Maryland Healthy Soils Program Update

Greenhouse Gas Mitigation Work Group (MWG) Aug. 17, 2021

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How Does This Align with MWG Goals?

- ► Healthy Soils are a key part of MDA's strategy to reduce GHG emissions as described in the GGRA plan
- Carbon Sequestration
 - Priority conservation practices, set by Advisory Committee, align with GGRA and have carbon sequestration potential
 - Inventory method(s) discussion underway to better account for soil carbon from ag practices. COMET-Planner and the EPA SIT tool are being compared
- MDA currently updating farm evaluation tool for nutrients and carbon
- Expect future updates to MWG on Healthy Soils Program and associated tools



Healthy Soils Refresher - 2017 Legislation

- Improve the ability of the soil to function as a biological system
- Increase soil organic matter
- Improve soil structure and water and nutrient holding capacity
- Sequester carbon and reduce greenhouse gas emissions
- Do all of this in a way that improves the health, yield, and profitability of soils in the state



Healthy Soils Committee: Priority Conservation Practices

- Cover crops (340)*
- Reduced till (345) and No-till (329)
- Prescribed grazing (528)*
- Forage and biomass planting (512)*
- Conservation cover (327)*
- Critical area planting (342)*
- Nutrient management (590)
- Conservation crop rotation (328)
- Integrated pest management (595)
- Agroforestry: Alley Cropping (311)
- Agroforestry: Hedgerow planting (422)*
- Agroforestry: Windbreak/shelterbelt establishment (380)*
- Agroforestry: Silvopasture (381)*
- Agroforestry: Tree/shrub establishment (612)*



^{*}Conservation practiced directly or indirectly supported by current MACS programming

Healthy Soils Committee: Incentive Concepts

Most recent discussions review incentive concepts that could be applied to the priority conservation practices

Included MDA's initial selfevaluation of each opportunity

MDA willingness to pursue any concept, but not concurrently

Incentive Concept	Brief description	Evaluation Metrics*		
		MDA capacity	Funding	Producer Experience
1) Traditional Cost-share	Use the expanded authority of the MACS program to cost-share for practice adoption	0	0	0
2) Bundled practice cost-share	Establish 2-3 practice suite implemented over contract duration	0	0	•
3) Conservation Buffer Initiative	Expand FY21 pilot program to address additional marginal lands with focus on saltwater impacted lands	0	0	0
4) Cover Crops	Expand traditional program based on SHAC recommendations (mixes, planting season, etc.)		0	
5) Equipment financing	Promote LILAC opportunity and/or expand Income Tax Subtraction of conservation equipment to include roller crimper, small operation equipment needs, etc.	0	•	•
6) State certification program	Create branded farmer certification program to advance greater market opportunity (e.g. supply premiums) or other appealing outcomes (e.g. NM audits, priority program access, etc.)	0	•	0
7) Technical Assistance support	Support state's Soil Health Management Plan (SHMP) capacity via Technical Service Provider network. The SHMP is enabling document for holistic mindset, inclusive of soil health evaluations	0	0	0
8) Competitive grant fund	Create competitive grant program to fund practice adoption. Evaluation and ranking criteria could be developed with SHAC.	0	0	0
9) Small farm conservation	Establish dedicated assistance and protocol for small farm operations to complement existing programs		0	0

^{* &}lt;u>Definitions:</u> **MDA capacity** (Office of Resource Conservation) rates our current infrastructure and staffing capacity to deliver the incentive concept; **Funding** rates current (or likely) funding available to MDA for the incentive concept; and **Producer Experience** rates perceived interest or experience among producers with the incentive concept.



= wea



= moderate



= strong



Healthy Soils Committee: Next Steps

- Incentives will include focus on shifting producers towards systemslevel thinking about soil health and carbon storage
- Any outcomes-based payments will need to address permanence more directly if used as part of a market or inventory - state policy discussion
- Advisory Committee will meet again August 30 to resume discussions on incentives
- Goal to mostly finalize recommendations with the Advisory Committee over the next ~6 months

