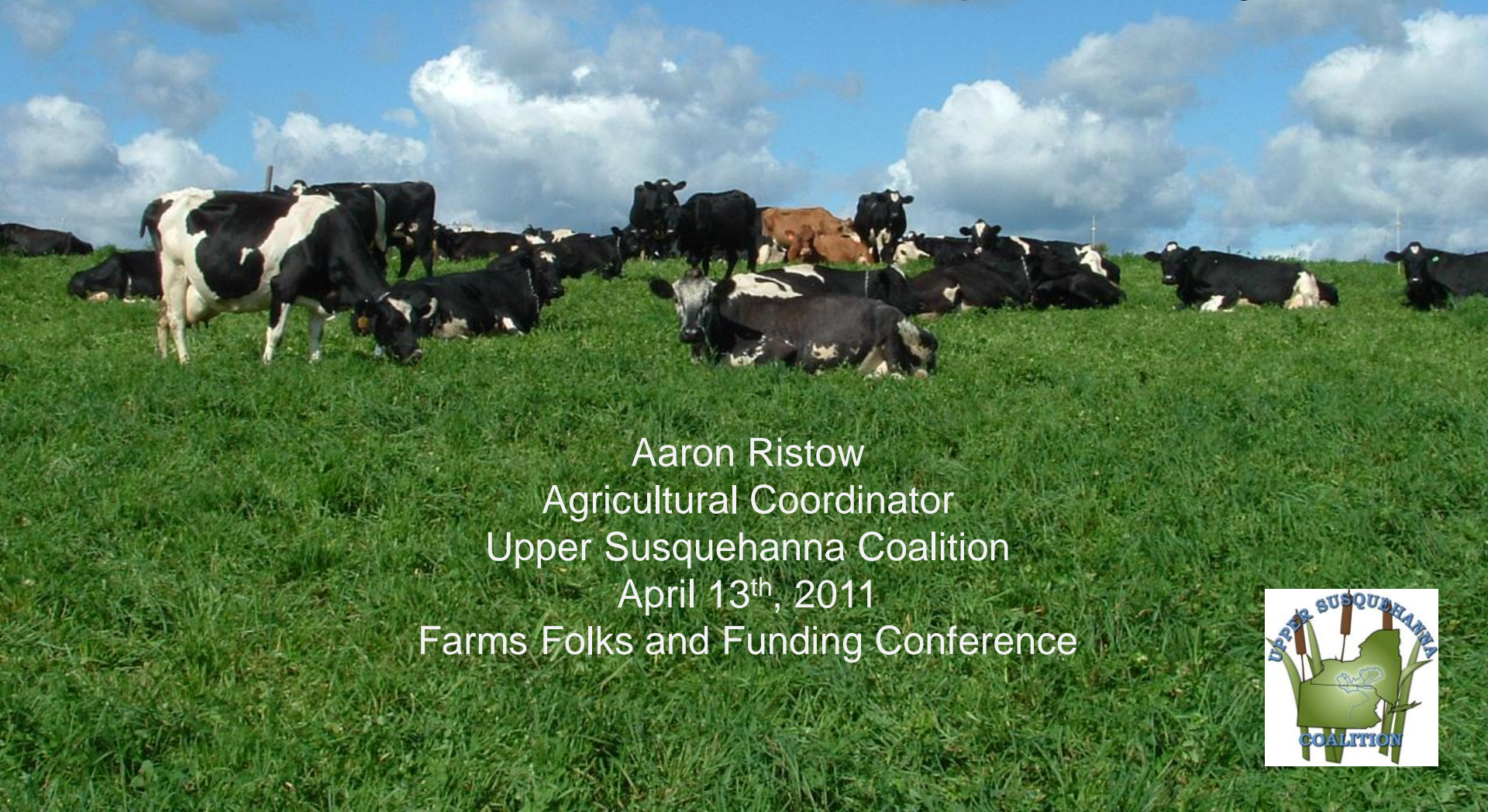


Upper Susquehanna Coalition

Watershed Issues and Implementation in the Headwaters of the Chesapeake Bay



Aaron Ristow
Agricultural Coordinator
Upper Susquehanna Coalition
April 13th, 2011
Farms Folks and Funding Conference



Upper Susquehanna Coalition

Established in 1992

19 Soil and Water
Conservation Districts

16 counties in NY

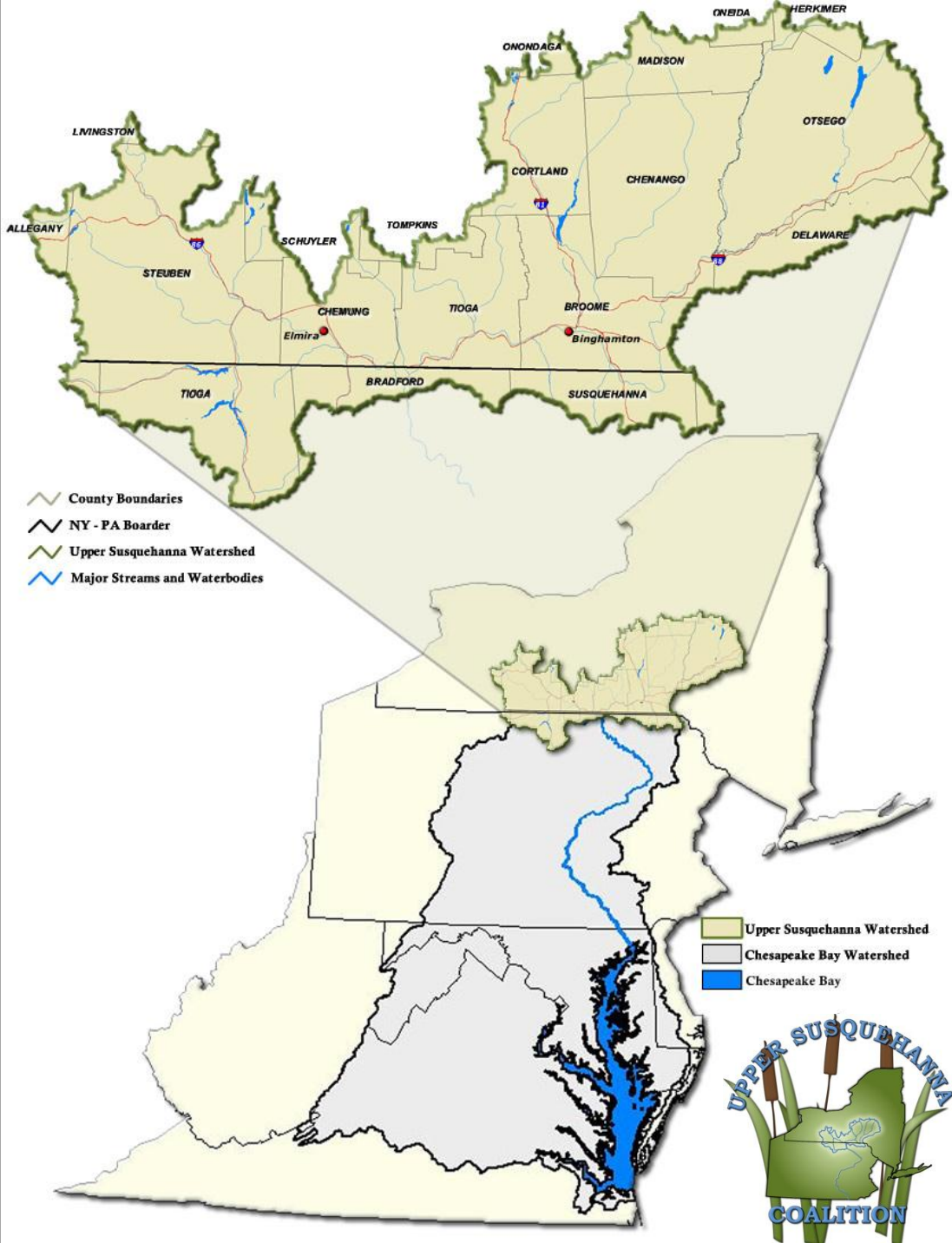
3 in PA

Partnerships with NRCS,
DEC, Universities,
Municipalities

7,500 square miles

Headwaters of the
Chesapeake Bay

USC implements nonpoint
source projects to address
watershed issues



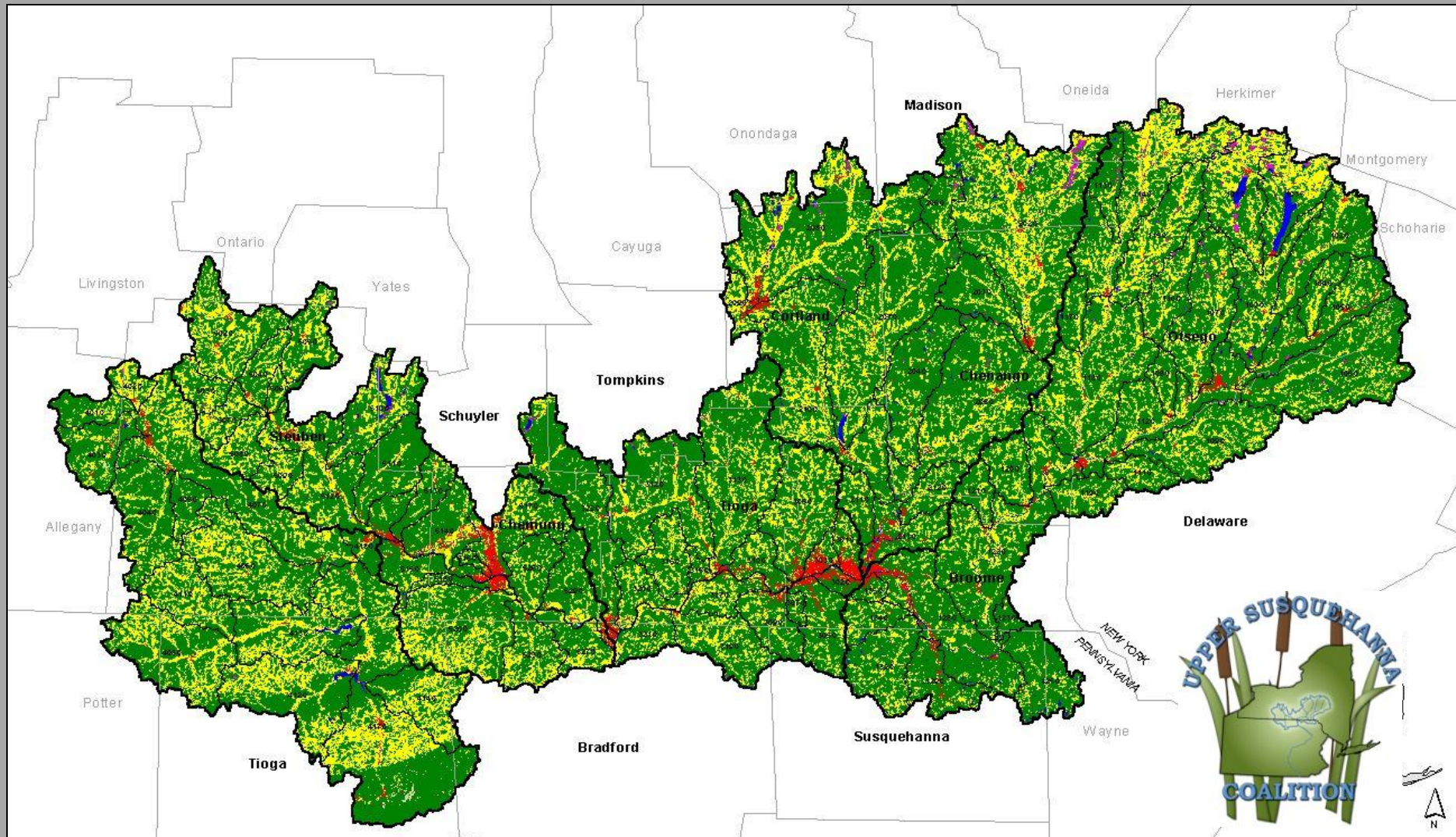
LAND USES

69% Forest

28% Agriculture

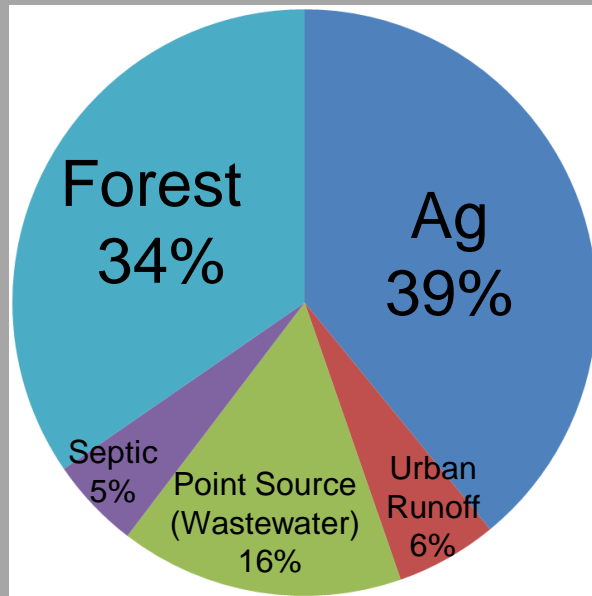
1.5% Water / Wetlands

1.5% Residential/ Commercial / Industrial

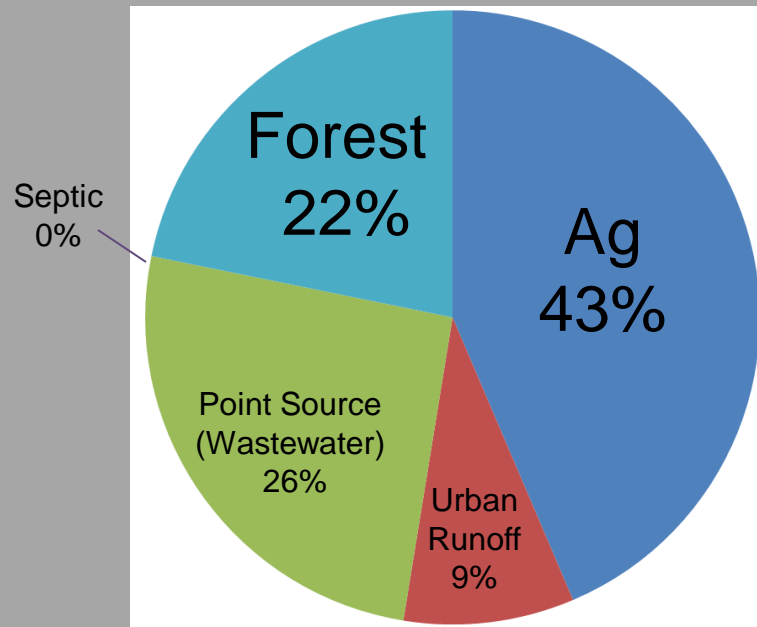


NY Sources

N contribution by sector



P contribution by sector



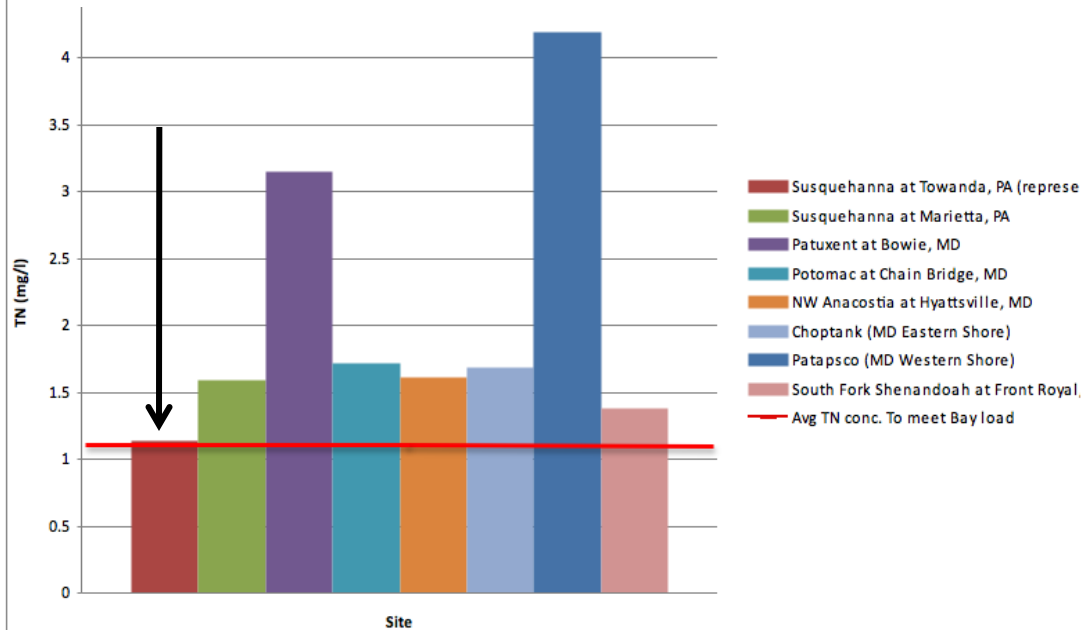
EPA Watershed Model v5.3

Agriculture contributes 39% N, 43% P loads from NY

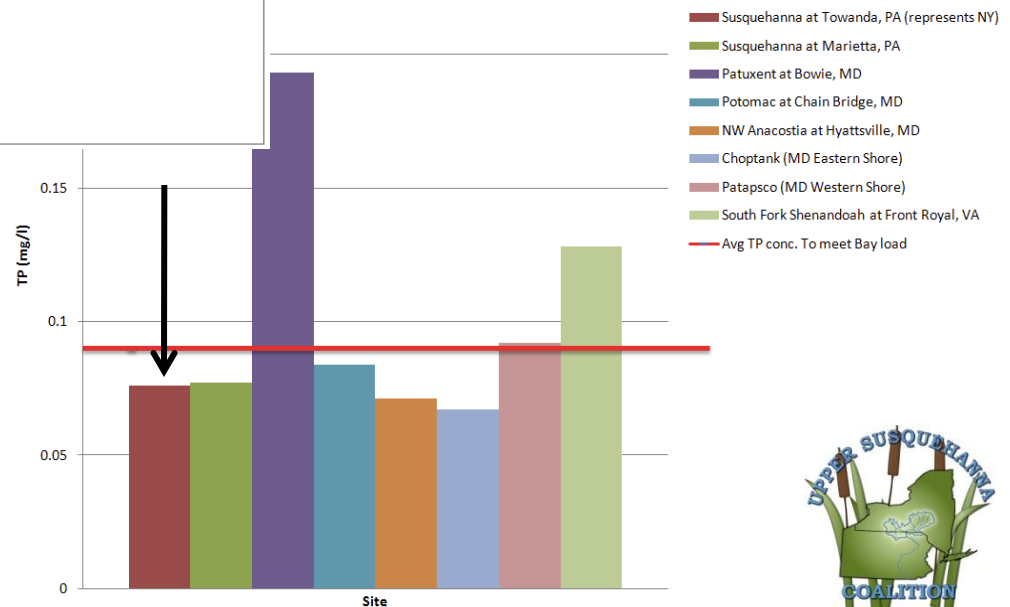
Forest contributes 34% N, 22% P loads

NY'S WATER IS CLEAN:

Nitrogen Concentrations to Clean Up the Bay (mg/L)



Phosphorus Concentrations to Clean Up the Bay (mg/L)



NY Waters
Already Meet
Bay Specifications
for High Quality
Aquatic Life
Required by the TMDL



NY Allocations

Nitrogen Delivered to Bay (million lbs/year)	Phosphorus Delivered to Bay (million lbs/year)	Sediment Delivered to Bay (million lbs/year)	Year
10.54	0.80	327	2009 (Current)
9.60	0.66	307-324	2017 Phase I Allocation (60% of Goal)
8.77	0.57	293-322	2025 Phase I Allocation (Goal)
9.26	0.57	293	2025 NY TMDL Phase II Goal

12% Reduction of N load

23% Reduction of P load

Sediment reductions not a great as a concern because practices to reduce N and P will minimize sediment loss

12% and 23% total reduction includes the forest load

Tough Road Ahead

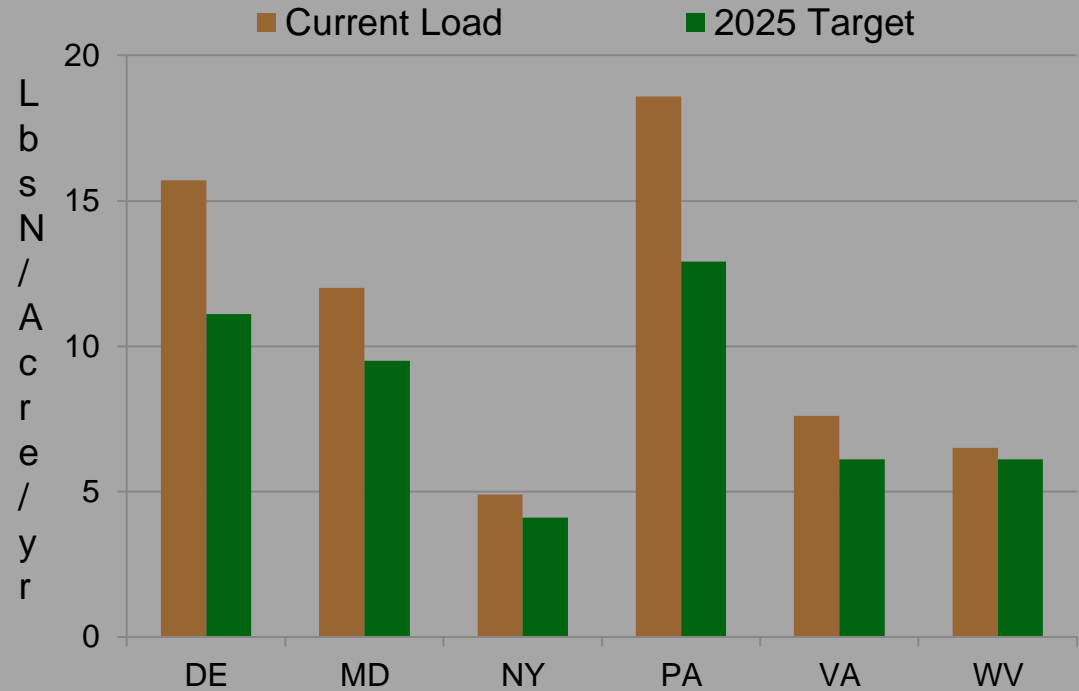
Higher per acre load the
more possibility of reductions

Lower per acre load means
more efficient or more BMPs

Very expensive and difficult
to reduce 12% of 4.9 lbs
compared to 18.6 lbs

The smaller the amount of
nutrients in the system, the
more impact accurate data
has on model predictions

Agricultural Nitrogen Loading By State



v5.3 December 2010 Final Allocations
2009aveCSOAA 12/21/2010 scenario run

NY Watershed Implementation Plan

Goals for 2025

- Plan requires more than just CAFO regulation to get us allocations
- Voluntary approach for AFOs
- Work at reduced till, cover crops, buffers, more waste management:
 - **Conservation Tillage 40% of available acreage**
(61,071 ac/yr out of 152,678 acres)
 - **Cover Crops on 20% of the total available row crop acreage**
(30,000 ac/yr out of possible 152,678 acres)
 - **100% fence on trampled riparian corridor;**
47% (80,000 acres) other pasture acres
 - **60% Animal Units (A.U.) under Animal Waste Management Systems**
 - **65% A.U. under Barnyard Runoff Control Systems**
 - **50% A.U. under Precision Feed Management**

2 year milestones and Reasonable Assurance Important



THE USC PLANNING / IMPLEMENTATION STRATEGY:

Use a Multiple Barrier Approach to
Address Nonpoint Issues

Integration of Program Areas

Wetlands, Streams and Agriculture



THE USC PLANNING / IMPLEMENTATION STRATEGY:

Agricultural Environmental Management Program (AEM)

NYS AgNPS Abatement and Control Program

Graze-NY

USC Grazing Initiative

Nitrogen Management Workgroup

Precision Feed and Forage Management Team

Agronomic Cover Crop Working Group

NRCS Grazing Lands Conservation Initiative

USDA NRCS Farm Bill Programs

USDA FSA Farm Bill Program

Technical Assistance From SWCD/ CCE / NRCS

Cornell / Binghamton University Research and Support

“The WIP details in-depth strategies that support New York's BMP implementation rates. . . strategies **provide reasonable assurance** that New York can and will **implement its WIP commitments.**”

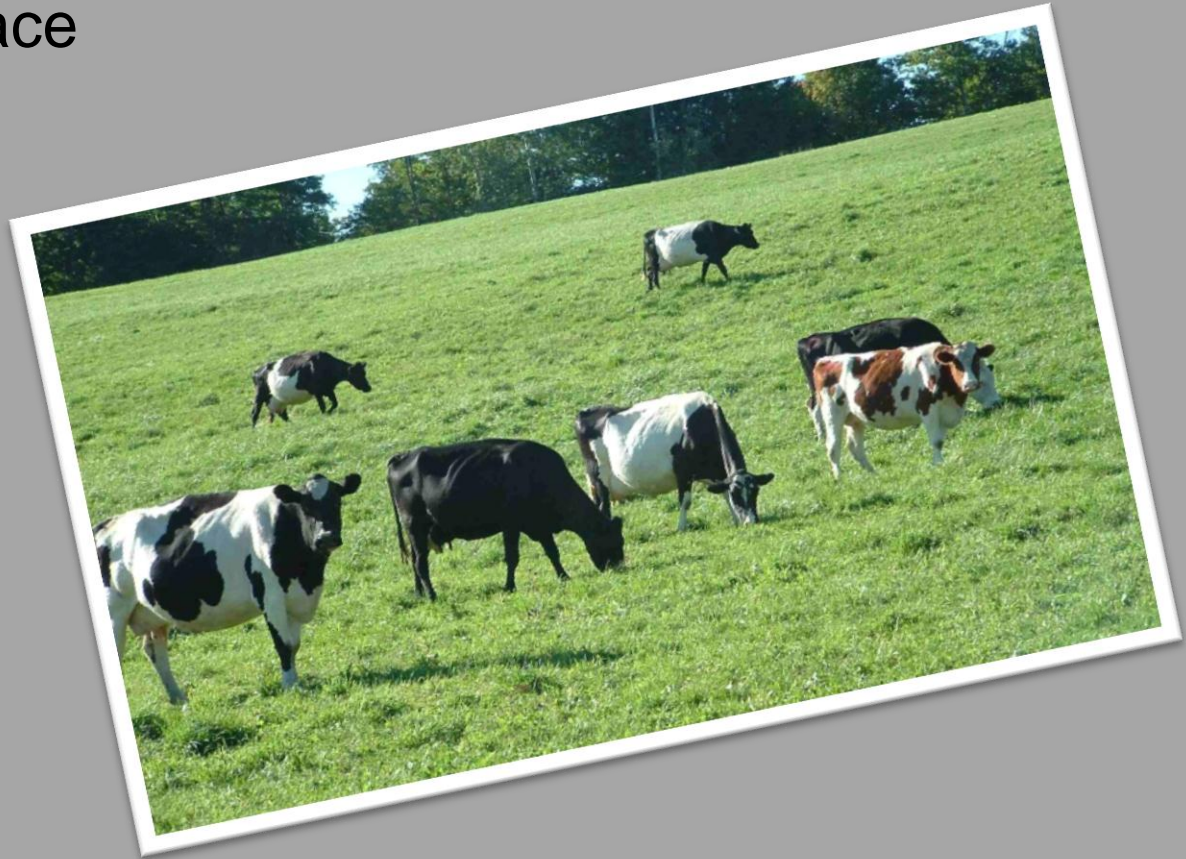
*Summary New York Final WIP Evaluation –
Environmental Protection Agency
December 29, 2010*

“The WIP provides a detailed overview of the **Agricultural Environmental Management Program**, which covers approximately 95 percent of the dairies in the state. The WIP also discloses a comprehensive list of funds and cost estimates for its **voluntary programs.**”

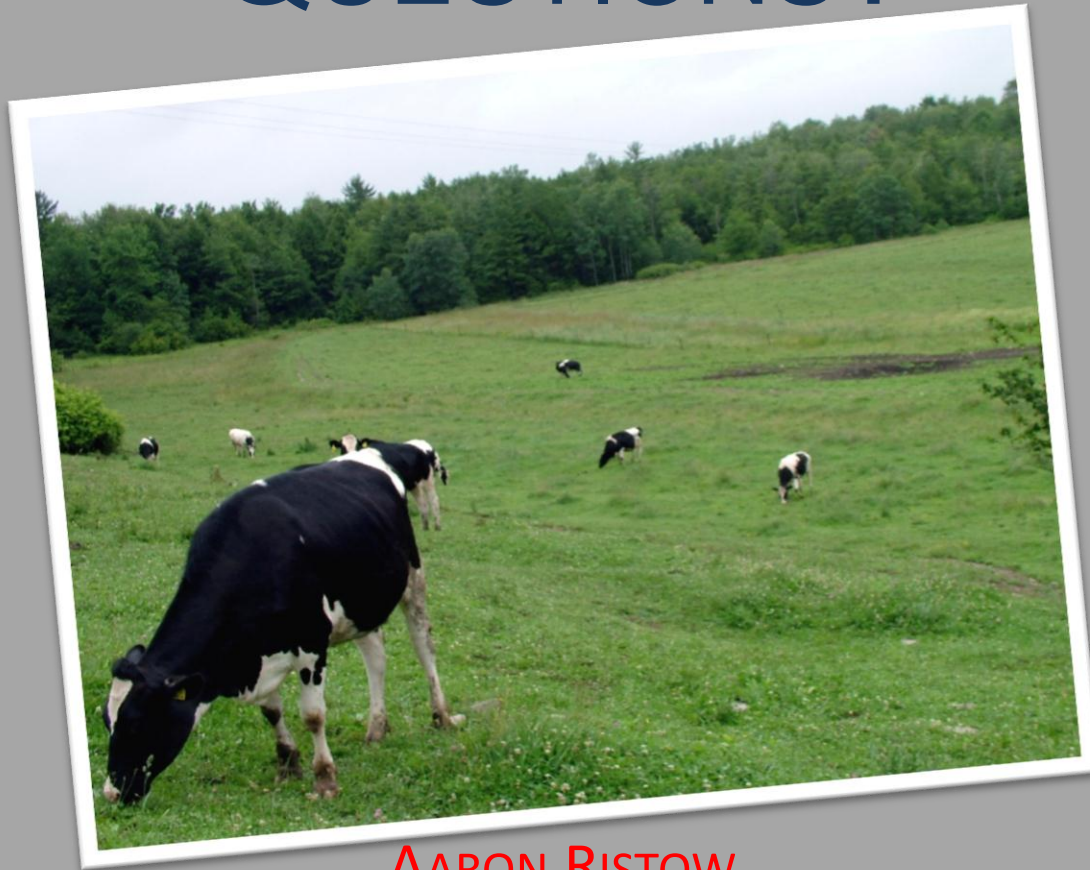
*A Report Card for Phase I Watershed Implementation –
Center for Progressive Reform
January 2011*

Take Home Messages:

- Hang together...
- Proactive adoption allows us to work at own pace
- Data important for reporting
- Local level planning
- TMDLs for impaired waters will continue
- Talk of Great Lakes
- Watch and learn- more TMDL s likely



QUESTIONS?



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