Despite decades of efforts to reduce non-point source nutrient pollution, excessive nutrient losses continue from agricultural lands, contributing to water quality impairment. Wet, temperate and/or humid regions of the US, increasingly experience frequent runoff events that transport nutrients, pathogens, and/or sediment from recently applied nutrients to surface waters. Producers and conservation personnel need easy-to-use, real-time tools to help them identify when and where a runoff event may occur. This webinar will present four different current runoff advisory tools: the Runoff Risk Advisory Forecast (WI), Application Risk Management System (WA), Fertilizer Forecaster (PA), and the Saturated Area Forecast Tool (VA). Producers and conservation personnel can use these tools to change nutrient management strategies and avoid unintended impacts to water quality. An application for continuing education credit for Certified Crop Advisors (CCAs) and members of the American Registry of Professional Animal Scientists (ARPAS) will be submitted.

Dr. Nichole Embertson is a Nutrient Management and Air Quality Specialist at the Whatcom Conservation District, adjunct professor at Washington State University, and Director of the Washington Discovery Farms Program. She provides technical assistance through research and education on nutrient and environmental issues to livestock producers, agencies, and industry across Washington State and the US. Her focus is on development of manure application risk management tools for farmers such as a real-time manure spreading advisory, application risk management decision support tool, and on-line nutrient management planning. Phone: (360) 526-2381 x 126; Email: nembertson@whatcomcd.org

Steve Buan began his career with the National Weather Service in Lake Charles, LA in 1988 as a meteorologist intern. He transferred to the Twin Cities and has spent the last 26 years forecasting floods and droughts across the Upper Midwest. Steve has held 4 positions between the two Twin Cities NWS offices, including Journeyman Hydrologist in the NCRFC, Senior Service Hydrologist for WFO Twin Cities/Chanhassen, NCRFC becoming the inaugural Service Coordination Hydrologist. He is currently the Hydrologist In Charge of the NCRFC. Phone: (952) 368-2545; Email: steve.buan@noaa.gov

Zachary Easton graduated from Cornell University in 2007 and is now an Associate Professor in the Department of Biological Systems Engineering at Virginia Tech. The primary focus of his work is to improve understanding of hydrologic and terrestrial processes that control the biogeochemical cycles and fluxes with the ultimate goal of developing policies and management practices that protect water, soil, and other natural resources. Water is his central focus because it is arguably the most critical and at-risk resource to humans and ecosystems. Zach’s research addresses both native and managed systems and includes field study/monitoring, modeling, and application of results to real world problems. Phone: (540) 231-0689; Email: zeaston@vt.edu

Dr. Anthony Buda is a Hydrologist for the Pasture Systems and Watershed Management Research Unit. He serves as a team member on the project “Management and Conservation Practices to Improve Water Quality in Agroecosystems of the Northeastern Us”. His research focuses on hydrological and water quality studies at plot, field, and watershed scales to determine the effects of agricultural management, landscape factors, and soil characteristics on the fate and transport of nutrients, sediments, and emerging contaminants in runoff. Phone: (814) 865-6623; Email: anthony.buda@ars.usda.gov

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On the day of the webcast, go to www.extension.org/58813 to download the speaker’s power point presentations and connect to the virtual meeting room. First time viewers should also follow the steps at: www.extension.org/8924.

For More Information
* Washington Manure Spreading Advisory http://www.wadairyplan.org/MSA
* Manure Advisory System www.manureadvisorysystem.wi.gov/app/runoffrisk

The LPE Learning Center is a project dedicated to the vision that individuals involved in public policy issues, animal production, and delivery of technical services for confined animal systems should have on-demand access to the nation’s best science-based resources. See our website at: lpelc.org.