Healthy Soils Legislation and Policy

Tufts Northeast Healthy Soils Initiative
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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
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 5th 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 5th, 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?