

RUTGERS
New Jersey Agricultural
Experiment Station


**Musconetcong River Watershed
Restoration Plan –
SVAP Data**

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RCE Water Resources Program
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Project Advisory Committee Meeting

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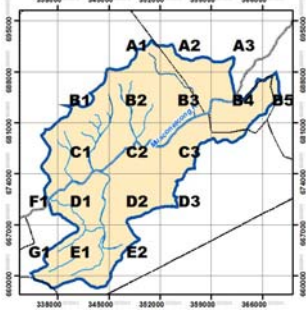
SVAP Elements

- Channel Condition
- Hydrologic Alteration
- Riparian Zone
- Bank Stability
- Water Appearance
- Nutrient Enrichment
- Barriers to Fish Movement
- Instream Fish Cover
- Pools
- Invertebrate Habitat
- Canopy Cover
- Manure Presence
- Riffle Embeddedness
- Macroinvertebrates Observed

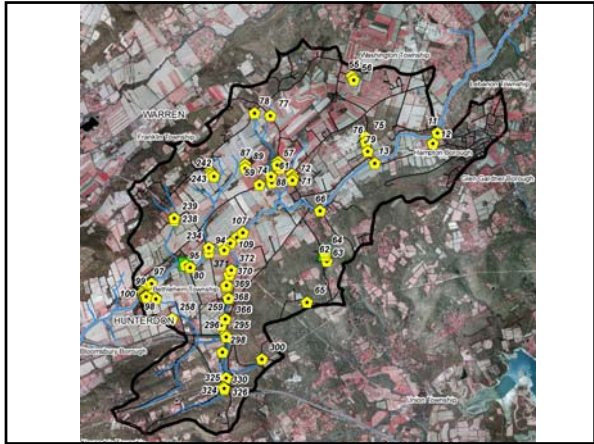


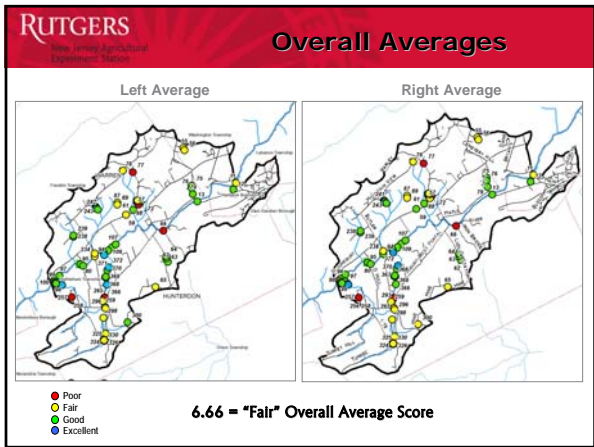
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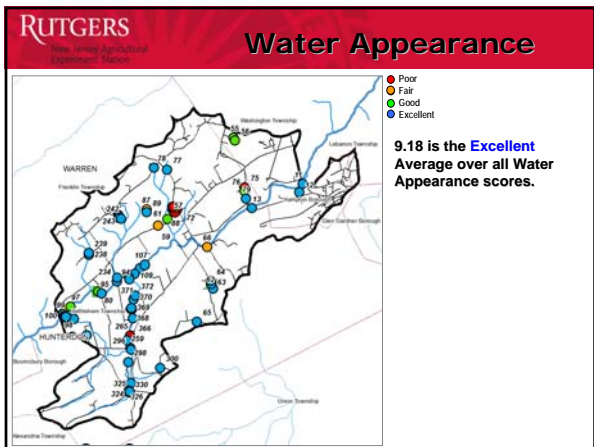
Musconetcong River SVAPs

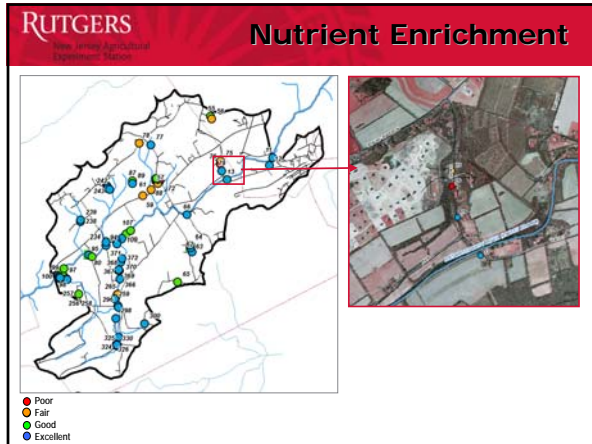


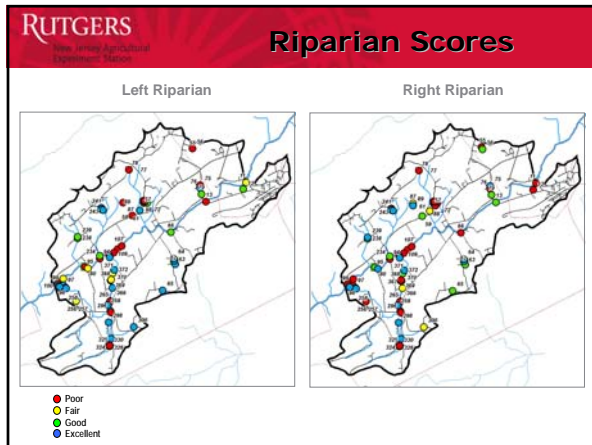
- **166** visual assessments completed
- Good coverage throughout the watershed
- Chose a reference site for low and high gradient streams

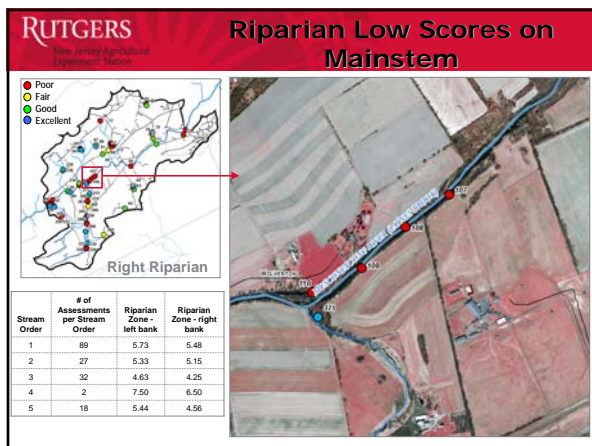


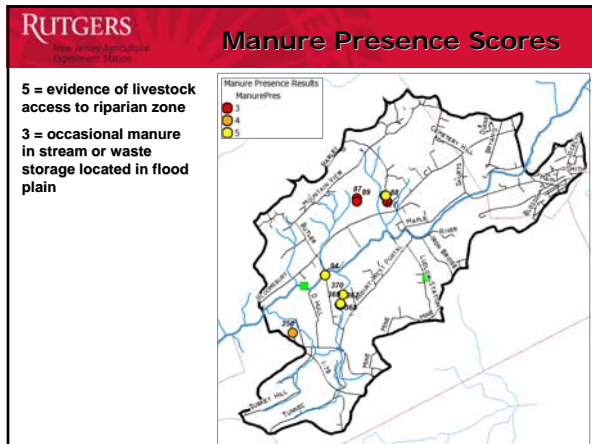














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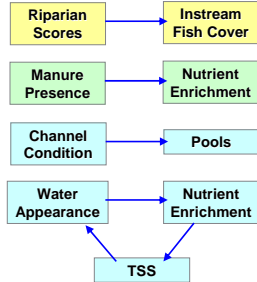
About our streams....

- Active channel widths ranged from 2-125 feet;
- Of 166 sites, the average overall score is 6.66, FAIR;
- POOLS had the lowest average score of 3.59;
- 130 of 166 sites had riffles (embeddedness average of 6.49);
- 14 pipes noted;
- 6 ditches documented, one with steady flow and an eroding bed from an old cultivated field;
- Comments focused on riparian zone improvements, removal of multiflora rose, restoring natives, and fencing cows from the stream.

Assessment Element	Average Score
Hydrologic Alteration	6.62
Channel Condition	7.31
Riparian Left Bank	5.66
Riparian Right Bank	5.31
Bank Stability Left Bank	6.37
Bank Stability Right Bank	6.42
Water Appearance	9.18
Nutrient Enrichment	8.24
Fish Barriers	4.95
Instream Fish Cover	6.37
Pools	3.59
Invertebrate Habitat	7.80
Canopy Cover *	6.69
Manure Presence	4.00
Riffle Embeddedness	6.47
Macro Invertebrates Scored	12.05
Left Average	6.67
Right Average	6.64
Overall Average	6.65

* Canopy cover is not scored when not observed within a 50 foot

Scores & Relationships



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Next Steps for SVAP Data	
<ol style="list-style-type: none"> 1. A representative photo has been chosen for each reach, and a photo log is being developed; 2. Overlay assessment elements to prioritize restoration projects and re-assessments; 3. Prioritize sites where restoration and fencing are needed; 4. Compare SVAP with water quality monitoring data. 	

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<p>If you have any questions, feel free to contact me at katieb@rutgers.edu or by phone. This presentation will also be available on our website, www.water.rutgers.edu.</p> <p style="text-align: center;">THANK YOU!</p>	
