Upper Susquehanna Coalition

Watershed Issues and Implementation in the Headwaters of the Chesapeake Bay

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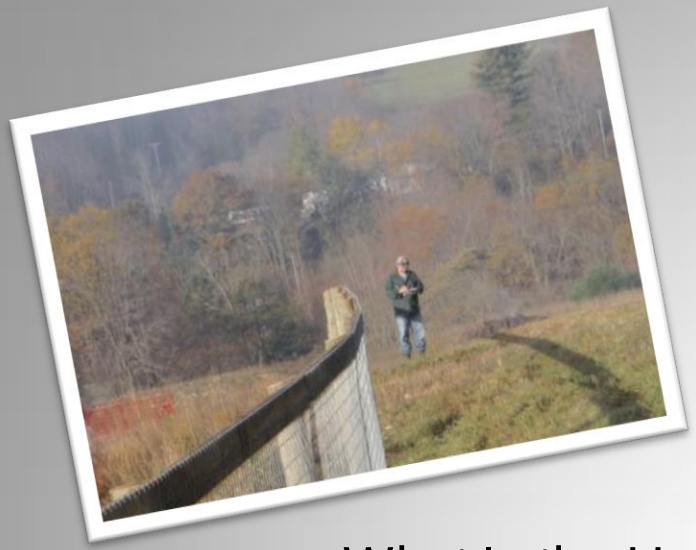


What Is the Upper Susquehanna Coalition (USC)?

Agricultural Water Quality Issues Identified by the USC

How Water Quality Issues Are Addressed in the USC

Challenges of Nutrient and Sediment Allocations for NY

Upper Susquehanna Coalition

19 Soil and Water Conservation Districts

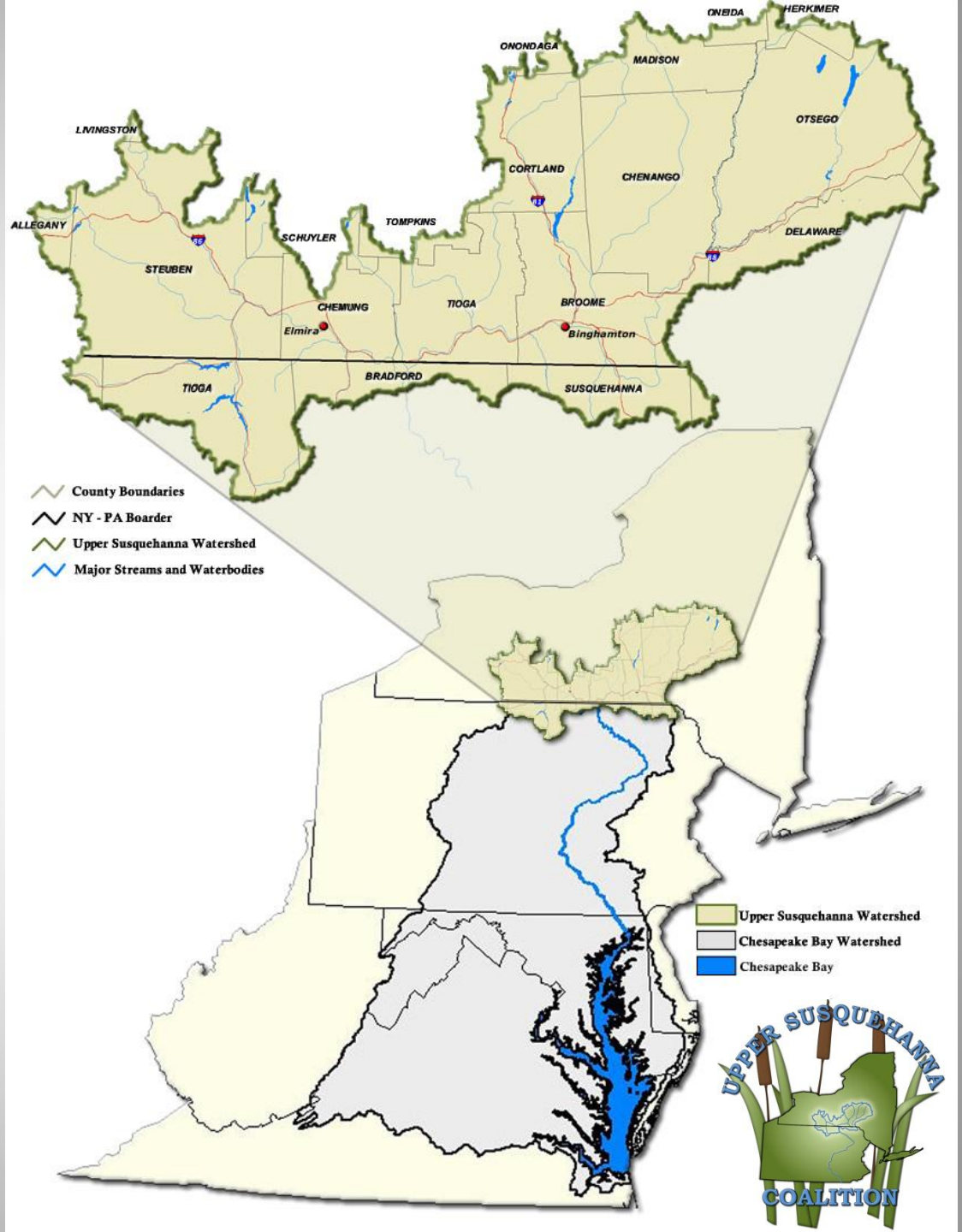
16 counties in NY
3 in PA

Partnerships with NRCS, DEC, Universities, Municipalities

7,500 square miles

Headwaters of the Chesapeake Bay

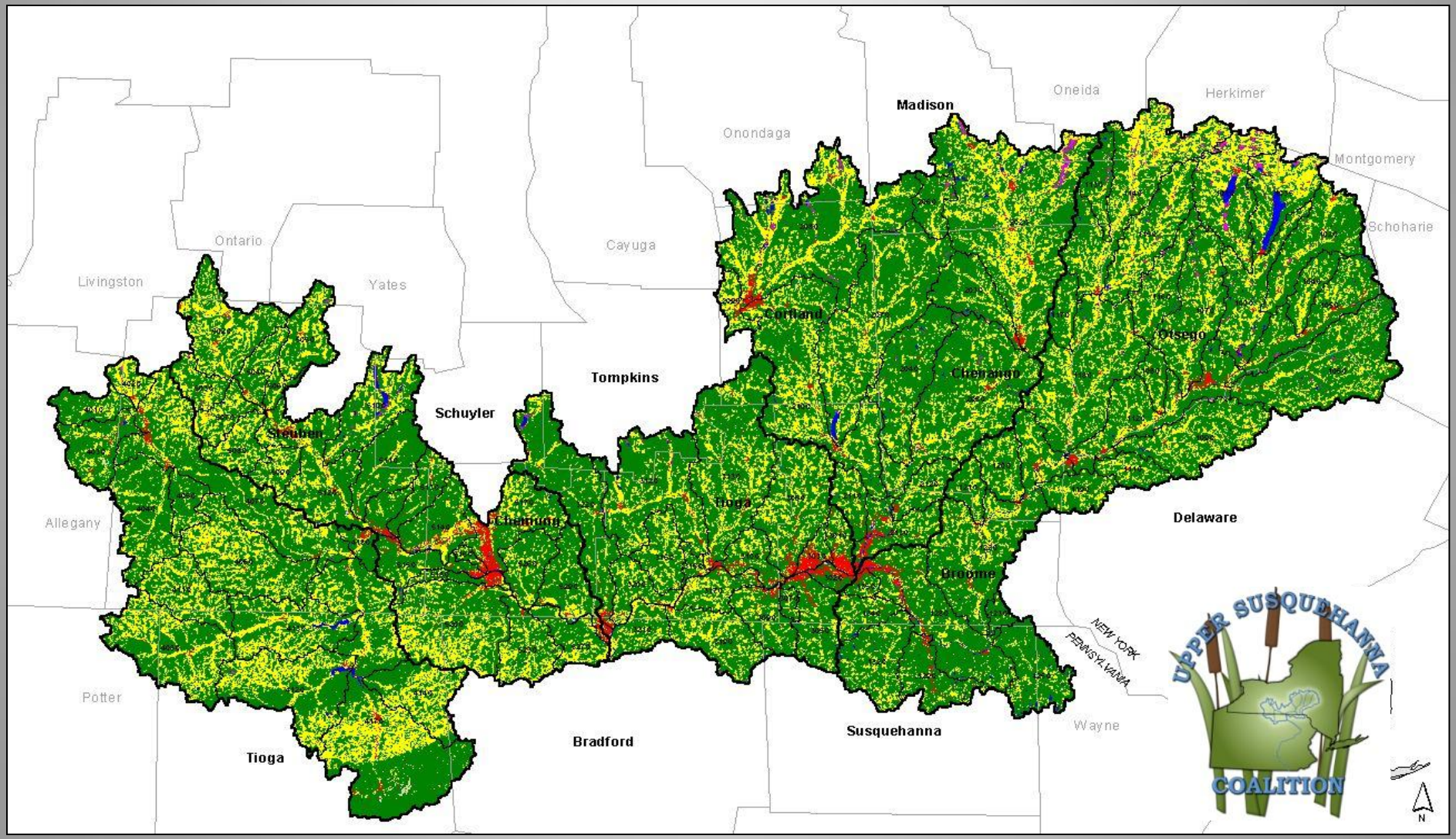
USC implements nonpoint source projects to address watershed issues



LAND USES

69% Forest 28% Agriculture 1.5% Water / Wetlands

1.5% Residential/ Commercial /Industrial



Major Nonpoint Issues:

Flooding, Erosion, Nutrient Runoff

Steep Topography

Poorly Planned Road System

Streambank and Road Ditch Erosion

Logging and Logging Roads

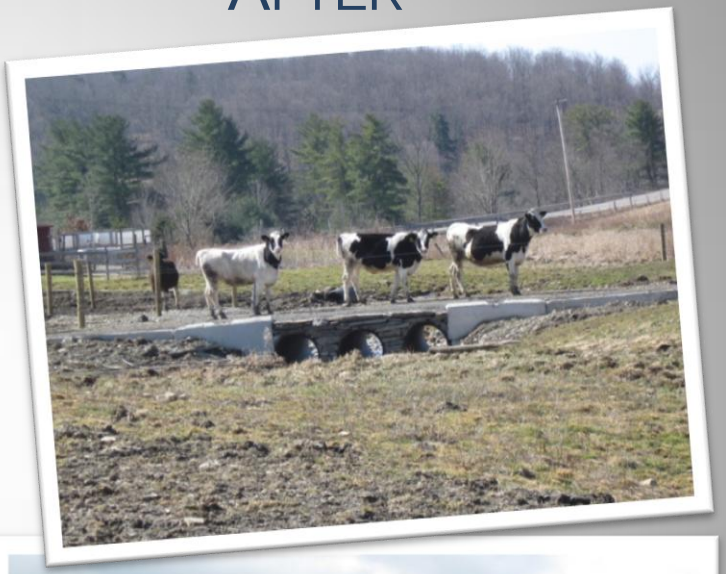
Farmstead and Field Erosion and Nutrient Runoff

SEDIMENT AND NUTRIENT SOURCES FROM USC AGRICULTURE

How Water Quality Issues Are Addressed in the USC

Before

After



THE USC PLANNING / IMPLEMENTATION STRATEGY:

USE A MULTIPLE BARRIER APPROACH TO ADDRESS NONPOINT ISSUES:

At the Source

Across the Landscape

In the Stream Corridor

Programmatically through Outreach, Training, and Regulation

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)

Permits for Concentrated Animal Feeding Operations (CAFO)

Agricultural Nonpoint Source Abatement and Control Program Grants(AGNP)

Graze-NY

Planning Certifications

Regular Training for District and NRCS Employees, District Board of Directors

Agronomically Sound Recommendations

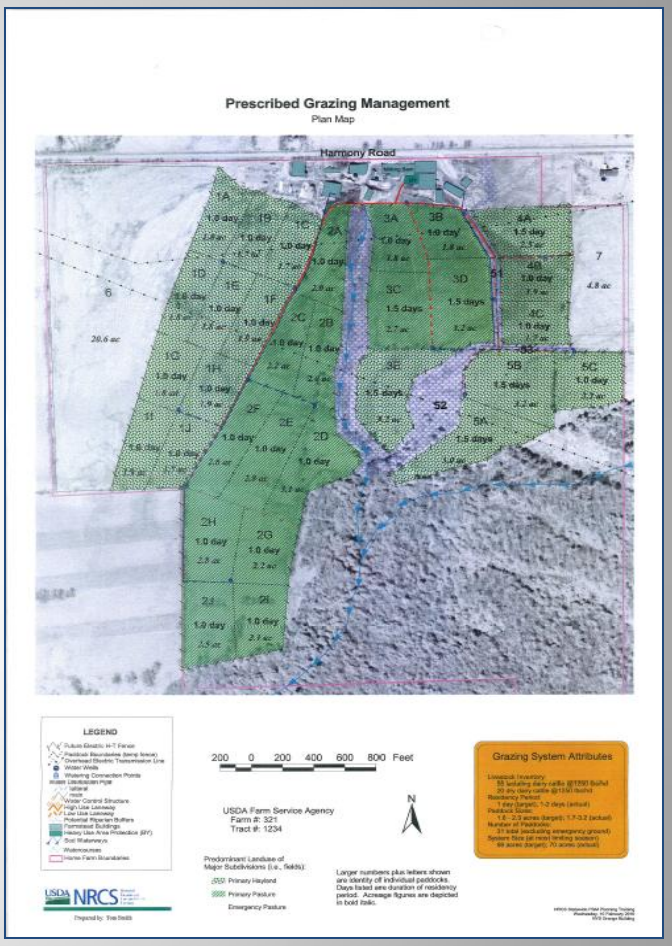
The USC Planning / Implementation Strategy:

AEM:

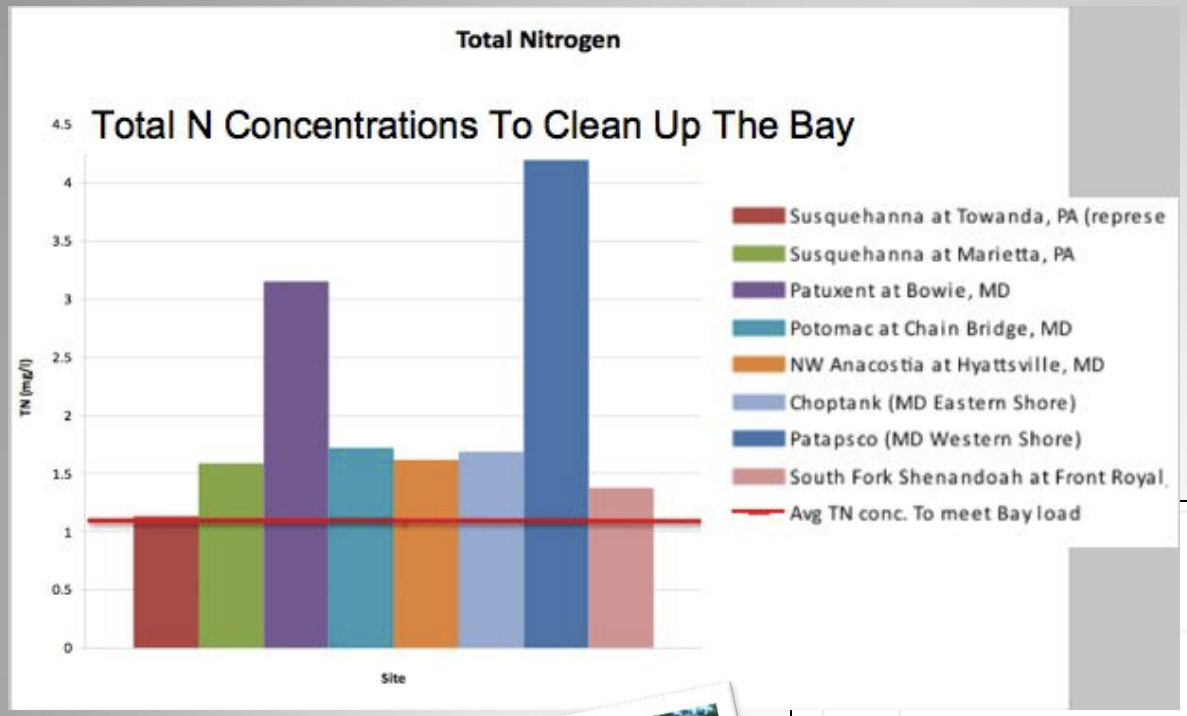
- ✓ Voluntary, incentive-based program (Since 2000, but unofficially since 1996)
- ✓ Progressive Planning Process with Evaluation

CAFO:

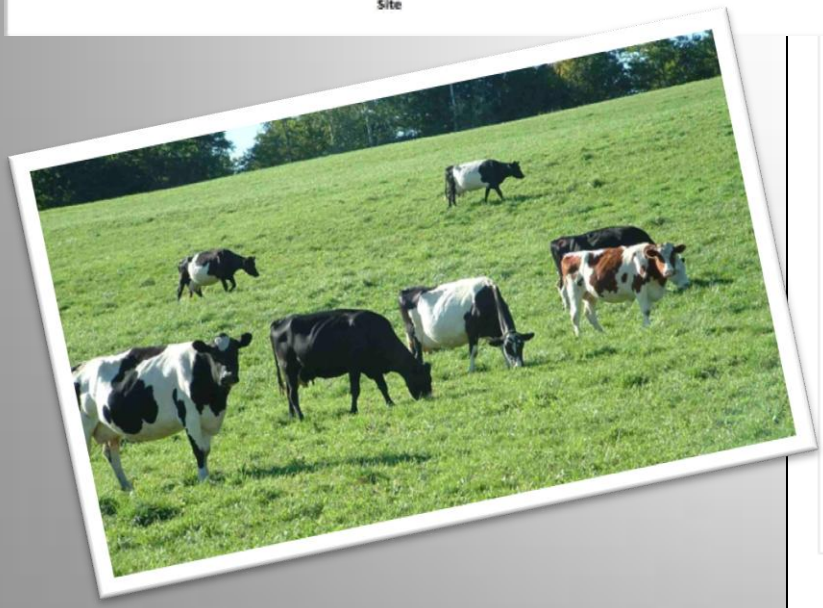
- ✓ NY CAFO permit stricter than federal standards
- ✓ NY NRCS standards are often tougher than other states for similar practices
- ✓ Actively implemented and enforced, state-wide applicability, science-supported

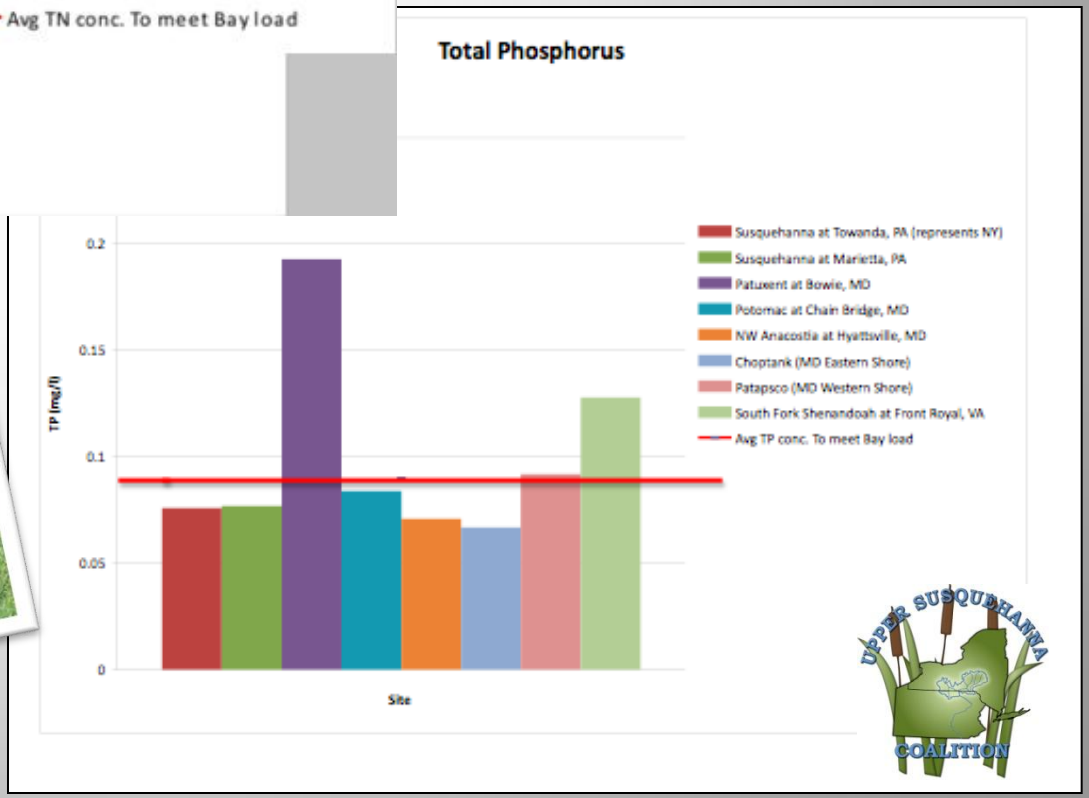


CHALLENGES:



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





CHALLENGES:

Table 1: Current Unit Area Nutrient Loadings (lbs/year/acre)				
	E.O.S TN/area	Delivered TN/area	E.O.S TP/area	Delivered TP/area
DE	10.45	9.29	0.76	0.70
DC	81.36	80.48	4.10	3.52
MD	12.07	8.99	0.74	0.58
NY	**6.06**	**2.65**	**0.49**	**0.20**
PA	12.66	7.43	0.62	0.28
VA	8.97	4.73	0.73	0.52
WV	10.32	2.54	0.83	0.40

Table 1 – According to CBP model 5.3, NY water quality is better in terms of nutrient loads than any Bay Jurisdiction. NYS has the lowest unit area loading for current edge of stream nitrogen (TN) and phosphorus (TP) than any of the states or D.C (**6.06 TN** and **0.49 TP** lbs/year/acre)

Table 2: Draft Nutrient Allocations & Required Removals				
	Delivered Allocations (lbs/year)		Required Reductions (%)	
	TN	TP	TN	TP
DE	2,950,000	260,000	29.45	17.63
DC	2,320,000	120,000	26.13	12.69
MD	39,090,000	2,720,000	25.35	18.89
NY	**8,230,000**	**520,000**	**21.85**	**34.94**
PA	76,770,000	2,740,000	27.78	30.67
VA	53,400,000	5,410,000	18.11	24.29
WV	4,680,000	750,000	18.89	17.77

Table 2 – NYS is being asked to reduce at higher percentages, especially in terms of phosphorus (TP), than other Bay Sates. NYS is being mandated to reduce phosphorus loadings by 35%. This is significantly higher than any other Bay state or DC.

Table 3: Unit Area Nutrient Loadings (lbs/year/acre), Based on Draft Allocations				
	E.O.S TN/area	Delivered TN/area	E.O.S TP/area	Delivered TP/area
DE	7.37	6.55	0.63	0.58
DC	60.10	59.45	3.58	3.08
MD	9.01	6.71	0.60	0.47
NY	**4.74**	**2.07**	**0.32**	**0.13**
PA	9.14	5.36	0.43	0.19
VA	7.35	3.87	0.56	0.39
WV	8.37	2.06	0.68	0.33

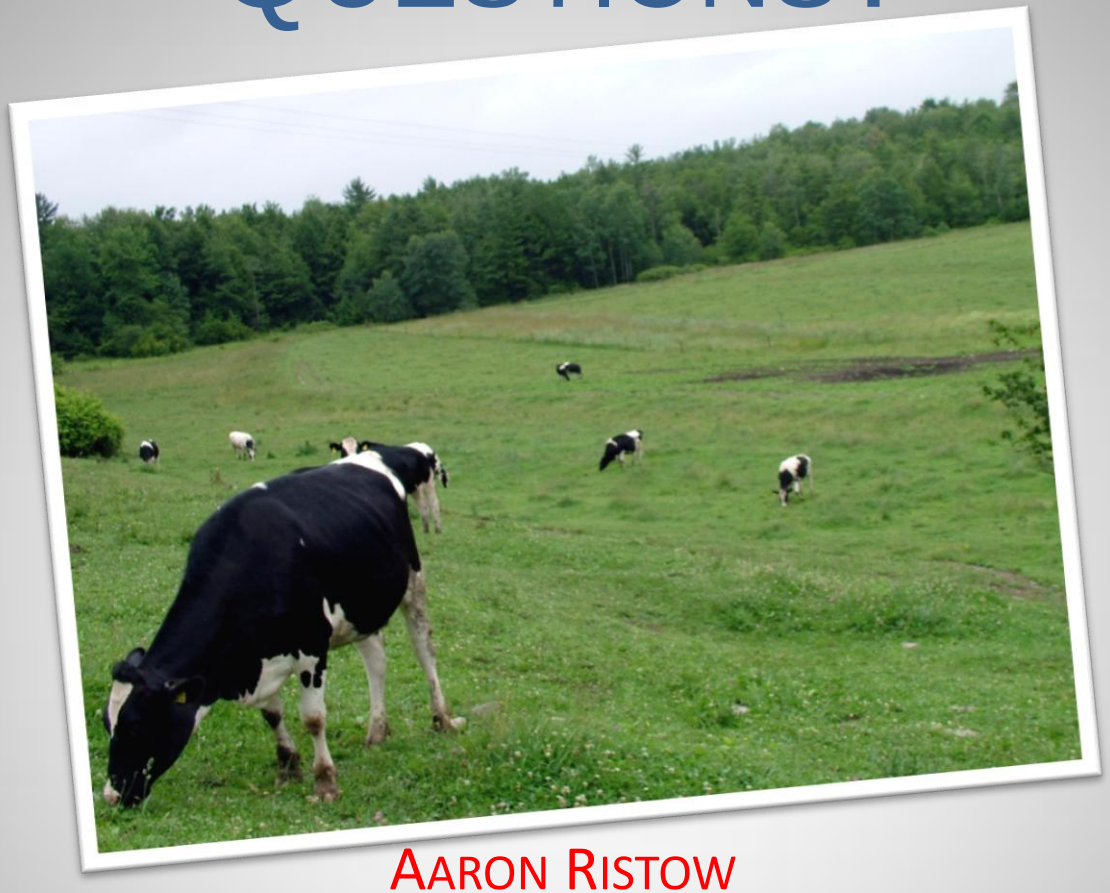
Table 3- Even after the non-NYS jurisdictions clean up their water to meet draft allocations, they will still deliver higher nutrient loads per acre than NYS does now!

CHALLENGES:

High forest, low intensity agriculture, decreasing population leave little room for source reductions

Challenge is to explain to farmers, planners, policy makers and tax payers why we need to do more when New York has done a lot already and has clean water to begin with

Questions?



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