Soil Health Advisory Committee

March 15, 2021

Maryland Department of Agriculture
Themes from facilitated meetings #1 and #2

- Practice specific examples:
  - Maximize opportunity to support living cover year-round via cover crops
  - Encourage diversity in specie composition, but evidence may suggest maximum soil health benefit at 3-4 species
  - Small operation’s program access – flat rate, bulk seed access, equipment
  - Invasive species control in perennial cover
  - Record keeping burden and consistency for prescribed grazing
  - Conversion or improve current grazing operations? Diversity of grazing operations, e.g. cattle vs. equine
  - Targeted areas for conservation cover
Themes from facilitated meetings #1 and #2

- Cross cutting issues:
  - Flexible program rules
  - Investment with greatest impact
  - Rented land and lease terms – long term commitment to soil health
  - Performance-based assistance
  - Technical assistance
  - Synergy between practices
  - Unintended consequences (e.g. tradeoffs between practices)

Thank You for engagement and thoughtful feedback
Next Steps

- Following today’s meeting, organize debrief session for each subcommittee to transition discussion and feedback into “Options” section of each memo
- Circulate updated memos to full Committee
- Next meeting
  - Date: TBD
  - Topic: **Incentive concepts**
  - Objective: pre-recommendation phase, let’s explore incentive models for advancing practice adoption
  - Discussion will inform future meeting on metrics and funding
- Other state models pre-meeting
- Updated carbon sequestration values for key practices (COMET) – forthcoming
- Future webinar on MDA soil health grant – Year 1 findings
<table>
<thead>
<tr>
<th>INPUTS</th>
<th>ACTIVITIES</th>
<th>METRICS</th>
<th>OUTCOMES (motivation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farms</td>
<td>Incentives</td>
<td>pH</td>
<td>Crop yield</td>
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<tr>
<td>Crops</td>
<td>Capacity Building</td>
<td>CEC</td>
<td>Nutrient Value</td>
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<td>Materials</td>
<td>Research</td>
<td>Water holding</td>
<td>Water quality</td>
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<td>Equipment</td>
<td>Technical Asst.</td>
<td>SOC</td>
<td>Resilience</td>
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<tr>
<td>Peer-to-Peer</td>
<td>SOM</td>
<td></td>
<td>Carbon</td>
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<tr>
<td>Microbiome</td>
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<td>Disease</td>
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</tbody>
</table>

What do we currently know about MD farms relevant to soil health?

What activities are needed to increase adoption?

How do we measure soil health?

Future meeting

March & Dec. 2020

From March 2020 meeting
Agroforestry update

Photo credit: Keefe Keeley, Savanna Institute
<table>
<thead>
<tr>
<th>Name</th>
<th>Code</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hedgerow Planting</td>
<td>422</td>
<td>Establishment of dense vegetation in a linear design to achieve a natural resource conservation purpose.</td>
</tr>
<tr>
<td>Windbreak/Shelterbelt</td>
<td>380</td>
<td>Windbreaks or shelterbelts are single or multiple rows of trees or shrubs in linear configurations.</td>
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<tr>
<td>Establishment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Silvopasture Establishment</td>
<td>381</td>
<td>An application establishing a combination of trees or shrubs and compatible forages on the same acreage.</td>
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<tr>
<td>Alley Cropping</td>
<td>311</td>
<td>Trees or shrubs planted in a set or series of single or multiple rows with agronomic, horticultural crops or forages produced in the alleys between the rows of woody plants.</td>
</tr>
<tr>
<td>Tree/Shrub Establishment</td>
<td>612</td>
<td>Establishing woody plants by planting seedlings or cuttings, direct seeding, or natural regeneration.</td>
</tr>
</tbody>
</table>
Next Steps

- Excellent presentation and resources provided by National Agroforestry Center
- Expansion of state cost-share (MACS) to demonstrate a clear conservation benefit, defined as “an improvement in the condition of the soil, water or other such natural resource of the State, and includes, among other beneficial effects, improved water quality, improved soil health, reduced soil loss, and restored wetlands.”
- State demo projects being pursued
- What other information supports the Committee moving toward recommendations for agroforestry practices?