

**Nutrient Management Training and Certification
Regulatory Advisory Panel
Monday, April 20, 2026
Monacan Soil & Water Conservation District
Goochland, Virginia**

TIME AND PLACE

The meeting of the Nutrient Management Training and Certification Regulatory Advisory Panel (RAP) took place at 9:40 a.m. on Monday, April 20, 2026, at the Monacan Soil and Water Conservation District (SWCD) in Goochland, Virginia.

NUTRIENT MANAGEMENT TRAINING AND CERTIFICATION REGULATORY ADVISORY PANEL MEMBERS PRESENT

Angela Whitehead, Soil Horizons, LLC
Matt Kowalski, Chesapeake Bay Foundation
Bob Waring, Colonial SWCD
Wesley Gwaltney, Virginia Tech, Agricultural Technology Program
Betsy Bowles, Virginia Department of Environmental Quality (DEQ), Animal Waste State Program Coordinator
Jim Riddell, Virginia Cattlemen's Association
R.O. Britt, Smithfield
Trey Davis, Virginia Agribusiness Council
Tim Grove, Houff Corporation
Bryan A. Cauthorn, DEQ, Biosolids State Program Coordinator
Eric Scruggs, Profit Agronomics LLC
Mike Gerel, Chesapeake Bay Foundation
Josh Lombard, GROWMARK
Darrell Marshall, Virginia Department of Agriculture and Consumer Services (VDACS)
James Martin, Department of Conservation & Recreation (DCR), Director, Division of Soil and Water Conservation

NUTRIENT MANAGEMENT TRAINING AND CERTIFICATION REGULATORY ADVISORY PANEL MEMBERS NOT PRESENT

Wayne Pendleton, VDACS
Jake Tabor, Virginia Farm Bureau
Eric Paulson, Virginia State Dairymen's Association
Ryan Holbrook, Virginia Golf Course Superintendents Association
Rory Maguire, Virginia Tech

DCR STAFF PRESENT

Christine Watlington Jones, Policy and District Services Manager
Stephanie Dawley, Nutrient Management Training and Certification Manager
Hunter Landis, Nutrient Management Program Manager
Nico Robichaud, Policy and Program Assistant

Breanne Lindsey, Board and Constituent Liaison
Gonzalo Ortiz, DCR, Urban Nutrient Management Specialist
Marie Schirmacher, DCR
Justin Lindemeyer, DCR

OTHERS PRESENT

Nicholas Moody, Farm Bureau (alternate for Jake Tabor)
Ross Phillips, VAMWA
Marcus McDonald, Precision Agriculture Manager at James River Equipment

CALL TO ORDER

Ms. Watlington Jones called the meeting to order at 9:40 a.m.

WELCOME AND INTRODUCTIONS

Ms. Watlington Jones welcomed and thanked members of the RAP for attending the meeting. Members of the RAP and DCR staff members present introduced themselves.

DISCUSSION OF INCLUSION OF PRECISION AGRICULTURE INTO THE REGULATIONS

The Panel discussed incorporating a definition of precision agriculture and consistently using the term throughout the regulations as part of this regulatory action. During the discussion, members reviewed draft definitions developed by staff. Staff shared additional information on how other states, including Delaware, define and implement precision agriculture practices.

The Panel discussed how precision agriculture could be integrated into nutrient management plans. The definition developed describes precision agriculture as a method, system, or combination of practices used to improve the productivity, efficiency, and sustainability of crop systems through modern technologies such as variable-rate technology, yield mapping, drones, sensors, satellite imagery, and data analytics.

The Panel also considered revising the terminology from “precision agriculture” to “precision nutrient management” to more clearly reflect its intended application.

BREAK

The Panel took a break from 11:36 a.m. to 12:17 p.m.

DISCUSSION OF INCLUSION OF PRECISION AGRICULTURE INTO THE REGULATIONS CONTINUED

The Panel continued its discussion on precision agriculture, with a focus on identifying the components required in a nutrient management plan. The Panel and staff determined that necessary information includes soil test data, yield data, and georeferenced field boundary data. In addition, the Panel determined that nutrient application rates (prescriptions) must be consistent with applicable Standards and Criteria at the field level, and fertilizer application records must be maintained to document implementation at the appropriate level.

Key considerations discussed included ensuring that any plan used by a producer is relevant, practical, and tailored to their specific operation. Staff informed the Panel of the importance of minimizing duplication of effort among planners and by producers to improve efficiency and consistency. Discussions were also had about in which situations soils and field conditions should be treated as environmentally sensitive areas. Additionally, the Panel reviewed the need to ensure that key decision points within the plan can be clearly verified. For example, if soil maps are not used to assess soil productivity levels, alternative data sources, such as yield maps, should be included to support those determinations.

The Panel discussed the use of a spreadsheet to document and justify target yield goals for each management zone. The spreadsheet should include key information such as field name, acreage, the basis for the prescription, the fertility management strategy, and the expected yield goal. Staff noted that the template could be expanded to incorporate phosphorus (P) and potassium (K) application recommendations, either by zone classification (e.g., high, medium, low) or by individual zones where soil test values and lime recommendations vary significantly. It was also recognized that GIS software should be capable of generating the criteria required for a plan, and staff recommended developing a standardized reporting format applicable across GIS platforms. The Panel acknowledged that the capability to collect the necessary data already exists and discussed using a combination of the existing Nutrient Management Module and data provided by precision planners or applicators to develop a comprehensive plan.

RECOMMENDATIONS VS. REQUIREMENTS

The Panel revisited the topic of recommendations versus requirements, originally discussed at the March 30, 2026 meeting. Panel members provided input on potential regulatory revisions, including recommended changes to Section 4VAC50-85-140.

The Panel also discussed the inclusion of “verifiable past crop yield records” as a new defined term within the regulations.

Ms. Watlington Jones informed the Panel that staff are reviewing fee structures used by other agencies to evaluate options for incorporating credit card processing fees.

PUBLIC COMMENT

There was no public comment.

ADJOURN

Ms. Watlington Jones reminded the Panel that the next meeting date is scheduled for May 20, 2026.

The Panel adjourned at 2:38 p.m.