



Chesapeake Bay AMT Meeting

Animal BMPs and Excess Implementation

by Bill Keeling - Virginia Department of Environmental Quality May 9, 2025

Topics VA Requested WTWG/CBP Consider for P7

- Cover Crop Excess Revisit how Cropland Rotations Acres are Estimated - Possible Redistribution of Excess
- Review How Buffer Upland Benefit is Calculated Proposed Change to Assignment of Load Sources for Upland Benefit Exclusion versus Non-Exclusion Buffers
- Animal BMP Excess Particularly Animal Waste Management Systems – Request a Review of Current Process in Model versus BMP Reporting
- Backout of Herbaceous Land Use Change BMPs Proposed a Change to the Backout Process Used for Herbaceous Land Use Change BMPs



BMPs of Concern

Animal Waste Management Systems

Animal Mortality Disposal by Composting

Riparian Fence – Reduction of Direct Deposition



The Problem – Animal Waste Management Systems

State	ВМР	Excess	Submitted	% Excess	Unit
DE	Animal Waste Management System	1,010,168	1,982,985	51%	AU's
MD	Animal Waste Management System	797,083	2,423,223	33%	AU's
NY	Animal Waste Management System	61,884	149,878	41%	AU's
PA	Animal Waste Management System	650,811	1,930,260	34%	AU's
VA	Animal Waste Management System	1,061,750	2,284,284	46%	AU's
WV	Animal Waste Management System	244,197	527,635	46%	AU's
Total	All	3,825,894	9,298,265	41%	AU's

2024 Progress 20250214 Scenario



The Problem – Mortality Disposal by Composting

State	ВМР	Excess	Submitted	% Excess	Unit
DE	Animal mortality disposal by composting	758,131	801,138	95%	AU's
MD	Animal mortality disposal by composting	429,840	508,831	84%	AU's
PA	Animal mortality disposal by composting	392,563	446,551	88%	AU's
VA	Animal mortality disposal by composting	0	365	0%	AU's
Total	All	1,580,534	1,756,885	90%	AU's

2024 Progress 20250214 Scenario



The Problem – Riparian Fence and Direct Deposition

State	ВМР	Excess	Submitted	% Excess	Unit
DE	Riparian Fence	0	240	0%	AU's
MD	Riparian Fence	1,436	54,466	3%	AU's
NY	Riparian Fence	12,939	69,151	19%	AU's
PA	Riparian Fence	23,551	172,805	14%	AU's
VA	Riparian Fence	23,511	299,631	8%	AU's
WV	Riparian Fence	40,204	82,155	49%	AU's
Total	All	101,641	678,448	15%	AU's



The Request

Review the Process Used to Simulate this Sector of Agriculture and Compare That to How the BMPs are Reported or - Why is the Current Methods Producing Significant Excess of the Reported Implementation on Annual Progress Runs and What Can be Changed in Phase 7 to Simulate these Management Actions Better



Some Concerns

- Scale and Distribution of Feeding Space in Model versus BMP Reporting
- Actual and Simulated Animal Numbers and Distribution
- CAST Factors for Animal Number to AU, Average Animal Weight, Types of Animal (turkey), AU per System, Manure Excreted and Collected,...
- Should Very Small Animal Numbers be Included in "Collected" Waste?
- Default Value AU/1000 ft for Exclusion Fencing
- Composting What Constitutes Too Much Excess?

Discussion

