

# The Local Leader's Role in Whole Farm Planning and Water Quality



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[www.nycwatershed.org](http://www.nycwatershed.org)



# Our Mission

The mission of the Watershed Agricultural Council is to promote the economic viability of agriculture and forestry, the protection of water quality, and the conservation of working landscapes through strong local leadership and sustainable public-private partnerships.



# Council's Core Programs

- Agriculture
- Forestry
- Conservation Easements
- East of Hudson
- Farm to Market
- Farmer Education
- Outreach





# What is the New York City Watershed?

- Primarily surface water
- 19 reservoirs + 3 lakes
- System capacity = 550 billion gallons
- 9 million consumers (~1/2 New York State population)
- Delivers 1+ billion gallons per day
- Watershed is a 1,969 square mile watershed (~1.2 million acres)
- Watershed covers parts of 8 upstream counties in NY plus a small portion of CT



# Why do we need a New York City Watershed?



The average single family household in NYC:

- Uses ~80,000 gallons of water per year
- At a cost of \$2.95 per 100 cubic feet (748 gallons)
- About \$315 per year
- Including sewer rates (159% of water)
- Total average bill: \$723-816 per family.
- **The average New Yorker uses 125 gallons of water per day.**



# US EPA Also Concerned about Water Quality

- 1986: Congress passed Clean Drinking Water Act (CDWA)
- 1989: Pursuant to SDWA, EPA issues Surface Water Treatment Rule (SWTR) requiring surface water to be filtered
- 1990: City issues draft regulations to meet SWTR requirements of CDWA
- 1991: Regional farmers form grassroots coalition as proposed regulations would have put farmers out of business.
- 1992: Watershed Agricultural Program created
- 1993: Council incorporated
- 1997: Memorandum of Agreement signed; watershed protection programs began





To date, DEP has spent **\$1.5 Billion** on watershed management programs, best management practices and landowner incentives.

The Watershed Agricultural Council has spent **~\$130 Million** since 1991.

To build a filtration plant today would cost  
~\$10 Billion to construct and  
~\$1 Million per day to run.



# Who owns the watershed?

Private landowners ~ 71%

Farms & forest – working landscape

New York State ~ 17%

Catskill Forest Preserve – forever wild

New York City ~ 12%

Reservoirs, buffer lands, recreational lands



# Pollutant Categories (PC)

- I. Parasites & Phosphorus: Animal Waste Storage
- II. Pesticides: Mixing/Loading Areas
- III. Phosphorus: Fertilizer Storage
- IV. Parasites: Animal & Manure Management
- V. Nutrient Management: CREP & Nutrient Management Plans
- VI. Nutrients: Concentrated Sources
- VII. Sediment: Diffuse
- VIII. Sediment: Concentrated
- IX. Pesticides: Field & Animal Application
- X. Fuel Storage
- XI. Other: Toxic Materials







































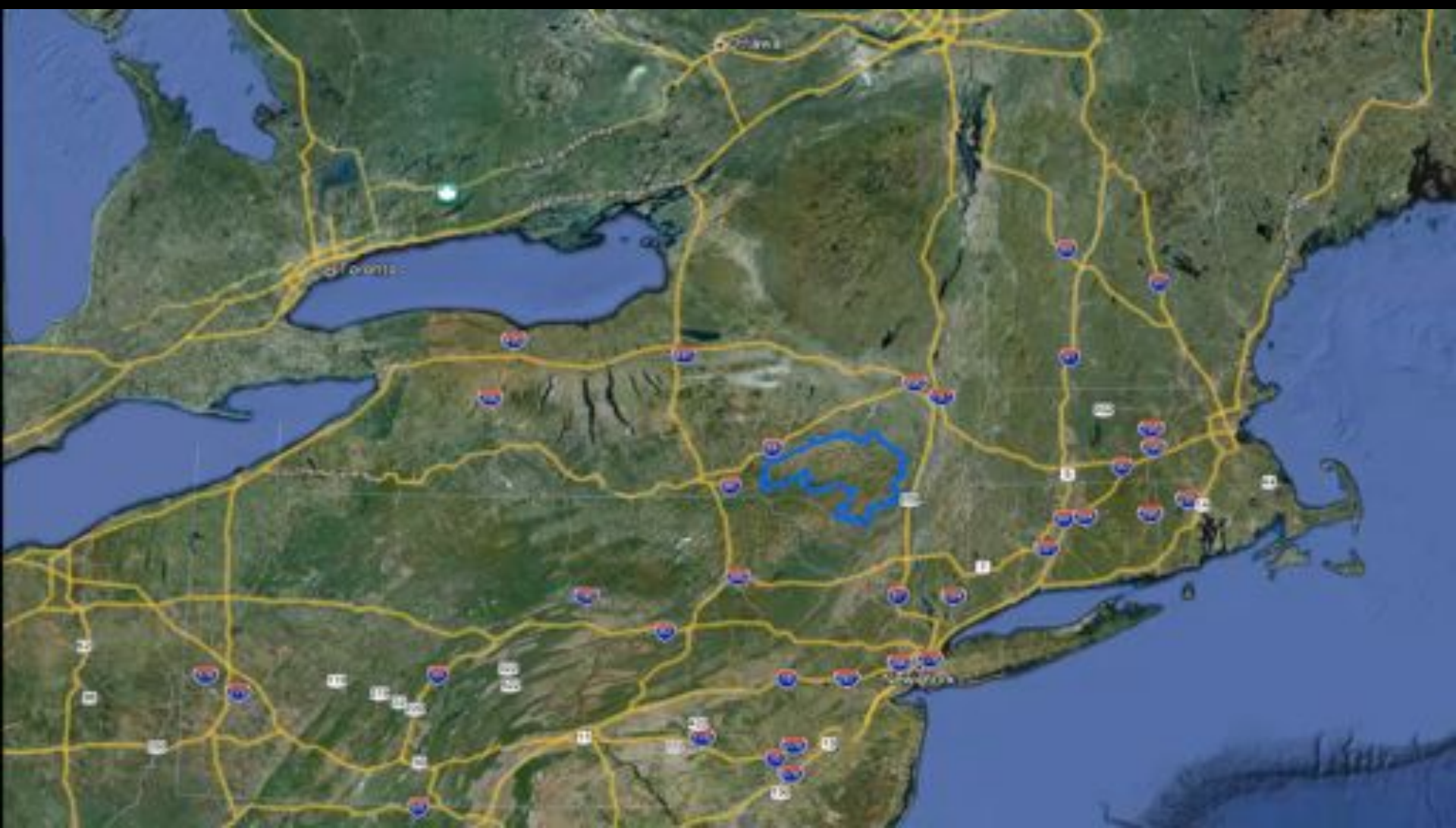
# Stream Buffers

- Conservation Reserve Enhancement Program
    - 50% of cost paid by WAC
    - 50% of cost paid by USDA
  - Incentive payment
  - Rental payment
- 
- Stream Restoration













Issue #1

Issue #2

Issue #3

Issue #4

Issue #5









# Innovative Agricultural Programs

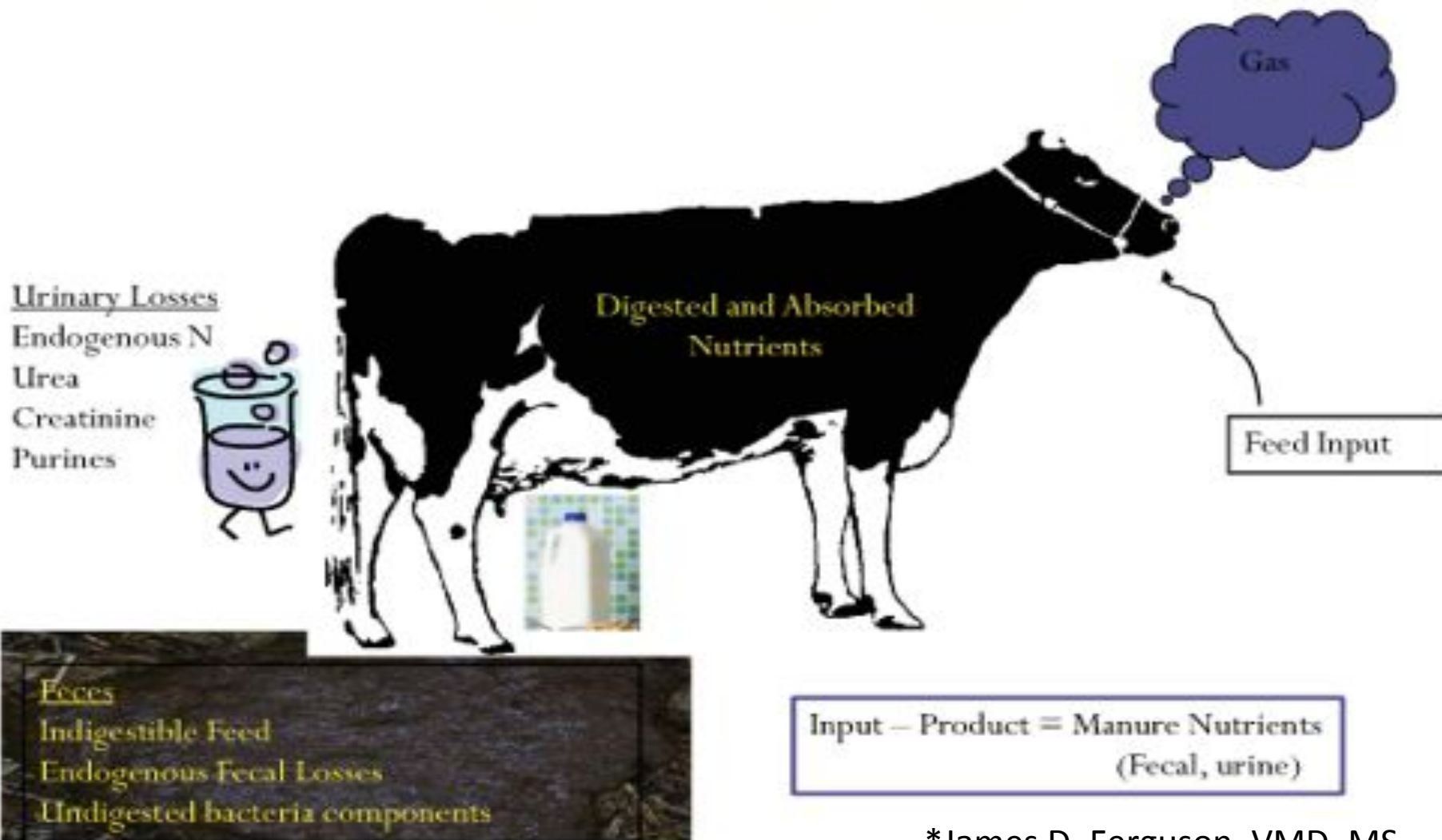
- Nutrient Management Credit Program (2010): offers financial incentive for farms to carefully implement their NMP. Farms annually submit their records for agency and peer review.
  - 84 Farms enrolled, managing 10,300 animal units
  - 399 plans covering 25,500 acres
  - Total investment: \$1.3 million





# Precision Feed

## Animal Nutrient Utilization



\*James D. Ferguson, VMD, MS

# Pasture Management

- Overgrazing



- Rotational Grazing





# The Watershed Agricultural Council is funded in part by:



along with other federal, foundation and private sources.  
The WAC is an equal opportunity employer and provider.

# Collaboration & Partnership

Watershed Agricultural Council  
[www.nycwatershed.org](http://www.nycwatershed.org)



Cornell University  
Cooperative Extension







## **For more information:**

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## **visit us online**

Blogs (WAC and Pure Catskills) [www.nycwatershed.org](http://www.nycwatershed.org)  
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