

Date: July 10, 2024

To: Urban Stormwater Workgroup Members and Interested Parties

From: David Wood, USWG Coordinator

Re: Urban Nutrient Management Expert Panel Charge and Scope

Candidates for Expert BMP Review Panel: Urban Nutrient Management (2)		
<i>Panelist</i>	<i>Affiliation</i>	<i>e-mail Contact</i>
Cecilia Lane*	DOEE	
Frank Schneider*	PA Dept of Agriculture	
Martin Hurd*	Fairfax County, VA	
Nicole Christ*	MDE	
Dave Montali	Tetra Tech	
Kevin Du Bois*	Department of Defense	
Michael Goatley*	Virginia Tech	
Peter Landschoot*	Pennsylvania State	
Gonzalo Ortiz*	Virginia Tech/VA DCR	
David Wood & Michele Berry	CSN (Panel co-facilitators)	
*Confirmed participation		

Background:

The [Urban Nutrient Management expert panel report](#) was first approved in 2013. In the years since, the Chesapeake Bay Program has updated their modeling tools, adopted a new BMP verification framework, and made multiple adjustments to how nutrients are applied in the urban sector. With each of these changes, crediting urban nutrient management remained a challenge due largely to data limitations.

Urban Nutrient Management Charge:

The initial charge of the panel is to review and update the available science on the nutrient removal performance associated with different approaches to urban nutrient management. In doing so, the USWG specifically requests that the Panel investigate the following variables that may influence the performance, tracking, and verification of the practice:

- Evaluate the effectiveness of state fertilizer legislation in reducing the application of nitrogen and phosphorus on urban turf grass.
 - Consider how urban fertilizer sales data are used to inform baseline N and P loads to urban turfgrass, and determine if the methods are accurately capturing trends in fertilizer use.

- Determine if there are other data sources that can inform urban nutrient application rates, and the impacts of fertilizer legislation
 - As-needed, develop a proposed alternative crediting mechanism, or provide justification for maintaining or making minor modifications to current approach.
- Evaluate options and implications for providing nutrient reductions for large, non-fertilized lands.
 - Evaluate options for reducing nutrient loads to un-fertilized turfgrass acres. This could include the feasibility of a unique land use, an efficiency BMP, etc.
 - Establish streamlined methods of tracking and reporting that would allow this type of credit without undue burden on the local and state agencies
 - Work with the MWG and WWTWG to determine if there are there other sources of urban nutrients that can be quantified and accounted for, that are not currently part of the modeling system, that help to explain and account for unfertilized lands (organic inputs, gray infrastructure discharges, etc).
 - Determine how remaining nutrients get distributed when acres are reported as un-fertilized
- Evaluate potential approaches to streamline tracking, reporting, and verification of both individual urban nutrient management plans, and any pollutant removal associated with state-wide fertilizer legislation.
- Update the characterization of urban nutrient management trends and behaviors.
 - Consider factors including the extent of turf cover, factors influencing risk of nutrient export, turf trends and projections, and human behavior.
- Provide guidance to the CBP Modeling Team to aid in the development of the Phase 7 Watershed Model
 - Work with the USWG to provide requested feedback on urban nutrient application and physical process simulation, including P export pathways, and P sensitivities.
 - Determine whether the urban fertilizer application method developed by the [Phase 1 Task Force](#) should be revised or continued.

Beyond this specific charge, the panel is asked to;

- Take an adaptive management approach to refine the accuracy of its removal rates, including any recommendations for further monitoring research that would fill critical management gaps.

- Critically analyze any unintended consequences associated with the nutrient management credit and any potential for double or over-counting of the credit.

While conducting its review, the panel shall follow the procedures and process outlined in the BMP review protocol, as amended (WQGIT, 2015).