

247 Farms
4 Agencies
 Watershed Agricultural Council
 Soil and Water Conservation Districts
 USDA NRCS
 Cornell Cooperative Extension

Partnering with:
 New York City Department of Environmental Protection

Cornell University Cooperative Extension of Delaware County
 Watershed Agricultural Council

History

1990s –
 New York City Granted Filtration Avoidance

- City avoids billions dollars in investments
- Agrees to Watershed Agricultural Program
 - Voluntary participation
 - 100% cost shared

Cornell University Cooperative Extension of Delaware County
 Watershed Agricultural Council

Watershed Agricultural Council

Mission
 support the economic viability of agriculture and forestry while protecting water quality and promoting land conservation.

Cornell University Cooperative Extension of Delaware County
 Watershed Agricultural Council

Key Factors

- Partnership
- Trust
- Accountability



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Programs

- Agriculture
- Forestry
- Conservation Easements
- Economic Initiatives



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Whole Farm Planning



- Program staff develop CNMP with cooperating farms
- Identified BMPs funded by NYC



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Whole Farm Planning



- Annual review of plan and operation and maintenance of practices
- Plans revised as needed

BMP Implementation

- BMPs designed according to NRCS standards and specifications
- Farm participates in planning and approves all designs
- BMPs constructed by local contractors




Challenges

- Continuing high level of stewardship for the long-term
- Cooperative conservation is only as strong as the weakest link in the chain of partnerships.





Nutrient Management Planning


- NMPs developed every three years
- Manure rates based on N need and P Indexes




Level of Implementation Critical to Success

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Following a Nutrient Management Plan is:




- Inconvenient
- Expensive
- Requires additional management



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Nutrient Management Credit

Farmers who closely follow their NMP receive financial incentive




- Farm submits manure application records annually
- Peer Review Committee certifies compliance



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Reimbursing Expenses

Annual Rate - \$10/ac + \$4/AU



- Purchase, lease, or repair of the manure handling equipment
- Custom handling or spreading of manure
- Establishment of cover crops



Partnerships

- Upstate : Downstate
- Farmer : Agency
- Agency: Agency
- Program : Farmer : Contractor
- Program : Local Government
- Agriculturalist : Environmentalist



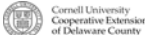
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Trust



- Program directed by local council of farmers
- Program delivered by local agencies farmers know and trust
- Nutrient Management Peer Review gives participants confidence



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Accountability

- Farmers and Funders need assurance that only good stewardship is rewarded
- BMPs and O&M reviewed with each farm annually
- Manure application records are submitted and reviewed annually



Water Quality Impact

Farm scale

- 43% reduction in TDP
- 29% reduction in PP



(Bishop, Hively, Stedinger et al)

Water Quality Impact

Watershed scale

(preliminary)

- 60% decrease in TDP loads from all sources
- 45% decrease in TDP due BMPs
- PP loads continue to increase



(Christine Shoemaker et al)

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Thank You



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