Statement of

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On

Nutrient Pollution: An Overview of Nutrient Reduction Approaches

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Environmental and Public Works

Subcommittee on Water and Wildlife

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Senator Cardin, Senator Sessions and Members of the Subcommittee, I am Nick Maravell, an organic farmer for the past 30 years.

We farm 170 acres in Montgomery and Frederick Co's producing livestock, hay, grains and vegetables.

A partial list of our practices relevant to nutrient management include:

- recycling on-farm nutrients
- fixing nitrogen and carbon from the air into the soil
- lengthy crop rotations
- multiple species plantings, including plenty of legumes
- winter and summer cover crops
- intensive rotational livestock grazing
- shallow tillage and minimal tillage
- no-till planting into standing crops, stubble, and perennial crops
- slow release of nutrients
- very minimal use of highly water soluble nutrients

- minimum use of off-farm fertility inputs

We have been able to weather good years and bad due to our improving soil quality—which has also led to better water quality through more efficient nutrient use and better nutrient holding capacity.

We manage our manure to conserve its nutrients. We raise all of the feed for our livestock. Our beef never leave pasture. Our poultry are moved across our pastures. Thus, we manage our livestock so that manure does not accumulate in one place, has a chance to decompose quickly, and surface run off is readily absorbed into soil covered with vegetation.

We add value to our products by making them organic and grassfed, by selling them directly to the final user, and by on-farm processing of our poultry, poultry feed, and seed stock. Our minimal impact on the environment is a major selling point with our customers. Our sales growth averages 10-20% each year, on par with the growth of the $30 billion nationwide organic industry.

Our farming system lacks characteristics often associated with increased risks of nutrient pollution:

- We are not a confined animal feeding operation centralizing the accumulation of manure.
- We do not specialize in primarily one type of product.
- We do not rely primarily on off-farm water-soluble fertilizers to supply our nutrients.
- We do not have very large fields with short 2 year rotations of monocultures.
- We do not produce for a commodity or export market.
- We do not lose the identity of our product as it is marketed.

American agriculture is very varied, and that diversity is a tremendous strength that should be preserved. Because there is no one model that should apply to all farms, our national policy and programs should have the flexibility to accommodate our legitimate differences. I call this the multiple models approach. For example, Congress'es Chesapeake Bay Watershed Initiative of 2008 is tailored to provide regional nutrient pollution reduction. It needs to be expanded to assure farmers of the help they need to meet new mandates. States need flexibility to work with farmers, particularly more latitude to allocate technical assistance funds to have maximum impact on reducing nutrient pollution.

Finally, I will comment on some approaches that have been most helpful to me.

- On-farm research and on-site technical assistance has been the most successful approach to improving our fertility decisions.

- Market forces that increase the farmer's bottom line for providing ecological services are very effective. Allowing for some identity preservation of farm products provides the ultimate and direct accountability between agriculture and our local and regional environmental preservation efforts.

- Assistance to plant cover crops is an excellent approach to recycling nutrients. States could provide more flexibility in such areas as: planting multiple species, using new innovative species, setting earlier and later planting dates, and exploring summer covers.

- Assistance to farmers who are responsibly managing their soil and nutrients, but who want to make further improvements is an excellent approach, such as the Conservation Stewardship Program. But such programs must be sure to cover various farm models and levels of accomplishment.

- For farms that do not accumulate large amounts of nutrients, particularly manure, the State should allow filing a new Nutrient Management Plan once every five years with annual updates rather than once every three years.