

Senate Energy and Natural Resources Committee

Griffin Roberge 271-3042

HB 199, including soil health and soil conservation in the state soil conservation plan.

Hearing Date: April 19, 2021.

Time Opened: 1:06 p.m.

Time Closed: 1:31 p.m.

Members of the Committee Present: Senators Avard, Gray, Watters and Perkins Kwoka.

Members of the Committee Absent: Senator Giuda.

Bill Analysis: This bill amends current provisions relative to soil conservation to include soil health and climate and environmental change adaptation.

Sponsors:

Rep. Bixby

Who supports the bill: Representative Susan Almy, Grafton - District 13; John Ballentine; David Beaudreau, Responsible Industry for a Sound Environment; Representative Peter Bixby, Strafford - District 17; Representative Donald Bouchard, Hillsborough - District 11; Representative Tony Caplan, Merrimack - District 6; Representative Roger Dontonville, Grafton - District 10; Mary Eisner; Representative Chuck Grassie, Strafford - District 11; Representative Joan Hamblet, Rockingham - District 31; Anne Hunnewell; Richard Hunnewell; Robert Johnson, II, NH Farm Bureau Federation; Janet Lucas; Nisa Marks; Representative Megan Murray, Hillsborough - District 22; Stephanie Osborne; Representative Howard Pearl, Merrimack - District 26; Representative Maria Perez, Hillsborough - District 23; Erick Sawtelle, Lee, NH; Valerie Scarborough; Representative Dianne Schuett, Merrimack - District 20; Representative Joyce Weston, Grafton - District 8.

Who opposes the bill: None.

Who is neutral on the bill: None.

Summary of testimony presented in support:

Representative Peter Bixby

Strafford – District 17

- HB 199 is a reintroduction of HB 1562 (2020). HB 1562 was recommended “ought to pass with amendment” by the House Environment and Agriculture Committee. The full House adopted the committee’s recommendation on a voice vote. However, the bill was tabled in the Senate and died there due to the COVID-19 pandemic and the suspension of legislative activity.
- Back in the 1930s, the federal government recognized something needed to be done to protect agricultural soils following the Dust Bowl. The federal government required states to create state soil conservation plans (SCPs) and created the Soil Conservation Service. Today, the Soil Conservation Service is known as the Natural Resources Conservation Service (NRCS).
- NH’s SCP is a guiding statute for county soil conservation districts (SCDs), which provide education and technical assistance on soil and natural resource conservation to farmers and landowners based on the best

soil science available at the time. The last major revision to NH's SCP was in 1984 with minor changes in 1995. These changes highlighted the relationship between soil conservation and water conservation.

- In the 1980s, the current soil science had a focus on physical soil structure and soil nutrient chemistry. Since that time, there has been more development in soil science. There is a growing recognition of the biological activity and organic matter in soil. More biological activity and soil organic matter lead to improved water retention, aeration, and nutrient retention. Soils with biological activity are more resilient to climate and ecological events. A soil's resiliency is known as soil health. SCDs have placed a growing focus on cover cropping and provided equipment at low rental costs for soil projects that promote soil health.
- HB 199 seeks to insert the notion of soil health into state statutes that govern SCDs, bringing the science in NH's SCP up to date. HB 199 refers to soil health and its connection to drought resilience and adaptation to climate and environmental changes. A soil's retention can prevent the spread of nutrients into public waterbodies, such as Great Bay.
- HB 199 will provide stronger support for SCDs when they apply for grants. Each county has a SCD and county funds largely cover a SCD's administrative costs and a small part of their program budget. A large part of a SCD's program budget comes from federal or private grants to help further their mission. SCDs are constantly looking for grant funding to help further their mission. Several private foundations look to promote soil health to develop climate resilience. These foundations will often look at an SCD's mission statement. Many SCD mission statements refer to NH's state soil health statutes in RSA 432. Including the idea of soil health in RSA 432 through HB 199 gives SCDs the means to apply for additional grants.
- HB 199 does not impose any regulations on the agricultural community or impose any requirements on SCDs. The bill merely helps SCDs do what they are already doing.
- Senator Watters referenced a University of New Hampshire press release that detailed three researchers who received federal research grants totaling over \$4.6 million. One grant from the US Department of Agriculture (USDA) offered \$2 million to study the impact of seasonal freezing and thawing which is a dominant control on nutrient and carbon cycles and affects soils in forests, urban settings, and agricultural ecosystems. Senator Watters asked if Representative Bixby was aware of that press release.
 - Representative Bixby said he was not aware of the press release.
- Senator Watters said increased precipitation rates and warmer winters in NH can have an impact on the nitrogen and fertility cycles for soil health. He asked if Representative Bixby could comment on that.
 - Representative Bixby said nitrogen is the most important nutrient for plant growth – if plants do not have nitrogen, they cannot grow. Nitrogen is soluble when available to plants. Soil health creates a reservoir for biological activity. All these biological activities help retain a soil's nitrogen to advance plant growth. Poor soil health fails to effectively retain nitrogen for plant growth. Instead, that nitrogen can leech out of the soil and end up in public waterbodies, which can have a harmful impact as seen in Great Bay.
- Representative Bixby followed up on Mr. Beaudreau's testimony. A lot of detail was given in a previous version of HB 199 as to what constitutes "healthy soils practices," such as cover cropping and organic agriculture. Some felt that adding too many practices may give the impression that a practice was not approved if it was not listed. The definition for "healthy soils practices" was changed to list broad goals. Any practice that achieved the goals as outlined in the "healthy soils practices" definition, such as the use of plant biostimulants, cover cropping, or organic agriculture, is something that should be accepted. Referencing plant biostimulants elsewhere in state statute may be a good idea but should be done in other legislation.

Representative Howard Pearl

Merrimack – District 26 and Chairman of the House Environment and Agriculture Committee

- The House Environment and Agriculture Committee recommended HB 199 "ought to pass with amendment" by a vote of 18-1. The committee placed the bill on the House consent calendar. The full House adopted the committee's recommendation on a voice vote.
- HB 199 underwent significant review in the House Environment and Agriculture Committee. HB 199 as introduced did not have a lot of support. Representative Bixby and committee members worked together to find common ground and the bill received bipartisan support.

Representative Tony Caplan - provided written testimony

Merrimack – District 6

- HB 199 updates NH's SCP to include provisions for agricultural practices that increase soil capacity to increase fertility and to reduce NH's carbon footprint by increasing carbon uptake from the atmosphere into the soil.

- HB 199 is a win for farmers, consumers, and the environment. The practices that increase the carbon uptake in the soil are also the practices that lower the input costs for farmers and complement the type of small-scale, mixed use farms that fit well in NH.
- Soil conservation and the agricultural practices that soil conservation promotes are essential for a healthy planet and a health food system.

David Beaudreau

Responsible Industry for a Sound Environment (RISE)

- RISE is a national trade association representing manufacturers, formulators, distributors involved in the pesticide and fertilizer industry. Some members sell a category of products called plant biostimulants, which have a beneficial impact on soil and have a positive effect on plant growth. They can prevent the leeching of important nutrients from the soil.
- Recommended a definition of plant biostimulants in HB 199. This emerging product category can play a role in improving soil health.
- Senator Avar asked if HB 199 made any reference to plant biostimulants.
 - Mr. Beaudreau said he has not seen reference to plant biostimulants in HB 199. The USDA has been discussing a definition for plant biostimulants. The USDA issued a report to Congress at the end of 2019 where they formally defined what a plant biostimulant is. RISE could follow up with the committee with that definition.
- Senator Avar asked where Mr. Beaudreau would like to see a definition for plant biostimulants in HB 199.
 - Mr. Beaudreau suggested inserting the language under Section 3, paragraph VI on page 2, lines 18-21. That part of the bill defines “healthy soils practices.” A lot of the attributes of healthy soils practices can be found in plant biostimulants.
- Senator Watters suggested that Mr. Beaudreau may want to talk with Representative Bixby about RISE’s proposed change. The definition of “healthy soils practices” appeared to be a generic and broad definition that might include plant biostimulants.
 - Mr. Beaudreau said RISE would be willing to circle back with Representative Bixby. There has been a lack of a state and federal definition for plant biostimulants for several years. Getting it formally defined would be beneficial for regulators and product users.
- Senator Avar asked if plant biostimulants could be considered genetically modified organisms (GMOs).
 - Mr. Beaudreau said plant biostimulants are not considered GMOs.

Summary of testimony presented in opposition: None.

Neutral Information Presented: None.

GJR

Date Hearing Report completed: April 19, 2021.