

Christopher F. Brosch, CNMP

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Interested in challenges of environmental sciences with a focus on nutrients in soils especially as affected by agriculture.

A focused background in soil nutrient and water quality science, with experience in field, laboratory, and modeling experiments. Deadline oriented, self-motivating, logical management. Over a decade of experience in teamwork, leadership, facilitation and educational instruction utilizing creative approaches. Proficiency in relevant technical computer software including ArcGIS, SAS and database programs like SQL, Access and Excel.

Education

Virginia Polytechnic Institute and State University, Blacksburg, VA

Masters of Science Agricultural Science

2015

Project: Relative Phosphorus and Nitrogen Loss Efficiencies Based on Nutrient Management Planning using Rainfall Simulation

University of Maryland, College Park, MD

Bachelor of Science Natural Resource Sciences: Conservation of Soil, Water and Land

2006

Professional Experience

Delaware Department of Agriculture, Dover, DE

Nutrient Management Program Administrator

2016

- Oversees the daily operations of the Nutrient Management Program, including 4 full-time and 2 part-time staff.
- Regulate developers and implementers of nutrient management plans to limit excess nutrient application.
- Implement General Permits for concentrated animal feeding operations from permit conditions to individual farm notices of intent.
- Manage manure relocation and nutrient management planning cost share programs totaling over \$1million of private and public funds
- Coordinate the DE NM Commission of government appointees in operations, enforcement of program laws and regulations.
- Managing requests/complaints from the general public over the agricultural community
- Maintain government and university staff involved in program outreach and education of the latest science and technical standards.

Virginia Tech & VA Dept. of Conservation and Rec., Richmond, VA and Annapolis, MD

Faculty Special Project Associate - Modeling Support Specialist II

2012-2015

- Populate and QA/QC semi annual Nutrient Management Plan BMP data for all Virginia plans meeting state standards and criteria to local, state and national water quality programs.
- Chair Nutrient Management Expert Panel under the Agriculture Working group for the Chesapeake Bay Program partnership and produced three scientifically defensible reports summarizing relevant literature and documenting bet professional judgement.
- Serve as technical reviewer for manure management expert panels, including manure to energy and incorporation best practices.
- Commented on guidance, policies, grants and scientific reports related to Agricultural policy and BMP effectiveness estimates based on technical merit for Virginia agencies.
- Assist in development of cloud based database system with a software interface for nutrient management plan tracking in Virginia using a web client to track data and verify plan writing.

University of Maryland and Chesapeake Bay Program, Annapolis and College Park, MD

Graduate Research Assistant; Faculty Extension Assistant

2006-2012

- Communicated complex relational databases from Scenario Builder and CAST to audiences of diverse backgrounds and various sizes.
- Updated extensive documentation on technical models estimating non-point source pollution and abatement.
- Lead work groups, expert panels and webinars on agricultural management and models.
- Provided technical support to senior officials in preparation of reports and briefings to US EPA, USDA, State regulatory and conservation agencies.

Joint Global Climate Change Institute, College Park, MD

2004-2005

Technical Intern

- Constructed and published national database of crop rotations based on county surveys of land use:
 - Rosenberg, NJ. *A Biomass Future for the North American Great Plains: Toward Sustainable Land Use and Mitigation of Greenhouse Warming*. Netherlands: Springer, 2007.
- Prepared databases in Microsoft Access and ArcGIS for use in watershed and national level models for carbon sequestration.

Professional Accreditation, Association and Recognition

Certified Nutrient Management Planner	2014- Curr
Member CSA-ASA-SSSA	2008- Curr
North-eastern Branch Outstanding Senior	2007
Tri-Societies National Student Recognition Award	2007
Member Mid-Atlantic Association of Professional Soil Scientists	2009-2013
Senior Scholarship	2006