

Recommendations to Strengthen Nutrient Management Planning on Virginia Farms

Nutrient management plans (NMP) have been identified as a high-priority conservation practice proposed for widespread adoption in Virginia because of their potential to support farm profits and water quality. An NMP minimizes the cost of supplying nutrients and avoids wasted spending on unnecessary or unused nutrients.

The United States Department of Agriculture's 2013 Conservation Effects Assessment Project in the Chesapeake Bay watershed found that *"the most critical conservation need in the region is the need for complete and consistently applied nutrient application management following ... appropriate rate, timing, method, and form of nitrogen and phosphorus application"*.

50%

of Virginia's croppd and hayland acres have current NMPs.

82%

of NMP components from 295 Virginia farmers managing 106,595 acres are fully implemented.

\$4,593

potential increase in net income on Virginia livestock farms with NMPs in place.

Virginia Nutrient Management Leadership Team

Given the win-win potential for NMPs to improve both farm profits and water quality, the Virginia Nutrient Management Leadership Team (VNMLT) was convened in June of 2016 for the purpose of strengthening NMP efforts on farms throughout Virginia. The VNMLT is a collaborative effort comprised of agricultural and conservation organizations, and state and federal agencies, with the following specific objectives:

1. Gather feedback from farmers and industry professionals to identify challenges to and opportunities to expand participation.
2. Develop recommendations to improve farmer participation.
3. Highlight nutrient management success stories.
4. Communicate results and support efforts to implement recommendations.

Incremental Steps Work Best

Beauregard Farm, Culpepper, VA

Jamie Shenk (Farm Manager) observed that Beauregard Farms *"didn't jump into using precision nutrient management all at once. We started on small plots. Once we saw what worked, we expanded that. The cost savings we generated from one piece of new equipment helped us to justify investment in the second piece. So, this process has been one step at a time for us."* He also notes that *"Soil is our main focus. We can't create good yields out of poor soil."*

Gathering Feedback from Farmers and Agricultural Industry Professionals

The VNMLT gathered feedback from 223 farmers and agricultural industry professionals. Questions asked participants about benefits of NMPs and services provided by planners as well as challenges to participation. Results highlighted strengths of Virginia's program as well as areas for improvement.

Strengths identified:

- Certified nutrient management planners are their primary partners in the development and implementation of NMPs;
- Having an NMP facilitates participation in cost share programs and can help some farmers meet regulatory requirements;
- NMPs provide both agronomic and cost savings benefits;
- Environmental benefits of NMPs are also valued;
- The most important services provided by certified nutrient management planners include: helping to keep the plan updated, expertise in agronomy and crop production, and clear explanations of how to implement the plan.

Areas identified as needing improvement:

- The plan should be easier for farmers to read;
- Concerns that NMPs are too inflexible ranked as one of the top challenges to program participation;
- "Concerns that NMPs may result in future regulations" was ranked by farmers as the 2nd highest of 14 potential challenges to program participation;
- Farmer respondents indicated that promoting good yield was the least valuable benefit of the NMP process. While 21% rated this as 'highly valuable,' 47% rated it as 'somewhat valuable,' and 29% rated it as 'not valuable';
- Stakeholders were hopeful that the VNMLT process would create an opportunity for stakeholders to provide feedback and ways to improve the program in the future.



Virginia Nutrient Management Leadership Team Recommendations

- Establish a Nutrient Management Stakeholder Advisory Group to foster communication between stakeholders and the Department of Conservation and Recreation.
- Develop a "self-prepared NMP" for farmers that use only commercial fertilizer.
- Improve the format and presentation of completed NMPs to make them easier to read.
- Develop tools and processes to help farmers keep their plans updated.
- Clarify the level of flexibility producers have regarding nutrient application rates.
- Create a "safe way in" to the NMP program for farmers managing fields with high soil phosphorus so that they can eventually implement a certified NMP.
- Publish a report on Virginia's NMP program success and efforts to be used for education and outreach purposes.
- Promote Resource Management Plans (RMPs) as a way of increasing NMP participation and promote NMPs as the foundational building block of the RMP program.
- Develop a public relations/outreach campaign to build on farmer participation and express the benefits of NMP adoption.
- The VNMLT affirms existing and encourages future DCR efforts that provide training to certified nutrient management planners that helps them to encourage NMP adoption by providing accurate, up-to-date information that addresses their client's needs and concerns.

Nutrient Management Planning Is Another Tool In The Box

Jimmy Crosby, Cros-B-Crest Farms

For the Crosby's, nutrient management planning is one component of a comprehensive conservation system approach that benefits crop production, as well as soil and water quality. According to Richard Fitzgerald, a private nutrient management planner who develops the farm's NMP, *"The Crosbys are consistently producing 200 bushels of corn on soils that are rated at 140 bushels or less. They accomplish this by paying attention to the details in every part of their farming operation. They are using strip crops, filter strips, diverse cover crops, no-till, split application of nitrogen, and both organic and inorganic sources of nutrients."*

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Virginia Nutrient Management Leadership Team

Agricultural/Industry Organizations: Virginia Agribusiness Council, Virginia Biosolids Council, Virginia Cattlemen's Association, Virginia Farm Bureau, Virginia Grain Producers Association, Virginia Poultry Federation, Virginia State Dairywomen's Association.

Conservation Groups: Chesapeake Bay Foundation, Headwaters LLC, James River Association, Sustainable Chesapeake, Virginia Association of Conservation Districts.

State and Federal Agencies: Virginia Department of Agriculture and Consumer Services, Virginia Department of Conservation and Recreation, Virginia Department of Environmental Quality, USDA Natural Resources Conservation Service.

Land Grant/State Universities: Virginia Tech