

Improving modeling and mitigation strategies for poultry ammonia emissions across the Chesapeake Bay Watershed

STAC Workshop Steering Committee

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Saving a National Treasure

- Managing Ammonia has potential to provide Producer benefits *and* Environmental benefits:

- Improved bird health
- Increased N in litter – potentially offsetting commercial fertilizer needs
- Improved nutrient balance (N:P) of litter
- Reduced deposition/delivery
- Reduced P losses
- Energy Savings? Air Quality?

- There should be win-win solutions

- Scale?



•The ‘Bay partnership’ has not dedicated ‘significant attention’ to managing ammonia

- Cost-share investments have been small or absent in watershed states
- Very Few BMPs have been reported into the model (even though there is some expectation that broad implementation is occurring). Future implementation goals are also low.
- Only 3 BMPs available (2 relevant to poultry) with limited details

% of total potential implementation

Practice	2010	2020	2025-WIP3
Litter Ammendments	1.52%	0.02%	11.58%
Biofilters	0.00%	0.00%	0.00%
Lagoon Covers	0.00%	0.00%	0.00%



- There are new 'tools' and research that may present new opportunities
 - New management approaches?
 - New modeling tools?
 - Monitoring efforts?
 - Surveys?



- What do we know about the scale of ammonia transport? Sources? How much? How far? How might we improve our understanding?
- What are the management strategies that are currently available and what do we know about them? What emerging ideas are being researched? What co-benefits come with these management efforts?

→ How can the partnership be helpful?
Incentives? Surveys? Research?



Why are we focusing on Poultry?

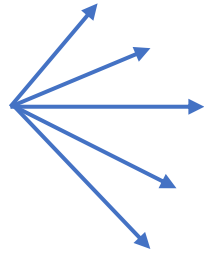
- Clear overlap of benefits between producers and environment
- Historic management efforts by industry



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Today:
Introduction
to the
questions



Synthesis
meeting,
~ June 22'



Steering
Committee will
synthesize
feedback and
draft report with
recommendations

5-8 focus questions
Breakout sessions
(Dec 21'-May 22')

