

# Healthy Soils Legislation and Policy

Tufts Northeast Healthy Soils Initiative

April 4, 2019

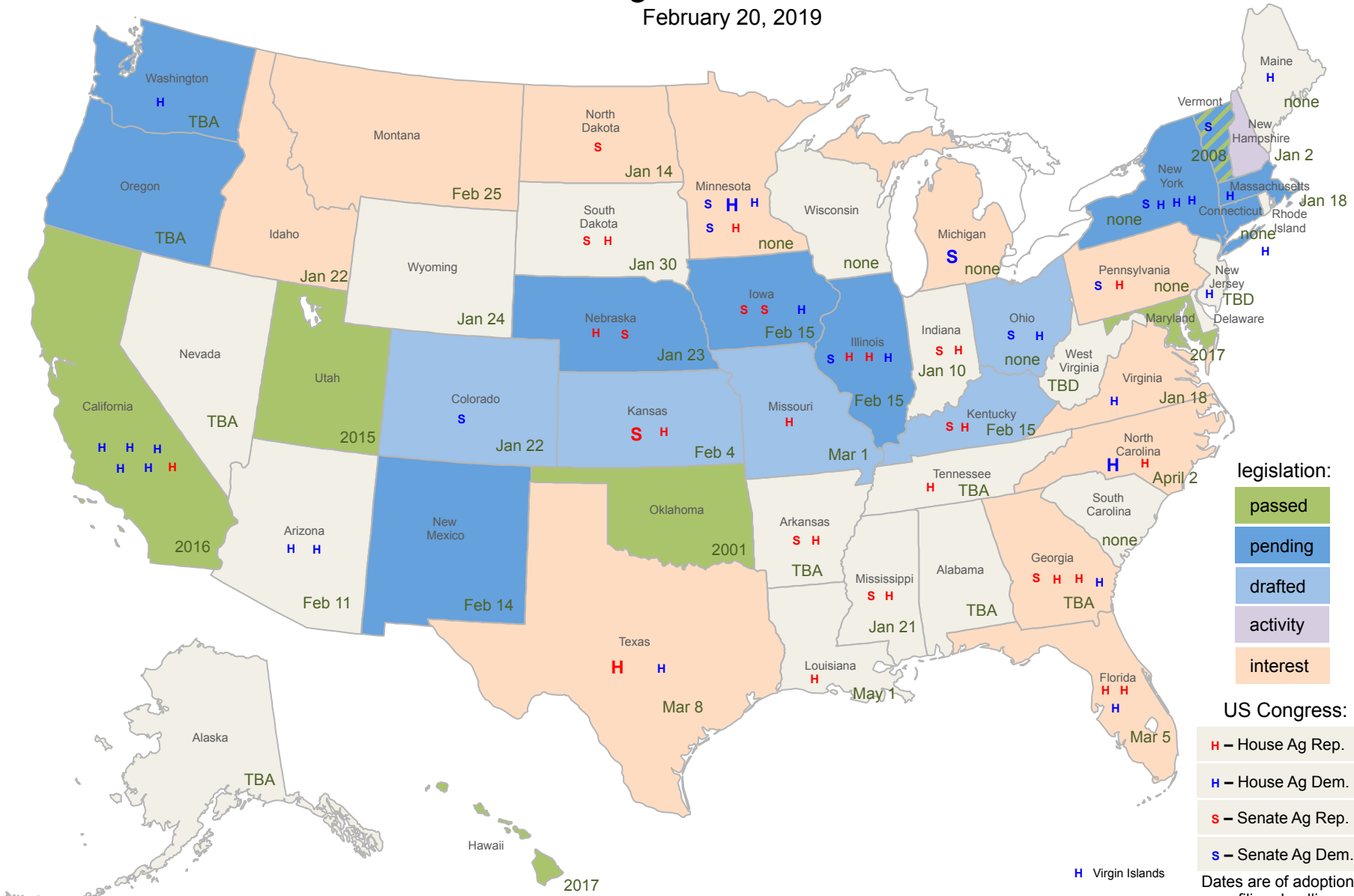
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# Healthy Soils Legislation and Policy

- A summary of state soil health legislation
- Use of legislation as a tool to educate legislators and staff about the importance of healthy soils and to increase funding for soil health at the state and Federal level.
- Current status of work on state soil health legislation/policy nationally, esp. in Northeast.
- Healthy Soil legislation and policy roadmap

# Healthy Soils legislative status

February 20, 2019



legislation:

- passed
- pending
- drafted
- activity
- interest

US Congress:

- H – House Ag Rep.
- H – House Ag Dem.
- S – Senate Ag Rep.
- S – Senate Ag Dem.

Dates are of adoption or filing deadline  
(TBA = To Be Announced)  
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# Existing Healthy Soils laws

- Oklahoma (2001) carbon sequestration
- Vermont (2008) carbon sequestration
- Utah (2015) carbon sequestration
- California (2016) funding through carbon fees
- Maryland (2017) defines, but still needs funding
- Hawaii (2017) study

# State legislation 2019

- **Connecticut** ([HB6647](#)) Regenerative Ag (Healthy Soils) – stalled
- **Illinois** ([SB1980/HB2737, HB2819](#)) soil health included in conservation – moving forward
- **Iowa** ([HSB 78, HF 102](#)) cover crop support – stopped, new bill needed
- **Massachusetts** ([SD1438/HD3065](#)) Healthy Soils Act – ongoing
- **Nebraska** ([LB243, LB283, LB729](#)) Soil Health Task Force – moving forward
- **New Mexico** ([SB218/HB204](#)) Healthy Soils Act passed
- **New York** ([A02718](#)) carbon farming – ongoing
- **Oregon** ([HB2020](#)) cap-and-invest – ongoing
- **Washington** ([SB 5947/HB 2095](#)) sustainable farms and fields – moving forward

# Northeast legislative and policy status

- Massachusetts – 75 cosponsors (63 Dem, 12 Rep; 37% of legislature!) + support by Northeast Organic Farming Assoc (NOFA), Farm Bureau and Farmers Union; \$100k funding for Healthy Soils Action Plan; pursuing funding for Healthy Soils Pilot Program
- Connecticut – Due to backlog of bills, did not move forward
- Vermont – Vermont Environmental Stewardship Program (VESP) bill could improve support – another bill of interest
- New York – Carbon Farming bill depends on Cornell study – complementary bill or updated bill is of interest
- New Hampshire, New Jersey, Maine – interest in bills for 2020
- Rhode Island – work underway on bill to be submitted

# Healthy Soils Legislation and Policy

- Healthy Soils legislation promotes healthy soils practices, which improve:
  - drought resilience,
  - stormwater management, and
  - water quality, while
  - drawing down atmospheric carbon.
- **Ecosystem services** of healthy soils without carbon drawdown are sufficient to justify funding – carbon drawdown is a bonus

# Healthy Soils Legislation

Healthy Soils legislation typically mainly deals with agricultural lands, but sometimes also addresses other parts of the solution:

- Agricultural – Healthy Soils
- Urban – Healthy Cities
- Wetlands – Healthy Watersheds
- Forests – Healthy Forests
- Oceans – Healthy Oceans



# State Healthy Soils Policy Framework

- Education through Legislation
  - Legislators and staff give priority to understanding bills in the legislature, so legislation provides educational opportunities.
- Creation of a Healthy Soils Action Plan
  - Legislation leads to funding to determine status and way forward.
- Healthy Soils Pilot Program
  - Legislation leads to funding for pilot program to support farmers and to obtain cost-benefit data to support future funding

# Healthy Soils Funding Strategy

- Funding through appropriation/grants for creation of Healthy Soils Action Plan
- Funding through appropriation/grants for creation of Healthy Soils Pilot Program
- Use cost-benefit data from farmers/ranchers and Pilot Program to obtain appropriations/grants for Healthy Soils Program
- Use fees on externalities (e.g., greenhouse gases, fertilizers, pesticides, herbicides, and economic poisons) to compensate farmers for ecosystem services through Healthy Soils Program

# Soil Carbon and Ecosystem Services

- There is a strong wave of interest in providing incentives to farmers/ranchers for sequestering carbon
- While this is financially attractive, there are drawbacks:
  - Separation of mitigation from source is economically inefficient
  - May likely result in delay in lowering emissions
  - May bias practices to enhance carbon sequestration over other ecosystem services (e.g., water quality and biodiversity impacts of herbicides to kill cover crops)

# Fees on Negative Externalities

- Most states do not collect any fees or taxes on fertilizers, herbicides, pesticides, fungicides, economic poisons or other substances used in agriculture, silviculture, silvopasture, aquaculture, etc.
- Most of these substances have high negative external costs to the public and to nature.
- It is appropriate to collect a fee on these substances to mitigate their impact, as close as possible to the nexus (source).

# Practices and Outcomes

- Some legislation promotes a particular practice or practices – better if the legislation promotes healthy soils and healthy water ecosystems.
- The goal is healthy soils and the related ecosystem services – so, good legislation allows flexibility in implementation, to promote those practices that can lead to verifiable outcomes and to reward outcomes.

# Soil Carbon Initiative

“outcomes based, not process based”

## Critical elements:

Measure **outcomes**  
*(don't dictate practices)*

Achieve verified and  
meaningful **results**

Complement, and not  
compete, with existing  
standards

Engage the **entire**  
agricultural spectrum

Work for farmers  
agronomically &  
economically:  
**speed and scale**

Require ongoing  
**improvement**

Focus on **carbon**  
**sequestration and soil**  
**health**

# Northeastern Healthy Soils Coalition

- Support each other for creation of Health Soils Action Plan in every state
- Support each other for improved funding for Healthy Soils Programs, including data collection and training
- Development of holistic approach, that coordinates with legislation on food policy, carbon policy, and on forest, urban, wetland, and ocean health, using fees on negative externalities to fund ecosystem services
- Leverage existing Northeastern entities like RGGI (Regional Greenhouse Gas Initiative), CONEG (Coalition of Northeastern Governors), and NEASDA (Northeast Association of State Departments of Agriculture)

# Northeast Healthy Soils Coalition

- Name?
- Objectives - agriculture only, or also forest, urban, wetland, and ocean?
- Who?
  - Northeast Organic Farming Association (NOFA)
  - Soil and water conservation districts (NACD)
  - American Farmland Trust (AFT)
  - Farm Bureau
  - Farmers Union
  - Others?



# Healthy Soils State Coalition Building

- In most states, the organizations that have the strongest interest in healthy soils policy/legislation tend to be soil and water conservation districts, and sometimes watershed associations or food policy groups.
- However, the conversation does not move forward unless a farming group gets involved.
- NOFA and other organizations are positioned to move healthy soils policy forward quickly throughout the Northeast.

# Healthy Soils legislation and policy

## Next Steps

- Healthy Soils Action Plan in every state
- Healthy Soils Pilot Program in every state
  - with training to build capacity to support HS
  - with data gathering for:
    - establishing baseline soil health
    - modeling and estimation of statewide soil health
    - obtain cost-benefit data and support growth of funding
- Coalition building in each state and Northeast
- Comments by **May 5<sup>th</sup>** to Soil Carbon Initiative
- Legislation and policy resolutions in every state

# Healthy Soils Legislation and Policy

Additional Information

# Practices and Outcomes

- Need baseline data of current practice, soil health, soil carbon and other ecosystem services.
- Trend of policy discussions appears to be toward outcomes, yet there is a serious danger of blowback if lack of training and support in practices result in poor outcomes.
- How to influence Soil Carbon Initiative (SCI) to start with rewarding practices and training during baseline establishment and before rewarding outcomes? **Comment deadline is May 5<sup>th</sup>, 2019**

# Related Policy

- Ecological Tax Exemption – tool for providing incentives for ecosystem services on non-agricultural land
- Food Policy – important that healthy soils legislation supports and integrates with food policy
- Forest Health – important part of integrated response to climate change

# Soil Health Requirements in Leases

- Loss of soil or loss of soil health is a loss of land asset value.
- 40% of agricultural land is leased (2012)
- It is the fiduciary responsibility of land managers to protect, if not enhance, the value of the land assets under their management.
- Thus, a large portion of agricultural would be put under healthy soils practices if land managers understood this

# Net Green Ag?

- A lot of buzz and targets for communities becoming “Net Zero”, as in “Net Zero Carbon Emissions”
- The target of Regenerative Ag / Healthy Soils is net negative carbon and net positive externalities for ecosystem services
- How to brand the targets for the agricultural sector (~20% of emissions)?
- When can Ag get to net drawdown of carbon?