Decision Requested: *Schema modifications vs. Appendix additions*

1) Proposed Schema Modifications:

a) Soil Hydrologic Group

Comment: This can be accommodated by free text NPS Measures like "Bioretention on A/B soils"

Practices (especially stormwater) may track and report whether implementation occurred on AB or CD soils. The proposal is to add an element for Soil Hydrologic Group for BMPs and BMP Components.

Code	Description
A	Group A soils typically have less than 10 percent clay and more than 90 percent sand or gravel and have gravel or sand textures. Soils in this group have low runoff potential when thoroughly wet.
B	Group B soils typically have between 10 percent and 20 percent clay and 50 percent to 90 percent sand and have loamy sand or sandy loam textures. Soils in this group have moderately low runoff potential when thoroughly wet.
C	Group C soils typically have between 20 percent and 40 percent clay and less than 50 percent sand and have loam, silt loam, sandy clay loam, clay loam, and silty clay loam textures. Soils in this group have moderately high runoff potential when thoroughly wet.
D	Group D soils typically have greater than 40 percent clay, less than 50 percent sand, and have clayey textures. In some areas, they also have high shrink-swell potential. Soils in this group have high runoff potential when thoroughly wet.
A/B	Mix of Group A & B soils. Lower runoff potential when thoroughly wet.
C/D	Mix of Group C & D soils. Higher runoff potential when thoroughly wet.

b) Verification Date (at BMP & BMP component level).

Comment: What is being verified; installation? Continued operation?

c) Verification Qualifier Codes (at BMP & BMP component level , currently applicable to Manure Application, Cover Crops & AWMS)

Comment: This can be accommodated by free text NPS Measures like "Area of cover crop without manure applied"

When submitted with a particular practice, these would be used to confirm that a BMP conforms specifically to CBPO Scenario Builder practice definitions reviewed & approved by expert panels. For example, Cover Crops can be submitted with or without the 'NOMANURE' qualifier. If some jurisdictions can confirm the lack of nutrient application while others cannot, the verification subcommittee might be able to make recommendations on whether or not unconfirmed practices conform to practice definitions & are eligible for full efficiency.

Code	Description
NOMANURE	Manure has not been applied. Applicable to Chesapeake Bay WSM practices whose definitions specify the lack of nutrient application (Cover Crops, Land Retirement to hay without nutrients, etc).
NOSPREAD	Excess manure from animal waste management system has not been spread on crops.

d) Practice lifespan

BMPs can have a lifespan, which is defined as the time period in which the practice is to be used and maintained for its intended purpose. When reported, the lifespan information can be used to "retire" a practice, removing it from being considered as contributing to a jurisdictions annual implementation for progress reporting.

We discussed three elements to be added associated with reporting lifespan:

Element	Description
Practice Lifespan	Time period in which the practice is to be used and maintained for its intended purpose (Number).
Practice Lifespan Unit Code & Name	Months, Years
Practice Start Date	Date of practice installation
Practice Expiration Date	Date practice is considered to be no longer in use.

The proposed business rules for determining the practice expiration date are:

- If *Practice Expiration Date* has been reported it will be used (Practice Lifespan and Start Date will not be used).
- If Practice Expiration Date has not been reported, it will be calculated from the *Practice Start Date* and the *Practice Lifespan*

VA and MD both expressed that they have programs & practices that are continued, extended, and maintained beyond the generic lifespan assigned by NRCS. It could be an issue. How would jurisdictions report (or CBPO know) that a practice has been extended? DE and DC also commented on inspection or rehabilitation efforts.

Marty: there are a few options through NEIEN that might be used to address this issue, depending on how jurisdictions track & report practices. Currently:

- Each practice has a *state unique identifier*. If a particular practice is extended, the jurisdiction could update the practice expiration and/or lifespan data element and re-submit the data. Scenario builder would access the updated information.
- The current method used by some jurisdictions is to track and retire these practices through existing mechanisms and reporting only the practices "active" within a progress reporting window. Essentially, all historical implementation is ignored and only the active submission is used to determine the current implementation.

- We might be able to create a new 'verification qualifier code' and document business rules to verify that a practice has been extended beyond its original lifespan.

e) Performance Standard (A free text data element associated with BMP & BMP components)

Report as a BMP, or report specific details associated with practice and use the standard to confirm the specific components were designed to meet the standard?

2) Additions to NPSBMP Codes List:

a) Cubic Feet
b) Acre-Feet
c) Verification Qualifier codes (see above)
d) Soil Hydrologic Group codes (see above)

Pros and Cons:

Schema modifications are structured (organized, defined, validated) and easier to document business rules and efficiently code software.

Appendix modifications are less structured, flexible, open enrollment period additions.

Because BMPs have multiple measure names, and the measures are free text, it is complicated to relate all of the combinations of measures to each other. Also, would cause "bloat" to rules appendix, documenting the possible combinations rather than separating elements.