

STATE SOIL HEALTH INITIATIVES: BUILDING MOMENTUM

Fishkill Farms, East Fishkill, New York

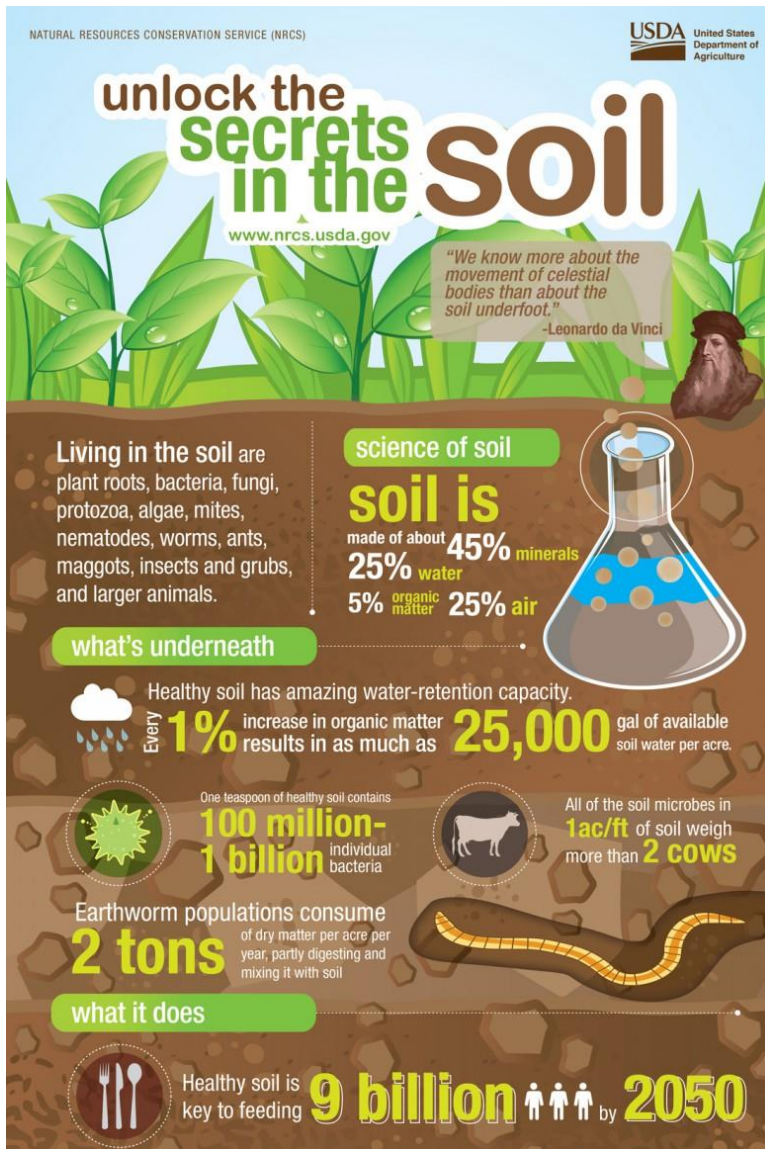
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GOALS OF A HEALTHY SOIL LAW

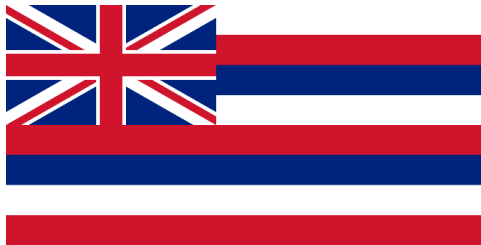


- **Reduce GHG emissions** (CH₄, N₂O, CO₂)
- **Increase soil carbon**
- **Support key soil health principles** (e.g. of NRCS or Rodale Institute):
 - Maximize soil surface cover
 - Minimize disturbance of soil
 - Maximize above- and below-ground diversity
 - Maintain continuous living roots in soil
 - Reduce and limit chemical inputs
 - Incorporate animals on cropland

EXISTING STATE HEALTHY SOIL LAWS (1)



- **California:** SB859 and AB 1613 (2016)
 - Creates Healthy Soils Program
 - Defines healthy soils, coordinates agency efforts, R&D, incentives, education
 - \$7.5M for program and demonstrations

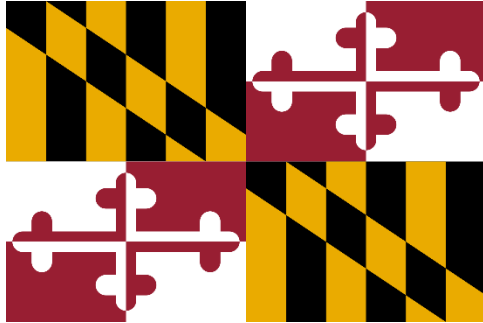


- **Hawaii:** HB 1578 (2017)
 - Identifies, measures, encourages practices to improve soil health
 - Promotes C seq, compost, and agroforestry
 - \$25,000



- **New Mexico :** HB 1578 (2019)
 - Defines healthy soils and ID's practices
 - Includes: soil assessment and education program, healthy soil advisory board, workshops and training
 - Creates "soil health champions"
 - \$5.15M for program (FY2020)

EXISTING STATE HEALTHY SOIL LAWS (2)



- **Maryland:** HB 1063 (2017)
 - Defines and supports healthy soils by directing the Agricultural Department to support practices through incentives, R&D, possible funding



- **Oklahoma:** HB 1192 (2001)
 - Creates advisory committee to identify and support practices through R&D, education
 - Funding and opportunities for carbon trading



- **Utah:** HCR 8 (2015)
 - Calls on all agencies “with authority to manage lands to increase soil carbon sequestration”

PROPOSED STATE HEALTHY SOIL LAWS



- **New York: A 3281 (2017)**
 - Defines carbon farming using USDA COMET-Planner and COMET-Farm
 - Establishes tax credit to encourage C seq.



- **Vermont: S 43 (2017)**
 - Requires the Sec. of Natural Resources to establish a regenerative soils program
 - Incentivizes C seq. with certification and marketing program, technical and financial assistance



- **Massachusetts: HB 3713 (2017)**
 - Defines and promotes healthy soils practices
- Legislation drafted in **Connecticut, Iowa, Illinois, Kansas, Kentucky, Missouri, Colorado**

State	Water Quality / Quantity Goal	Climate Change Mitigation Goal	Other Goals	“Healthy Soil” Definition	Specific Practices Identified	Committee, Task Force and/or Agencies	Research and Education	Technical Assistance	Funding and Financial Assistance
CA	✓	✓	Yields, erosion, air	✓	No-till, cover crops, compost, grazing	✓	✓	✓	\$7.5 M
HI	✓	✓	Resilience, trading	✓	Compost, agroforestry	✓	✓	✓	\$25,000 for study
NM			Yields, profitability	✓	No-till, cover crops, compost, mulch, grazing	✓	✓	✓	\$5.15 M
MD		✓	Yields	✓		Dept. of Ag.	✓	✓	
OK		✓	Trading		Trees, conservation, re-vegetation	✓	✓	Measurement	Creates fund
UT	✓	✓	Productivity, biodiversity		Advance forestry, grazing	✓		“Encourages”	
NY	✓	✓	Yields	Carbon farming	Refers to COMET-Planner		✓	Certificate	Tax credit
VT	✓	✓	Resilience	Performance based	No synthetic chemicals	✓		Certificate	Marketing program
MA				✓	No-till, cover crops, grazing, integration	✓	✓	✓	Creates fund

POSSIBLE KEY ELEMENTS OF MODEL LAW

- **Findings:** Benefits of health soils
- **Define:** Healthy soils
- **Goal:** To increase adoption of practices that create healthy soils
- **Actions:**
 - 1) Require agencies to consider and coordinate
 - 2) Identify healthy soil practices and goals
 - 3) Provide funding for R&D and demonstration projects
 - 4) Provide education, training, and technical assistance
 - 5) Provide financial incentives – either payments for practices or tons of carbon sequestered
 - 6) Work group to propose
 - 7) Create preferential purchasing and marketing programs and certification programs
 - 8) Create transition insurance program to help counter risk of adopting healthy soil practices
- **Funding Options:**
 - General funds
 - Fertilizer surcharge, storm water fee, or other impact fee (parallel to environmental benefit charge)
 - Funds from carbon cap and trade program, or carbon fee
 - Redirect federal EQIP, CSP, etc. funds to preference soil health practices