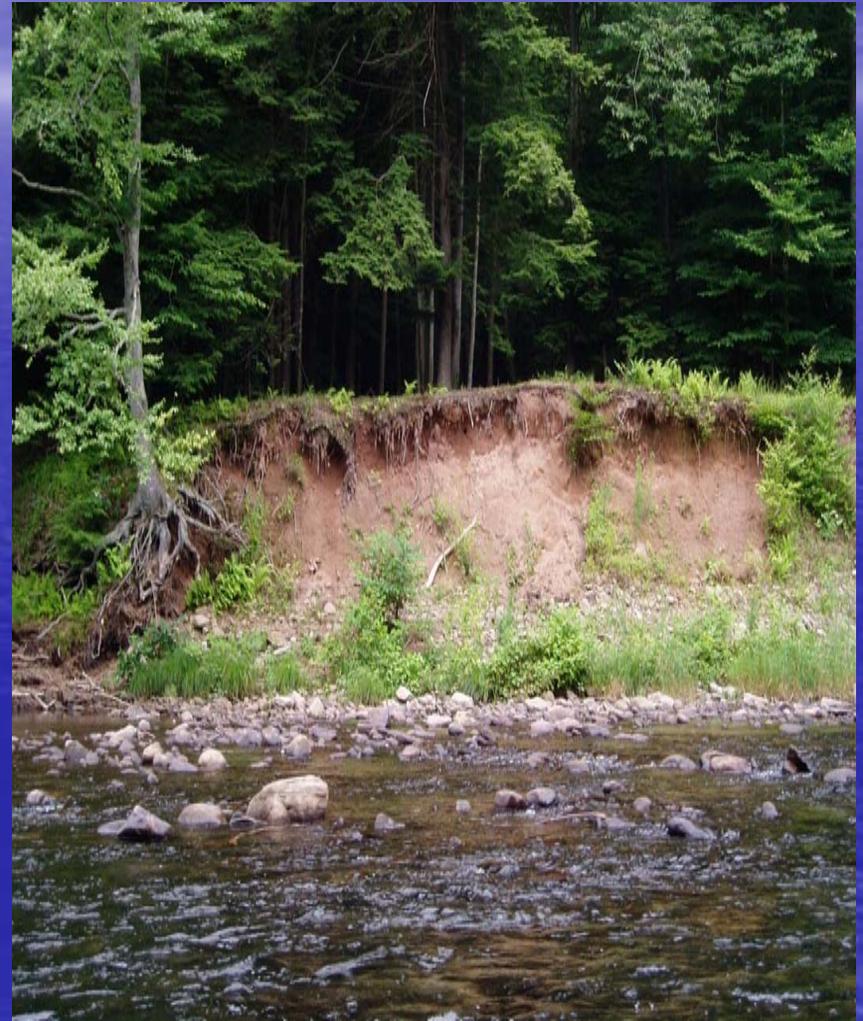






Before and After Rip Rap





Where's My Steps?









Pipe Line



Hellbender



Loyalsock Sewer Line





Tributaries

- Elk Creek
- Hoagland branch of Elk Creek
- Little Loyalsock
- Lopez Creek
- Mill Creek (Montoursville)
- Mill Creek (Warrensville)
- Ogdonia Creek
- Plunketts Creek
- Wallis Run

Jim and Theresa's Adventure on Lopez Creek



Hoagland Branch and Elk Creek

- Pumps along the Creek
- Bedrock formations within the Stream controlled water flow and limited erosion
- The majority of the stream flowed through forested areas which provided the stream with a substantial buffer

Ogdonia Creek

- HIGH erosion potential
- Bedrock formations within the stream
- Heavily rip-rapped along Girl Scout Camp
- Stream runs dry where it meets the Loyalsock.
 - Where does the water go?

Little Loyalsock Creek



Mill Creek Warrensville

- Heavily cluttered with debris
- Highly urbanized
- Several dams were located along the creek
- Many withdraw pumps, and pipes to discharge to the stream

The Adventures of Mill Creek



Mill Creek Montoursville

- Area assessed was from Quaker State Road to the point where it enters into the Loyalsock Creek.
- The stream was narrow and heavily riprapped.
- Moderately urbanized.

Conclusion

- 200 total erosion sites over 52 miles
- Projects involving the tributaries may have the greatest impact on preserving the Loyalsock Creek.
- The high areas of concern along the creek occur around rip-rap and islands or deposition bars.

Final Thoughts



Acknowledgements

- Corey Richmond and the staff of the Sullivan County Conservation District.
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- Marc Lewis.
- Country Ski and Sports.
- Lycoming College and Dr. Mel Zimmerman.
- The residents of the Loyalsock Watershed.

The End

