

# AMS Update: Scenario Builder Ver. 6 Review

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and  
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# Addressing Comments

- Written comments received from WVDEP, MDA, Virginia Tech and NE Pasture Consortium plus verbal comments from subcommittee and workgroup members
- Comments on documentation still welcome
- Documentation can be downloaded at:  
[https://archive.chesapeakebay.net/Modeling/Phase6/SBV6Documentation\\_01212016.pdf](https://archive.chesapeakebay.net/Modeling/Phase6/SBV6Documentation_01212016.pdf)

# Response to Summarized Comments for April Beta Version

- **Mineralization of past manure application should vary by decade.**
  - Agreed. Only the mineralized portion from the current year will be considered in the 1980s, while mineralization from three years worth of application will be considered in the 2000s.
- **100% of phosphorus in recovered manure (that which is not considered storage and handling loss) should be retained in the manure.**
  - Agreed. While USDA-NRCS assumes that a portion of P is not recoverable, the AMS found no literature suggesting this is the case.
- **Acres of feeding operations should match the equation provided in the SB Phase 6 Documentation.**
  - Agreed. The acres were mistakenly developed using Phase 5 methods in the January version.
- **Distribution of inorganic fertilizer should be done AFTER accounting for all BMPs.**
  - Agreed. Many BMPs will change the amount of manure available to crops, and the resulting crop application goal which is then used to distribute the inorganic fertilizer.
- **Emmer, spelt and triticale application goals should not be based on yields.**
  - Agreed. The yield data for these crops are lacking, so application goals will be on a per acre basis.

# Summarized Comments still being Reviewed

| Comment  | Status Update (All response information currently draft)   |
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| Uptake (or removal) values should be updated and tied to yields                                      | Changes to be incorporated; crop removal also being looked at  |
| Manure Transport data should be improved, including tracking of wet vs. dry tons                     | Changes to be incorporated in NEIEN Appendix.  |
| Biosolids data and methods should be revised   | Awaiting new data and methods from ad-hoc workgroup  |
| Application goal tables should be revisited once nutrient spread method is decided upon              | Tables will be sent out to states for one last review prior to July.   |
| Manure should be applied for P goals on subset of acres  | Changes can be incorporated, but acres of P-based NM are needed.   |
| A portion of manure deposited within access area should be moved back to pasture                     | Group is currently considering how much should be moved.   |
| AAPFCO fertilizer data should be improved based upon state information if used                       | States currently have option of reviewing fertilizer data and suggesting improvements  |
| Core nutrient management should impact application rates in some way                                 | Nutrient Management Panel meeting at the end of March; any recommendation will require acres of nutrient management for calibration period |
| Previous legume fixation should be "credited" for row crops just as previous manure applications are | Group considering best approach  |
| Number of manured acres may be too low in some counties  | No alternative approach yet recommended  |
| Crop applications in areas with little manure are relatively low compared to goals                   | Need to reassess after other changes in April and July   |
| Applications to turf grass (urban) appear to be too high   | Urban Stormwater Workgroup responsible for turf applications   |
| Legume fixation method should be revisited (both values for crops and method of calculation)         | Group currently working on revisions   |
| AWMS BMP submissions may be in error due to the new way that animal numbers are estimated            | Revisions needed in NEIEN Appendix   |
| Need to review/improve animals and feeding space acres in border counties                            | States should review April results and provide more detailed animal numbers if available   |
| RUSLE crop cover values should be revised  | Group currently working with commenter   |

# Timeline

- Recommended Timeline from WQ GIT leadership:
  - AMS recommendations for major SB modifications (manure nutrient applications, inorganic fertilizer applications, legume fixation, and nutrient uptake) to be presented at the April 21 Ag WG meeting
  - Comments from workgroup addressed and changes presented at the May Ag WG meeting for final decision
  - Delivery to Modeling Team by June 1 for July beta 3 runs
  - Minor (no coding needed) modifications to input data submitted to Ag WG as needed following beta 3 run
  - Comments still welcome after beta 3 runs, and responses will be provided to Ag WG in late summer
  - Beta 4 tentatively scheduled for October
- AMS is largely on track to meet suggested timeline, but consideration of alternative methods for inorganic fertilizer applications are still being considered.
- Coordination of nutrient spread procedures with Nutrient Management Panel's approach has been discussed, but final panel recommendations aren't expected until May. So, nutrient management will not be considered in April beta, but may be in July or October.