Committee Report

CONSENT CALENDAR

February 18, 2021

HOUSE OF REPRESENTATIVES

REPORT OF COMMITTEE

The Committee on Environment and Agriculture to which was referred HB 199,

AN ACT including soil health and soil conservation in the state soil conservation plan. Having considered the same, report the same with the following amendment, and the recommendation that the bill OUGHT TO PASS WITH AMENDMENT.

Rep. Peter Bixby

FOR THE COMMITTEE

Original: House Clerk
Cc: Committee Bill File

COMMITTEE REPORT

Committee:	**Environment and Agriculture**
Bill Number:	**HB 199**
Title:	**including soil health and soil conservation in the state soil conservation plan.**
Date:	**February 18, 2021**
Consent Calendar:	**CONSENT**
Recommendation:	**OUGHT TO PASS WITH AMENDMENT 2021-0351h**

STATEMENT OF INTENT

This bill as amended updates the state soil conservation plan to include soil health and resilience to changes in the climate and environment. The soil conservation plan, initially created as a response to the Dust Bowl in the 1930s, is the guiding statute for county Soil Conservation Districts (SCD), which provide education and technical assistance on soil and natural resource conservation to farmers and landowners. While counties provide core staff funding, many of the SCDs' equipment and education programs are grant funded. This change to the SCDs' charter statute will strengthen their ability to apply successfully for grants related to soil health and changes in the climate and environment. The amendment modifies the definition of "adaptation," removes "mitigation" from the bill, and puts greater emphasis on drought resilience. The bill places no new requirement on SCDs; it simply opens new funding avenues for the good work they are already doing.

Vote 18-1.

Rep. Peter Bixby
FOR THE COMMITTEE

Original: House Clerk
Cc: Committee Bill File

CONSENT CALENDAR

Environment and Agriculture

HB 199, including soil health and soil conservation in the state soil conservation plan. **OUGHT TO PASS WITH AMENDMENT.**

Rep. Peter Bixby for Environment and Agriculture. This bill as amended updates the state soil conservation plan to include soil health and resilience to changes in the climate and environment. The soil conservation plan, initially created as a response to the Dust Bowl in the 1930s, is the guiding statute for county Soil Conservation Districts (SCD), which provide education and technical assistance on soil and natural resource conservation to farmers and landowners. While counties provide core staff funding, many of the SCDs' equipment and education programs are grant funded. This change to the SCDs' charter statute will strengthen their ability to apply successfully for grants related to soil health and changes in the climate and environment. The amendment modifies the definition of "adaptation," removes "mitigation" from the bill, and puts greater emphasis on drought resilience. The bill places no new requirement on SCDs; it simply opens new funding avenues for the good work they are already doing. **Vote 18-1.**

Original: House Clerk
Cc: Committee Bill File

Voting Sheets

HOUSE COMMITTEE ON ENVIRONMENT AND AGRICULTURE

EXECUTIVE SESSION on HB 199

BILL TITLE: including soil health and soil conservation in the state soil conservation plan.

DATE: February 17, 2021

LOB ROOM: Hybrid

MOTIONS: OUGHT TO PASS WITH AMENDMENT

Moved by Rep. Bixby	Seconded by Rep. Homola	AM Vote: 19-0

Amendment # 2021-0351h

Moved by Rep. Bixby	Seconded by Rep. Homola	Vote: 18-1

CONSENT CALENDAR: YES

Statement of Intent: Refer to Committee Report

Respectfully submitted,

Rep Barbara Comtois, Clerk

HOUSE COMMITTEE ON ENVIRONMENT AND AGRICULTURE

EXECUTIVE SESSION on HB199

BILL TITLE: AN ACT including soil health and soil conservation in the state soil conservation plan

DATE: February 17, 2021

LOB ROOM: 206

MOTION: (Please check one box)

☐ OTP ☐ ITL ☐ Retain (1st year) ⦸ Adoption of Amendment # 2021-0351h

☐ Interim Study (2nd year) *(if offered)*

Moved by Rep. __Bixby__ Seconded by Rep. ___Homola___ Vote: 19-0

MOTION: (Please check one box)

☐ OTP ❹OTP/A ☐ ITL ☐ Retain (1st year) ☐ Adoption of Amendment # 2021-0351h __

☐ Interim Study (2nd year) *(if offered)*

Moved by Rep. ___Bixby____ Seconded by Rep. ___Homola____ Vote: 18-1

MOTION: (Please check one box)

☐ OTP ☐ OTP/A ☐ ITL ☐ Retain (1st year) ☐ Adoption of Amendment # _____

☐ Interim Study (2nd year) *(if offered)*

Moved by Rep. _____ Seconded by Rep. _____ Vote: _____

MOTION: (Please check one box)

☐ OTP ☐ OTP/A ☐ ITL ☐ Retain (1st year) ☐ Adoption of Amendment # _____

☐ Interim Study (2nd year) *(if offered)*

Moved by Rep. _____ Seconded by Rep. _____ Vote: _____

CONSENT CALENDAR: ___X__ YES _____ NO

Minority Report? _____ Yes _____ No If yes, author, Rep: _____ Motion

Respectfully submitted: ___Rep. Barbara Comtois_____

Rep Barbara Comtois, Clerk

STATE OF NEW HAMPSHIRE
OFFICE OF THE HOUSE CLERK

02/17/2021 9:57:30 AM
Roll Call Committee Registers Report

2021 SESSION

Environment and Agriculture

Bill #: HB199 **Motion:** Adopt Amendment **AM #:** 2021-0351h **Exec Session Date:** February 17, 2021

Members	YEAS	Nays	NV
Pearl, Howard C. Chairman	X		
Aron, Judy F. Vice Chairman	X		
Comtois, Barbara Clerk	X		
Verville, Kevin G.	X		
Davis, Arnold G.	X		
Stapleton, Walter A.	X		
Homola, Susan	X		
Kennedy, Margaret Anne	X		
Mason, James L.	X		
Sanborn, Gail E.	X		
Bixby, Peter W.	X		
Sofikitis, Catherine M.	X		
Bouldin, Andrew J.	X		
Dutzy, Sherry	X		
Murray, Megan A.	X		
Von Plinsky, Sparky	X		
Caplan, Tony	X		
Hyland, Stephanie M.	X		
Perez, Maria	X		
TOTAL VOTE:	19	0	

STATE OF NEW HAMPSHIRE
OFFICE OF THE HOUSE CLERK

02/17/2021 9:57:30 AM
Roll Call Committee Registers Report

2021 SESSION

Environment and Agriculture

Bill #: HB199 **Motion:** OTPA **AM #:** 2021-0351h **Exec Session Date:** February 17, 2021

Members	YEAS	Nays	NV
Pearl, Howard C. Chairman	X		
Aron, Judy F. Vice Chairman	X		
Comtois, Barbara Clerk		X	
Verville, Kevin G.	X		
Davis, Arnold G.	X		
Stapleton, Walter A.	X		
Homola, Susan	X		
Kennedy, Margaret Anne	X		
Mason, James L.	X		
Sanborn, Gail E.	X		
Bixby, Peter W.	X		
Sofikitis, Catherine M.	X		
Bouldin, Andrew J.	X		
Dutzy, Sherry	X		
Murray, Megan A.	X		
Von Plinsky, Sparky	X		
Caplan, Tony	X		
Hyland, Stephanie M.	X		
Perez, Maria	X		
TOTAL VOTE:	18	1	

Public Hearing

House Remote Testify

Environment and Agriculture Committee Testify List for Bill HB199 on 2021-01-27

Support: 11 Oppose: 1 Neutral: 1 Total to Testify: 2

Export to Excel

Name	City, State Email Address	Title	Representing	Position	Testifying	Non-Germane	Signed Up
Noonan, Roger	middlebranchfarm@comcast.net	A Member of the Public	New England Farmers Union	Support	Yes (0m)	No	1/26/2021 9:50 AM
Bixby, Peter	peter.bixby@leg.state.nh.us	An Elected Official	Strafford 17 (prime sponsor)	Support	Yes (0m)	No	1/27/2021 8:25 AM
Marks, Nisa	nisa.marks@gmail.com	A Member of the Public	New Hampshire Audubon	Support	No	No	1/27/2021 1:39 PM
Fordey, Nicole	nikkif610@gmail.com	A Member of the Public	Myself	Support	No	No	1/23/2021 1:04 PM
ploszaj, tom	tom.ploszaj@leg.state.nh.us	An Elected Official	Myself	Oppose	No	No	1/25/2021 10:36 PM
Weisbrot, Jason	hideouspenguinboy@gmail.com	A Member of the Public	Myself	Support	No	No	1/26/2021 12:01 PM
Stock, Jasen	jstock@nhtoa.org	A Lobbyist	NH Timberland Owners Association	Neutral	No	No	1/26/2021 2:57 PM
Smith, Suzanne	suzanne.smith@leg.state.nh.us	An Elected Official	Grafton 8	Support	No	No	1/26/2021 3:57 PM
Irwin, Tom	tirwin@clf.org	A Lobbyist	Conservation Law Foundation	Support	No	No	1/26/2021 5:57 PM
Rathbun, Eric	ericsrathbun@gmail.com	A Member of the Public	Myself	Support	No	No	1/26/2021 9:08 PM
Johnson, II, Robert	robj@nhfarmbureau.org	A Lobbyist	NH Farm Bureau Federation	Support	No	No	1/26/2021 9:39 PM
Laeng-Gilliatt, Sarah	mainstcheese@gmail.com	A Member of the Public	Main Street Cheese, LLC	Support	No	No	1/27/2021 7:27 AM
SAWTELLE, ERICK	esawtelles@aol.com	A Member of the Public	Myself	Support	No	No	1/27/2021 7:58 AM

HOUSE COMMITTEE ON ENVIRONMENT AND AGRICULTURE

PUBLIC HEARING ON HB199

BILL TITLE: AN ACT including soil health and soil conservation in the state soil conservation plan.

DATE: **January 27, 2021**

ROOM: **301** **Time Public Hearing Called to Order:** **3:45 pm**

Time Adjourned: **4:05 p.m.**

(please circle if present)

Committee Members: Reps. Pearl, Aron, Comtois, Verville, Davis, Stapleton, Homola, Kennedy, Mason, G. Sanborn, Bixby, Sofikitis, Andrew Bouldin, Dutzy, M. Murray, Von Plinsky, Caplan, Hyland and Perez

Bill Sponsors: Rep. Bixby, Straf. 17

TESTIMONY

* Use asterisk if written testimony and/or amendments are submitted.

*Rep Bixby, Strafford 17 – introducing - written testimony

Roger Noonan – New England Farmers Union – small organic family farmer in New Boston, NH – sharing equipment – this is an update of the bill – adaptation and mitigation of changing climate – provides explicit statutory language to help get public and private money

Rep Aron – Q. soil health – definition – how is this help A. definition is a broad one – Cornell University has come up with more details regarding soil health – there are measurable parameters for this

Rep Homola Q. – page 2 – definition of mitigation, is different than what is normally used universally – A. defer to her Q. State Plan A. this statue is that plan – having the wording climate change would strengthen

Rep Stapleton – Q. having a problem with Mitigation, we have noticed in the past couple years torrential years so to mitigate the effect of that they are expanding riff raff – enhance the sinks of greenhouse gasses A. in the context of Agriculture we are not trying to reduce what make greenhouse gasses – Mitigation is addressing no till and cover crops so farmers can be paid for sequestered carbon –

Rep.Comtois – Q. why climate change and not just environmental change A. it was language that was negotiated between Rep Pearl and Roger Noonan – the importance of keeping climate there is for districts to get grants – Soil Health – invasive insects, species, etc.

Rep Murray – Q. terminology, regenerative soils A. is this what we are talking about, sustainable was what it was and now it is regenerative – Monsanto now has a regenerative terminology

Rep Homola – Q. incentives for landowners A. he was handed 4 bags of cover crop, that would be an incentive – incentives are about the equipment we use

Testimony

NH AUDUBON
Protecting our environment since 1914

STATEWIDE OFFICES
84 Silk Farm Road
Concord, NH 03301
Phone 603-224-9909
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nha@nhaudubon.org
www.nhaudubon.org

REGIONAL CENTERS

MASSABESIC CENTER
26 Audubon Way
Auburn, NH 03032
Phone 603-668-2045

MCLANE CENTER
84 Silk Farm Road
Concord, NH 03301
Phone 603-224-9909

NEWFOUND CENTER
Summer Mailing Address:
50 North Shore Road
Hebron, NH 03241
Location:
290 North Shore Road
Hebron, NH 03241
Phone 603-744-3516

January 27, 2021

The Honorable Howard Pearl
House Environment and Agriculture Committee
Room 303, Legislative Office Building
Concord, NH 03301

Re: Support for House Bill 199 relative to including soil health and soil conservation in the state soil conservation plan.

Dear Chair Pearl and Members of the House Environment and Agriculture Committee:

Thank you for this opportunity to provide testimony regarding HB 199 on behalf of NH Audubon. We are a statewide conservation organization dedicated to protecting New Hampshire's environment for wildlife and for people. We support this bill, which would include soil health and climate change adaptation and mitigation in the state soil conservation plan.

Healthy soil provides the foundation for healthy plants and healthy biological communities. Soil bacteria are responsible for transforming nutrients into forms usable by plants, livestock, wildlife, and humans. Soil bacteria are used in the production of a number of key pharmaceuticals, including penicillin and many other antibiotics. Healthier soils increase crop production, with associated benefits to food security and economic activity.

Soil health promotes biodiversity, including bird species that help control agricultural pests. An estimated 25% of the world's species live in soil, and scientists have barely scratched the surface in understanding the many roles these organisms play. Research increasingly demonstrates the importance of soil health to human health as well, as increased soil biodiversity suppresses disease-causing organisms that live in the soil (Wall et al. 2015).

Healthy soils play a critical role in mitigating the damaging effects of floods and droughts, both of which are increasing in frequency (U.S. Global Change Research Program 2018). Soils with healthy structure are less likely to dry out and release retained moisture to the air, which in turn makes them able to support a wider array of plant and animal life. A 1% increase in soil organic carbon supports a 2 - 5% increase in that soil's ability to retain water (Soil Health Institute 2016). The widespread drought of 2020 illustrates the importance of maintaining soil conditions that retain water for communities throughout New Hampshire.

Healthy soils play a vital role in sustaining agriculture, ecological communities, and human health. Ensuring that New Hampshire's state soil conservation plan includes promotion of soil health practices, and the mitigation of and adaption to climate change and environmental change is an appropriate action to safeguard the future of New Hampshire's soil productivity.

We urge you to vote HB 199 Ought to Pass.

Sincerely,

Douglas Bechtel
President

References Cited

Soil Health Institute. 2016. "Climate change adaptation and mitigation through soil health." https://soilhealthinstitute.org/wp-content/uploads/2016/11/case-summary-climate-final-101316.pdf

U.S. Global Change Research Program. 2018. *Fourth National Climate Assessment, Volume II: Impacts, Risks, and Adaptation in the United States.* https://nca2018.globalchange.gov/

Wall, D.H., U.F. Nielsen, J. Six. 2015. "Soil biodiversity and human health." *Nature* 528(7580):69-76. https://pubmed.ncbi.nlm.nih.gov/26595276/

Soil Health HB 199

This bill was voted OTPA by our committee and by the House last year after Rep. Pearl and Roger Noonan of the New England Farmers Union worked out mutually agreeable language. It was tabled in the Senate.

What this bill does not do:

- Tell farmers what to do
- Impose new requirements on the Soil Conservation Districts

A little history:

- Dust Bowl
- Federal Government requires state soil conservation plans
- Creates Soil Conservation Service, later renamed to Natural Resource Conservation Service (NRCS)
- Soil Conservation Districts provide education and technical assistance to farmers and landowners
- Last revision to NH soil conservation plan 1985 with minor changes in 1995
- 1980s soil science focus: physical soil structure, soil nutrient chemistry
- Recent changes: More attention to soil biological activity and soil organic matter
- More biological activity and more organic matter led to better water retention, aeration, nutrient retention and nutrient accessibility for plants.
- These more resilient soils are referred to as healthy soils.

What the bill does

- Bring science in plan up-to-date
- Recognize the good work ours SCDs are already doing with soil health
- Provide stronger support for SCD grant applications.

About SCD finances

- Small base level funding from counties provides adminstrative staff
- Many Education and technical support projects funded grants, largely NRCS
- Other grant funding is sought as available.
- Having soil health and climate resiliance in the "mission statement" will open up a broader range of grant opportunities.

Soil health is now a mainstream idea: The Soil Health Institute has as some of it major funders Cargill Foundation, General Mills, Walton Family Foundation, Foundation for Food and Agriculture Research.

The core ideas in the bill are in the definition of soil health on page 2 and the definition of healthy soil practices. I would like to emphasize that healthy soil practices are a range of options, not a set of requirements. Each farmer or landowner who choses to work with the SCD will decide which approaches suite his or her needs.

Questions. For details about the practices, I will refer you to Roger.

clf
conservation law foundation

For a thriving New England

CLF New Hampshire
27 North Main Street
Concord, NH 03301
P: 603.225.3060
F: 603.225.3059
www.clf.org

January 26, 2021

Via Electronic Mail

The Honorable Howard Pearl, Chair
Environment and Agriculture Committee
Legislative Office Building
Concord, NH 03301

Re: HB 199, An Act including soil health and soil conservation in the state soil conservation plan

Dear Chairman Pearl and Honorable Committee Members:

Conservation Law Foundation (CLF) appreciates the opportunity to comment in support of HB 199, an Act including soil health and soil conservation in the state soil conservation plan. CLF strongly supports this legislation, which will ensure that the state prioritizes building soil health for its climate change mitigation, adaptation, and other benefits.

CLF is a nonprofit, member-supported advocacy organization that protects New England's environment for the benefit of all people. We use the law, science, and the market to create solutions that preserve our natural resources, build healthy communities, and sustain a vibrant economy. CLF works to support sustainable agriculture in New Hampshire for the many health, environmental, and economic benefits it provides our communities. CLF supports policies that help farmers invest in sustainable farming practices that protect water quality, reduce greenhouse gas emissions, and build climate resiliency.

Farmers are on the front lines of responding to the effects of climate change. Here in New England, farmers face shifting growing seasons and changing precipitation patterns, including extreme rainfall, drought, and warm winters followed by cold springs. Along with these shifting seasons, farmers will confront new types of pests and invasive species. At the same time, New Hampshire's farmers also face enormous economic hurdles. The U.S. Department of Agriculture's most recent survey found that farms in New Hampshire averaged just $2,519 in net farm income.[1]

Even as they face these obstacles, farmers are critical partners in the state's efforts to combat climate change and support a healthy ecosystem. Building soil health can improve drought

[1] USDA 2017 Census of Agriculture, New Hampshire Summary, https://www.nass.usda.gov/Publications/AgCensus/2017/Online_Resources/County_Profiles/New_Hampshire/cp99033.pdf.

conservation law foundation

resilience, stormwater management, and water quality, all while sequestering carbon from the atmosphere. Healthy soils practices include conservation tillage, cover crops, planned grazing, integrated crop-livestock systems, and using organic practices. In addition to providing environmental benefits and combating climate change, these practices also increase farm productivity and profitability by optimizing inputs and increasing resiliency. A 2017 study by the National Association of Conservation Districts found that farmers can benefit from an economic return of over $100 per acre by using cover crops and no-till practices. Supporting farmers' bottom lines is critical to ensuring that our communities have access to fresh, healthy food and that farmland remains in production.

HB 199 lays an important foundation for supporting resilient, climate-smart agriculture in New Hampshire. It incorporates soil health and the impacts of climate change into the statewide soil conservation plan. It ensures that the conservation districts, which are charged with helping farmers steward our soil resources, include soil health and the impacts of climate change in their projects. Farmers need funding, technical assistance, and other support to make the transition to farming practices that build the soil and reap many associated benefits.

CLF appreciates the opportunity to provide these comments and urges you to vote "ought to pass" on HB 199 as an important first step in investing in the health of our state's soils. The future of our food system and our climate depend on it.

Thank you for your consideration. Please do not hesitate to contact us if we can provide additional information.

Sincerely,

Tom Irwin
Vice President, CLF New Hampshire
603.225.3060, tirwin@clf.org

Sara Dewey
Director of Farm & Food Initiative, CLF
603.566.1878, sdewey@clf.org

clf

conservation law foundation

RMI
BUILDING HEALTHY SOILS

February 4, 2021

House Environment & Agricultural Committee
Delivered via email

RE: **HB 199 – Ought to Pass**

Dear Members of the Committee:

I write in support of the proposed HB 199 relative to the Soil Conservation Plan and the modification to include the concepts of *soil health, climate and environmental change, mitigation and adaption, and drought resilience*, as important components for the mission of the Soil Conservation Plan for the State of New Hampshire Conservation Districts.

This effort to update the Soil Conservation Plan was interrupted during the last House Session due to COVID-19, and I am glad to see that it is being considered once again as an important driver for policy impacting agriculture and soils in New Hampshire.

Thank you for your service, and continued commitment to the environment and agricultural practices of New Hampshire.

Please feel free to contact me with any questions.

Respectfully submitted,

Shelagh Connelly
President

Resource Management, Inc. (RMI) is a company that provides agricultural bulk commodities to farms throughout the northeast. RMI products include wood ash from biomass power plants, biosolids from municipal waste water treatment facilities, and short paper fiber from paper mills. Each of these products help to build healthy soils.

1171 NH Route 175
Holderness, NH 03245

Heart & Soil™ Ag Products
WOOD ASH • BIOSOLIDS • PAPER FIBER • ENGINEERED TOPSOIL

603-536-8900
RMIrecycles.com

Archived: Thursday, April 15, 2021 9:58:25 AM
From: Shelagh Connelly
Sent: Thursday, February 4, 2021 1:02:02 PM
To: ~House Environment and Agriculture Committee
Cc: Shelagh Connelly; Charley Hanson; anthony.drouin@des.nh.gov
Subject: Support for HB 199 - Soil Health and Resilience in Soil Conservation Plan
Importance: Normal
Attachments:
HB 199 - Soil Health - OTP.pdf ;

Please find our letter of support attached for HB199 – OTP.
Thank you,
Shelagh

Shelagh Connelly
President
1171 NH Route 175
Holderness, NH 03245
603-536-8900 office
603-536-8998 fax
603-387-8162 cell
Shelagh.connelly@rmirecycles.com
www.RMIrecycles.com
Down to Earth Recycling Solutions

Archived: Thursday, April 15, 2021 9:58:25 AM
From: Nisa Marks
Sent: Wednesday, January 27, 2021 1:42:31 PM
To: ~House Environment and Agriculture Committee
Subject: HB199 written testimony
Importance: Normal
Attachments:
HB199_ soil conservation plan_final.pdf

Hello,

Please find attached New Hampshire Audubon's written testimony in support of HB199, for distribution to the House E&A committee ahead of today's 3:45 hearing.

Thank you,
Nisa Marks, Henniker, NH
Volunteer, New Hampshire Audubon

Archived: Thursday, April 15, 2021 10:04:27 AM
From: Tom Irwin
Sent: Tuesday, January 26, 2021 6:00:57 PM
To: ~House Environment and Agriculture Committee
Cc: Sara Dewey
Subject: HB 199 -- letter of support
Importance: Normal
Attachments:
2021-1-26 HB 199_CLF Comments_pdf (4818-5827-5033.1).pdf ;

Dear Chairman Pearl and Honorable Committee Members,

Attached, in advance of the Environment & Agriculture Committee's hearing tomorrow, please find Conservation Law Foundation's comments supporting HB 199.

Sincerely,

Tom Irwin
Vice President
Director, CLF New Hampshire

27 North Main Street
Concord, NH 03301-4930

P: 603-573-9139
E: tirwin@clf.org

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MCLANE CENTER
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Phone 603-224-9909

NEWFOUND CENTER
Summer Mailing Address:
50 North Shore Road
Hebron, NH 03241
Location:
290 North Shore Road
Hebron, NH 03241
Phone 603-744-3516

January 27, 2021

The Honorable Howard Pearl
House Environment and Agriculture Committee
Room 303, Legislative Office Building
Concord, NH 03301

Re: Support for House Bill 199 relative to including soil health and soil conservation in the state soil conservation plan.

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Soil health promotes biodiversity, including bird species that help control agricultural pests. An estimated 25% of the world's species live in soil, and scientists have barely scratched the surface in understanding the many roles these organisms play. Research increasingly demonstrates the importance of soil health to human health as well, as increased soil biodiversity suppresses disease-causing organisms that live in the soil (Wall et al. 2015).

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Healthy soils play a vital role in sustaining agriculture, ecological communities, and human health. Ensuring that New Hampshire's state soil conservation plan includes promotion of soil health practices, and the mitigation of and adaption to climate change and environmental change is an appropriate action to safeguard the future of New Hampshire's soil productivity.

We urge you to vote HB 199 Ought to Pass.

Sincerely,

Douglas Bechtel
President

References Cited

Soil Health Institute. 2016. "Climate change adaptation and mitigation through soil health." https://soilhealthinstitute.org/wp-content/uploads/2016/11/case-summary-climate-final-101316.pdf

U.S. Global Change Research Program. 2018. *Fourth National Climate Assessment, Volume II: Impacts, Risks, and Adaptation in the United States.* https://nca2018.globalchange.gov/

Wall, D.H., U.F. Nielsen, J. Six. 2015. "Soil biodiversity and human health." *Nature* 528(7580):69-76. https://pubmed.ncbi.nlm.nih.gov/26595276/

Bill as Introduced

HB 199 - AS AMENDED BY THE HOUSE

7Apr2021... 0351h

2021 SESSION

21-0374
08/05

HOUSE BILL ***199***

AN ACT including soil health and soil conservation in the state soil conservation plan.

SPONSORS: Rep. Bixby, Straf. 17

COMMITTEE: Environment and Agriculture

AMENDED ANALYSIS

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

- -

Explanation: Matter added to current law appears in ***bold italics.***
Matter removed from current law appears [~~in brackets and struckthrough.~~]
Matter which is either (a) all new or (b) repealed and reenacted appears in regular type.

STATE OF NEW HAMPSHIRE

In the Year of Our Lord Two Thousand Twenty One

AN ACT including soil health and soil conservation in the state soil conservation plan.

Be it Enacted by the Senate and House of Representatives in General Court convened:

1 State Plan; Implementation of the Federal Soil Conservation. Amend RSA 432:3 to read as follows:

432:3 State Plan. The department is hereby authorized, empowered and directed to formulate and submit to the Secretary of Agriculture, in conformity with the provisions of said Soil Conservation and Domestic Allotment Act, a state plan for each year. It shall be the purpose of each such plan and each such plan shall be designed to promote such utilization of land and such farming practices as the department finds will tend, in conjunction with the operation of such other plans as may be approved for other states by the Secretary of Agriculture, to preserve and improve soil fertility ***and soil health; to promote adaptation to changes in climate and environment***; to promote the economic use and conservation of land; to diminish exploitation and wasteful and unscientific use of natural soil resources; to protect rivers and waterways against the results of soil erosion and aid in flood control; and to reestablish and maintain the ratio between the purchasing power of the net income per person on farms and that of the income per person not on farms, as defined in subsection (a) of section 7 of the Soil Conservation and Domestic Allotment Act. Each such plan shall provide for adjustments in utilization of land, and in farming practices through agreements with producers or through other voluntary methods, and for benefit payments in connection therewith, and for such methods of administration not in conflict with any law of the state, and for such reports as the Secretary of Agriculture finds necessary for the effective administration of the plan, and for ascertaining whether the plan is being carried out according to its terms.

2 Declaration of Policy; Conservation Districts; Soil Conservation. Amend RSA 432:8 to read as follows:

432:8 Declaration of Policy. It is hereby declared to be the policy of the state to provide for the establishment of conservation districts under the supervision of a state conservation committee, said districts to be composed of landowners and land occupiers within the district, who may join together in the interest of the ***health,*** conservation***,*** and development of the soil, water, and related natural resources***;*** [~~and~~] preventing soil erosion, floodwater and sediment damages***; promoting soil health practices, drought resilience, and adaption to changes in climate and environment***. It is the intent of this subdivision to facilitate the joint effort of landowners, land occupiers, and units of government in carrying out measures for the conservation and development of lands within the

district, voluntarily and with such assistance as may be available for this purpose from local, state, or federal governmental agencies.

3 Soil Conservation; Conservation Districts. Amend RSA 432:9 to read as follows:

432:9 Definitions. As used in this subdivision the following words shall have the following meanings:

I. "Adaptation" means the process of adjustment to actual or scientifically projected conditions.

[~~I~~] ***II***. "District" or "conservation district" means the territory included within the boundaries of a county, organized in accordance with the provisions of this subdivision.

[~~II~~] ***III***. "Land occupier" or "occupier of land" includes any person who shall hold title to, or shall be in lawful possession of, any parcel of land lying within a district organized under the provisions of this subdivision.

[~~III~~] ***IV***. "District supervisor" or "supervisor" shall mean a member of the governing body appointed in accordance with the provisions of this subdivision.

V. "Soil health" means the overall composition of the soil, including the amount of organic matter in and water holding capacity of the soil, and the continued capacity of soil to function as a vital living ecosystem that sustains plants, animals, and humans.

VI. "Healthy soils practices" mean agricultural practices that improve the health of soils, including but not limited to consideration of depth of topsoil horizons, water infiltration rate, organic carbon content, nutrient content, bulk density, biological activity, biological and microbiological diversity, and minimization of bare ground.

4 Creation of Conservation Districts; Soil Health. Amend RSA 432:12 to read as follows:

432:12 Creation of Conservation Districts. There are hereby established, as governmental subdivisions of this state and public bodies corporate and politic, 10 conservation districts as follows: (1) each of the 10 counties within the state is hereby incorporated into a conservation district; (2) each of the 10 districts shall be known by the name of the county to which its boundaries conform. Upon the appointment of the district supervisors as hereinafter provided the districts shall become duly organized and thereafter the districts and the supervisors thereof shall have all powers and duties conferred upon them by this subdivision; provided, however, that no such district shall exercise any of the powers conferred on districts or the supervisors thereof under this subdivision until after the state conservation committee shall adopt a resolution determining that there is a need, in the interest of public health, safety and welfare, for such district to function and that a substantial proportion of the land occupiers of such districts are in favor of its operation. In making such determinations the committee may accept petitions and conduct such public meetings and referenda as it deems necessary, and shall give due consideration to the distribution and intensity of erosion, floodwaters and sediment damages, ***the effects of drought,*** need for land drainage, [~~and~~] changes in land use***,*** [~~and~~] the conservation[~~,~~] and development of the natural resources***, the impact***

of changing climate and environment, and capacity of soil health to improve resilience on land within the said district, and to other relevant factors. From and after the date of adoption by the committee of a resolution in favor of the operation of a particular district, such district shall be deemed to be duly organized, and the supervisors of such district shall thereupon be entitled to exercise the powers conferred on them by this subdivision. A certified copy of such resolution shall be evidence of the due organization of such districts. All districts heretofore organized under RSA 430 or 430-B shall be identified as "conservation districts" and shall have all the powers and duties provided in this subdivision for conservation districts.

5 Conservation Districts; Powers of Districts an Supervisors; Soil Conservation. Amend RSA 432:16 to read as follows:

432:16 Powers of Districts and Supervisors. A conservation district organized under the provisions of this subdivision, and the supervisors thereof, shall have the following powers, in addition to others granted in other sections of this subdivision:

I. To conduct surveys, investigations and research relating to the character of soil erosion; floodwater and sediment damages; land drainage; the ***health,*** conservation***,*** and development of the soil, water, and related natural resources; ***the impact of drought, and the promotion of practices to adapt to a changing climate and environment;*** and the preventive and control measures and works of improvement needed, to publish the results of such surveys, investigations, or research, and to disseminate information concerning such preventive and control measures and works of improvement; provided, however, that in order to avoid duplication of research activities, no district shall initiate any research program except in cooperation with the government of this state or any of its agencies, or with the United States or any of its agencies;

II. To conduct demonstrational projects within the district on lands owned or controlled by this state or any of its agencies, with the cooperation and consent of the agency administering and having jurisdiction thereof, and on any other lands within the district upon obtaining the consent of the occupier of such lands or the necessary rights or interests in such lands, in order to demonstrate by example the means, methods, and measures by which soil and soil resources may be conserved ***and soil health improved***, and how soil erosion in the form of soil blowing and soil washing may be prevented and controlled, and how land may be drained and floodwater and sediment damages may be prevented; and how other works of improvement for the ***health,*** conservation***,*** and development of the soil, water, and related natural resources may be carried out; ***and how healthy soils practices can aid in adaptation to changes in climate and environment;***

III. To carry out preventive and control measures and works of improvement for the ***health,*** conservation***,*** and development of the soil, water, and related natural resources within the district including, but not limited to, engineering operations, methods of cultivation, the growing of vegetation, the drainage of land and changes in use of land, and measures for the prevention of

floodwater and sediment damages, on lands owned or controlled by this state or any of its agencies, with the cooperation and consent of the agency administering and having jurisdiction thereof, and on any other land within the district upon obtaining the consent of the occupier of such lands or the necessary rights or interests in such lands;

IV. To cooperate, or enter into agreements with and to furnish financial or other aid to, any agency, governmental or otherwise, or any occupier of lands within the district, in carrying out the erosion control, flood prevention, drainage, watershed protection, and resource conservation and development projects or other works of improvement for the ***health,*** conservation***,*** and development of the soil, water, and related natural resources within the district, subject to such conditions as the supervisors may deem necessary to advance the purposes of this subdivision;

V. To obtain options upon and to acquire, by purchase, exchange, lease, gift, grant, bequest, devise, or otherwise, any property, real or personal, or rights or interests therein; to maintain, administer, and improve any properties acquired; to receive income from such properties and to expend such income in carrying out the purposes and provisions of this subdivision; and to sell, lease, or otherwise dispose of any of its property or interests therein in furtherance of the purposes and provisions of this subdivision;

VI. To make available, on such terms as it shall prescribe, to land occupiers within the district, ***incentives, education, technical assistance,*** agricultural and engineering machinery, equipment, fertilizer, seeds, seedlings, and such other material or equipment as will assist such land occupiers to carry on operations upon their lands for the ***health,*** conservation***,*** and development of soil, water, and related natural resources, ***for the promotion of practices to foster drought resilience and adapt to a changing climate and environment,*** for the drainage of land, for the prevention and control of soil erosion, and for the prevention of floodwater and sediment damages;

VII. To construct, improve, operate and maintain such structures as may be necessary or convenient for the performance of any of the operations authorized in this subdivision;

VIII. To develop comprehensive plans for changes in land use and for the conservation***,*** and development of the ***healthy*** soil, water, and related natural resources, for the control and prevention of soil erosion, for land drainage, [~~and~~] for the prevention of floodwater and sediment damages within the ***district, for the promotion of drought resilience and for adaptation to changes in climate and environment***, which plans shall specify in such detail as may be possible the acts, procedures, performances, and avoidances which are necessary or desirable for the effectuation of such plans, including the specification of engineering operations, methods of cultivation, the growing of vegetation, cropping programs, tillage practices, and changes in use of lands; and to publish such plans and information and bring them to the attention of occupiers of lands within the district;

IX. To take over by purchase, lease, or otherwise, and to administer any ***soil health,*** soil conservation, drainage, ***drought resilience,*** flood prevention, erosion control, erosion prevention, watershed protection, or resource conservation and development project, or other works of

improvement for the ***health,*** conservation***,*** and development of soil, water, and related natural resources or combinations thereof, located within its boundaries undertaken by the United States or any of its agencies, or by this state or any of its agencies; to manage, as agent of the United States or any of its agencies, or of this state or any of its agencies, any ***soil health,*** soil conservation, ***drought resilience,*** drainage, flood prevention, erosion control, erosion prevention, watershed protection, or resource conservation and development project, or other works of improvement for the ***health,*** conservation***,*** and development of soil, water, and related natural resources or combinations thereof within its boundaries; to act as agent for the United States, or any of its agencies, or for this state or any of its agencies, in connection with the acquisition, construction, operation, or administration of any ***soil health,*** soil conservation, drainage, ***drought resilience,*** flood prevention, erosion control, erosion prevention, watershed protection, or resource conservation and development project or other works of improvement for the ***health,*** conservation***,*** and development of soil, water, and related natural resources or combinations thereof within its boundaries; to accept donations, gifts, and contributions in money, services, materials, or otherwise, from the United States or any of its agencies or from this state or any of its agencies, and to use or expend such moneys, services, materials, or other contributions in carrying on its operations;

X. As a condition to the extending of any benefits under this subdivision to, or the performance of work upon, any lands not owned or controlled by this state or any of its agencies, the supervisors may require contributions in money, services, materials, or otherwise to any operations conferring such benefits, and may require land occupiers to enter into and perform such agreements or covenants as to the permanent use of such lands as will tend to provide drainage, prevent or control erosion, prevent floodwater and sediment damages, and otherwise provide for the conservation and development of the resources thereon.

6 Effective Date. This act shall take effect 60 days after its passage.