

# STATE OF NEW YORK

5386

2021-2022 Regular Sessions

## IN ASSEMBLY

February 16, 2021

Introduced by M. of A. LUPARDO, BARRETT -- read once and referred to the Committee on Agriculture

AN ACT to amend the agriculture and markets law, the state finance law and the soil and water conservation districts law, in relation to establishing the soil health and climate resiliency act

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

1 Section 1. This act shall be known and may be cited as the "soil  
2 health and climate resiliency act".

3 § 2. The agriculture and markets law is amended by adding a new arti-  
4 cle 11-B to read as follows:

### ARTICLE 11-B

#### SOIL HEALTH AND CLIMATE RESILIENCY

##### Section 151-l. Definitions.

8 151-m. Soil health program.

9 151-n. Climate resilient farming program.

10 151-o. Soil health partnership and research framework.

11 § 151-l. Definitions. As used in this article: 1. "Soil health" means  
12 soils that have the continuing capacity to function as a vital, living  
13 biological system through: increased soil organic matter; improved soil  
14 structure, water and nutrient-holding capacity and nutrient cycling;  
15 diversity of beneficial organisms; enhanced resilience to tolerate and  
16 recover from drought, temperature extremes, pests, and other stresses;  
17 protecting natural resources; and assisting in reducing and mitigating  
18 the impact of global climate change, including net long-term greenhouse  
19 gas benefits.

20 2. "Soil health practices" means systems of agricultural, forestry and  
21 land management practices that:

22 a. improve the health of soils, including but not limited to consider-  
23 ation of depth of topsoil horizons, water infiltration rate, water hold-  
24 ing capacity, organic carbon content, biologically accessible nutrient

EXPLANATION--Matter in italics (underscored) is new; matter in brackets  
[-] is old law to be omitted.

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1 content, bulk density, biological activity, and biological and microbi-  
2 ological diversity;

3 b. follow the principles of: minimizing soil disturbance and external  
4 inputs; keeping soil covered; maximizing biodiversity; maximizing pres-  
5 ence of living roots; and integrating animals into land management,  
6 including grazing animals, birds, beneficial insects or other species  
7 beneficial to the soil, such as earthworms; and

8 c. include such practices as conservation tillage or no-till, cover-  
9 cropping, precision nitrogen and phosphorous application, planned graz-  
10 ing, integrated crop-livestock systems, agroforestry, perennial crops,  
11 integrated pest management, nutrient best management practices, and  
12 those practices recommended by the United States Department of Agricul-  
13 ture Natural Resources Conservation Service and that are supported by  
14 the state soil and water conservation committee.

15 3. "Soil health project" means a specific work or improvement or  
16 equipment acquisition that is undertaken for improving soil health on  
17 lands utilized for commercial farming and forestry.

18 4. "Climate adaptation" means the process of adjustment to actual or  
19 expected climate and its effects.

20 5. "Climate mitigation" means a human intervention to reduce the  
21 sources or enhance the "sinks" that absorb and store greenhouse gases.

22 § 151-m. Soil health program. 1. There is hereby established within  
23 the department a soil health program to assist farmers in improving the  
24 health of their soil by managing and optimizing soil health to reduce  
25 negative impacts on the environment while improving long term soil  
26 productivity, efficiency, and profitability of farming, sustaining agri-  
27 cultural plants and animals and a healthy, affordable food supply, and  
28 addressing such environmental impacts from those operations, including,  
29 but not limited to, soil, air and water pollution and greenhouse gas  
30 emissions.

31 2. The department, in cooperation with the soil and water conservation  
32 committee, shall implement a program to assist rural and urban agricul-  
33 tural producers and foresters in optimizing and managing soil health  
34 through soil health practices that include, but shall not be limited to:

35 (a) improving soil health and quantity, and control soil erosion and  
36 sedimentation;

37 (b) improving water infiltration rates and water holding capacities of  
38 soils for improved storm water management and flood control, drought  
39 resilience, and groundwater supply; and

40 (c) managing and enhancing the healthy cycling of nitrogen and phos-  
41 phorus within fields, to minimize nutrient runoff and reduce downstream  
42 nutrient loading, improve watershed health and reliable water availabil-  
43 ity, restore and enhance wildlife habitat, and manage water runoff and  
44 drainage water for improved local and downstream water quality.

45 The program may also include, but not be limited to: the training of  
46 soil health management experts who can provide expertise to other farm-  
47 ers; financial assistance, within funds available, to soil and water  
48 conservation districts; other incentives for program participation; and  
49 evaluation of the program and projects to assess effectiveness. The  
50 department, in the development of the program or any significant change  
51 to the established program, shall consult with one or more of the  
52 following organizations, as appropriate: the soil and water conservation  
53 committee, the department of environmental conservation, and organiza-  
54 tions representing farmers, farmland preservation, environmental  
55 protection, forestry, the United States Department of Agriculture's  
56 National Resources Conservation Services, the New York state college of

1 agriculture and life sciences established in section fifty-seven hundred  
2 twelve of the education law including Cornell Cooperative Extension,  
3 other institutions of higher education working on soil health, and any  
4 other organization designated by the commissioner.

5 3. Subject to the availability of funding, the department, in cooper-  
6 ation with the soil and water conservation committee and districts,  
7 shall make grants, and incentives to farmers, foresters and agricultural  
8 cooperatives to enhance the education, training, employment, income,  
9 productivity and retention of those working or aspiring to work in the  
10 field of soil health practices and to implement soil health practices in  
11 the state and provide technical support in implementing such practices.  
12 Amounts credited to the soil health fund shall also be used, without  
13 further appropriation, for the costs associated with administering and  
14 implementing the program and may also be used to provide grants on a  
15 competitive basis to public, private and charitable entities to finance  
16 projects in furtherance of the soil health program. The program shall  
17 establish a statewide network of experts or peer leaders to promote soil  
18 health stewardship and training, where such experts or leaders are land  
19 managers identified for their excellence in applying and promoting soil  
20 health principles, as modeled by a similar program of a national associ-  
21 ation of conservation districts. The program shall be designed to prior-  
22 itize incentives to beginning and socially disadvantaged farmers and  
23 ranchers, as defined by 7 U.S.C. §2279(a). Up to five percent of fund-  
24 ing, unless otherwise restricted, may be used for research in soil  
25 health and soil health measurement. Up to five percent of funding,  
26 unless otherwise restricted, may be used for administrative and overhead  
27 expenses of the department. Expenditures for this purpose shall comple-  
28 ment and not replace existing local, state, private or federal funding  
29 for related programs.

30 4. The department, in conjunction with the state soil and water  
31 conservation committee, shall report annually to the governor, the  
32 legislature and participating agencies on the progress of the soil  
33 health program, including an assessment of program effectiveness in  
34 achieving program objectives, public and private program participation,  
35 and such other information as the department and the committee deem  
36 appropriate. The report shall include receipts, expenditures, and  
37 activities funded through the program. The report shall include informa-  
38 tion regarding the program and the results of activities, including  
39 demonstrated progress toward meeting the timetable for achieving specif-  
40 ic goals for land area managed for soil health and watershed health, and  
41 measurable improvements to soil and watershed health which have been set  
42 by the committee.

43 5. The department is empowered to promulgate such rules and regu-  
44 lations and to prescribe such forms as it shall deem necessary to effec-  
45 tuate the purposes of this section.

46 § 151-n. Climate resilient farming program. 1. There is hereby estab-  
47 lished within the department a climate resilient farming program to  
48 reduce the effects of farming on climate change and assist farmers in  
49 mitigating the impact of climate change. The program may also include:  
50 financial assistance within funds available, to soil and water conserva-  
51 tion districts; other incentives for program participation; and evalu-  
52 ation of the program and projects to assess effectiveness.

53 2. Subject to the availability of funds, a matching grants program is  
54 established to fund projects which mitigate greenhouse gas emissions on  
55 farmland or promote the adaptation of farmland to projected climate  
56 change impacts.

3. Projects shall be integrated within the framework of the agricultural environmental management program established in article eleven-A of this chapter and section eleven of the soil and water conservation districts law and the soil health program established in section one hundred fifty-one-m of this article.

4. Project applicants are the soil and water conservation district or a group of soil and water conservation districts acting as a region.

5. State assistance may be provided for up to seventy-five percent of the eligible project costs, with the districts providing documentation of matching funds or in-kind contributions to meet the matching requirements.

6. Projects shall incorporate best management practices for climate and soil resiliency, as informed by the United States Department of Agriculture Natural Resources Conservation Service Field Office Technical Guide and by research conducted by New York state institutions of higher education with expertise in soil health and approved by the New York state soil and water conservation board.

7. Projects shall be approved in three categories, with additional areas to be added as designated by the commissioner to reflect emerging climate science research:

a. projects to reduce methane emissions on livestock farms with an emphasis on dietary changes and manure handling systems;

b. projects to implement water management systems on farmland for the purposes of mitigating climate consequences of increased rainfall and soil moisture as well as increased drought conditions; and

c. projects to encourage soil health and resiliency including but not limited to promoting cover cropping, no-till adoption, biochar incorporation, carbon sinks and nitrous oxide emissions reduction.

8. The department, in conjunction with the state soil and water conservation committee, shall report annually to the governor, the legislature and participating agencies on the progress of the climate resilient farming program, including an assessment of program effectiveness in achieving program objectives, public and private program participation, and such other information as the department and the committee deem appropriate. The report shall include receipts, expenditures, and activities funded through the program. The report shall include information regarding the program and the results of activities, including demonstrated progress toward meeting the timetable for achieving the specific goals set by the commissioner.

9. The commissioner shall have the authority to promulgate rules and regulations necessary to implement the climate resilient farming program.

§ 151-o. Soil health partnership and research framework. Subject to the availability of funds, the commissioner, in cooperation with a New York state institution of higher education with expertise in soil health, shall develop and implement a soil health partnership and research framework with goals to:

1. Continue accelerating the percentage of farmers who actively utilize best management practices to foster soil health and resiliency;

2. Provide necessary research and training programs to inform our scientific understanding of soil health and carbon sequestration with various farming practices, including but not limited to no-till, cover cropping, managed grazing, perennial pasture, and precise application of added nutrients to achieve nitrous oxide emissions reduction, and including but not limited to research on measuring soil organic matter and on long-term soil health outcomes; and

1 3. Establish a collaborative partnership of state, federal, farmers,  
2 natural resource professionals and community stakeholders around soil  
3 health and resiliency and climate adaptation, resilience and mitigation.

4 § 3. The state finance law is amended by adding a new section 99-ii to  
5 read as follows:

6 § 99-ii. Soil health fund. 1. There is hereby established in the joint  
7 custody of the state comptroller and the commissioner of agriculture and  
8 markets a fund to be known as the "soil health fund".

9 2. Such fund shall consist of: (a) any moneys appropriated and made  
10 available by the state for the purposes of such fund; (b) notwithstand-  
11 ing the provisions of this chapter or any other provision of law, any  
12 moneys which the department of agriculture and markets shall receive in  
13 repayment of advances made from such fund; and (c) any other moneys  
14 which may be made available to the department of agriculture and markets  
15 for the purpose of such fund from any other source or sources.

16 § 4. Subdivision 2 of section 2 of the soil and water conservation  
17 districts law is renumbered subdivision 3 and a new subdivision 2 is  
18 added to read as follows:

19 (2) Promotion of soil health and resiliency. It is further declared  
20 the policy of the legislature to promote the health and resiliency of  
21 New York's agricultural soils, including the biological, physical, and  
22 chemical components of such soils, to sustain agricultural plants and  
23 animals, produce a healthy, affordable food supply, reduce the effects  
24 of farming on climate change and mitigate the impact of climate change  
25 on farming, and further protect and promote natural resources and the  
26 health, safety and welfare of the people of this state.

27 § 5. Paragraph i of subdivision 4 of section 4 of the soil and water  
28 conservation districts law, as added by chapter 136 of the laws of 2000,  
29 is amended and a new paragraph j is added to read as follows:

30 i. To coordinate and approve the participation of the several  
31 districts in the AEM program as set forth in article eleven-A of the  
32 agriculture and markets law[~~+~~];

33 j. to coordinate and approve the participation of the several  
34 districts in the soil health and climate resiliency program as set forth  
35 in article eleven-B of the agriculture and markets law.

36 § 6. This act shall take effect July 1, 2021.