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**SUBSTITUTE SENATE BILL 6306**

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**State of Washington**

**66th Legislature**

**2020 Regular Session**

**By** Senate Ways & Means (originally sponsored by Senators Lias, Van De Wege, Warnick, Rolfes, Short, Nguyen, Das, Lovelett, Randall, Saldaña, and Wilson, C.)

READ FIRST TIME 02/06/20.

1 AN ACT Relating to creating the Washington soil health  
2 initiative; and adding a new chapter to Title 15 RCW.

3 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:

4 NEW SECTION. **Sec. 1.** The legislature finds that healthy soil is  
5 a cornerstone of a high quality of life on earth and that soil health  
6 is integral to supporting agricultural viability, promoting positive  
7 environmental outcomes, and ensuring the long-term availability of  
8 nutritious food.

9 It is the intent of the legislature that the mission of the  
10 Washington soil health initiative be the promotion of collaborative  
11 soil health research, education, demonstration projects, and  
12 technical assistance activities designed to identify, promote, and  
13 implement soil health stewardship practices that are grounded in  
14 sound science and that can be voluntarily and economically  
15 implemented by farmers and ranchers across Washington's diverse  
16 agricultural communities, climates, and geographies.

17 NEW SECTION. **Sec. 2.** The definitions in this section apply  
18 throughout this chapter unless the context clearly requires  
19 otherwise.

1 (1) "Collaborating agencies" means the university, the  
2 department, and the commission.

3 (2) "Commission" means the Washington state conservation  
4 commission.

5 (3) "Department" means the Washington department of agriculture.

6 (4) "Soil health" means the continued capacity of the soil to  
7 function as a vital living ecosystem that sustains plants, animals,  
8 and humans.

9 (5) "Soil health initiative" means the Washington soil health  
10 initiative created by this chapter as a collaborative partnership to  
11 promote and implement voluntary soil management actions and systems  
12 to improve soil health, environmental function, nutrition, and the  
13 productivity of working farm and ranch lands.

14 (6) "University" means Washington State University.

15 NEW SECTION. **Sec. 3.** (1) The Washington soil health initiative  
16 is created as a partnership jointly administered by the collaborating  
17 agencies.

18 (2) The goals and objectives of the soil health initiative are to  
19 improve:

20 (a) Agricultural viability, by improving farm profitability; and  
21 by helping agricultural producers implement good soil health  
22 practices that build soil organic matter, reduce soil erosion, soil  
23 compaction and production costs, and improve nutrient management,  
24 soil tilth, moisture infiltration, moisture retention, drought  
25 resilience, disease suppression, and the beneficial activity of  
26 microbes, fungi, earthworms, and other organisms;

27 (b) Nutrition, by increasing health-promoting nutrients,  
28 micronutrients, and microbial processes of agricultural soils; and by  
29 improving nutrient uptake, thereby expanding access to nutritious  
30 food and improving human health; and

31 (c) Environmental function, by reducing soil erosion, runoff, and  
32 leaching of nutrients and pollutants, thereby improving water  
33 quality; and by promoting strategies to store carbon and build soil  
34 organic matter and other beneficial properties, thereby enhancing the  
35 environmental functions of agricultural soils.

36 (3) In addition to the joint responsibilities established for the  
37 collaborative agencies in this section and the primary  
38 responsibilities established for each collaborating agency in  
39 sections 4 through 6 of this act, the collaborating agencies may

1 pursue any action designed to improve soil health and promote  
2 complementary improvements to agricultural viability, nutrition, and  
3 environmental function. The collaborating agencies must jointly:

4 (a) Support and supplement current Washington soil health  
5 advisory committee membership to promote effective implementation of  
6 the soil health initiative. Committee members must be qualified and  
7 knowledgeable regarding soil health stewardship. Membership may  
8 include agricultural producers, soil scientists or specialists, and  
9 representatives of governmental, nongovernmental, and tribal  
10 organizations interested in soil health as it pertains to  
11 agricultural viability, nutrition, or environmental function. The  
12 collaborating agencies must convene, staff, and develop agendas for  
13 each Washington soil health advisory committee meeting and appoint  
14 committee members and subcommittee members as appropriate. No  
15 appointment is effective unless all collaborating agencies concur in  
16 the appointment.

17 (b) Assess programmatic needs and build the capacities of the  
18 collaborating agencies to fill gaps in scientific research, economic  
19 assessment, staffing, technical assistance, grants administration,  
20 project implementation, data management, and monitoring tools to  
21 improve the reach and effectiveness of the soil health initiative.

22 (c) Prioritize in-state sourcing of needed soil health initiative  
23 resources including, but not limited to, testing resources, seeds,  
24 compost materials, supplies, and equipment.

25 (d) Employ adaptive management to support the improvement and  
26 long-term viability of the soil health initiative, including  
27 modification of soil health metrics, priorities, and activities to  
28 maximize complementary net benefits for agricultural viability,  
29 nutrition, and environmental function. To the extent practicable,  
30 metrics chosen to assess changes from baseline environmental function  
31 must be measured per unit of production.

32 (e) Submit a biennial Washington soil health initiative progress  
33 report to the governor and appropriate committees of the legislature  
34 by October 1, 2020, and every even-numbered year thereafter. The  
35 report's recommendations must include an assessment of success in  
36 meeting the soil health initiative's goals and objectives, a biennial  
37 work plan detailing any proposed legislation, budget requests or  
38 administrative rules, and a prioritized list of proposed actions  
39 needed to fulfill each collaborating agency's responsibilities for

1 programmatic components and advance soil health initiative goals and  
2 objectives in the upcoming biennium.

3 (4) The soil health initiative shall operate within the  
4 appropriations provided for the program.

5 NEW SECTION. **Sec. 4.** The university has primary responsibility  
6 for the following components of the soil health initiative:

7 (1) Establishing a regionally dispersed network of long-term  
8 agro-ecological research and extension demonstration sites to  
9 showcase and refine soil health research and practices, build  
10 statewide awareness and understanding, and support technical  
11 assistance capacity through trainings and on-farm demonstration  
12 projects that promote positive soil health outcomes across the  
13 state's diverse food production zones;

14 (2) Compiling existing information and developing new information  
15 on nutrition effects related to agricultural soil management  
16 practices and regimes, and identifying data gaps associated with  
17 understanding and quantifying such effects across the state's diverse  
18 food production zones, soil types, tillage systems, and cropping  
19 methods. Nutrition effects information compiled, developed, and  
20 assessed must include, but not be limited to, soil, plant, and food  
21 nutrient and micronutrient levels and community access to nutritious  
22 food;

23 (3) Developing a statewide soil health roadmap, based on a  
24 compilation of existing soil health information and ancillary  
25 agronomic, economic, environmental, and nutritional benefits and  
26 identified data gaps, to refine metrics and objectives to guide  
27 future public and private investment in the soil health initiative;

28 (4) Developing a statewide agricultural soil health monitoring  
29 system and database to receive data, test modeling estimations, and  
30 measure, analyze, and track trends over time in the productive use,  
31 management, and health of Washington's agricultural soils; and

32 (5) Consulting and collaborating with the department and the  
33 commission to support all soil health initiative goals, objectives,  
34 and components established in this chapter.

35 (6) The university shall perform its responsibilities within the  
36 appropriations provided for the soil health initiative.

1        NEW SECTION.        **Sec. 5.**        (1) The department has primary  
2 responsibility for the following components of the soil health  
3 initiative:

4        (a) Compiling existing information on agricultural viability and  
5 environmental function effects related to agricultural soil  
6 management practices and regimes across the state's diverse food  
7 production zones, soil types, tillage systems, and cropping methods,  
8 and identifying data gaps associated with understanding and  
9 quantifying such effects. Agricultural viability effects compiled and  
10 assessed must include, but not be limited to, assessments of yields,  
11 profitability, costs, and benefits. Environmental function effects  
12 compiled and assessed must include, but not be limited to,  
13 assessments of water quality and water availability;

14        (b) Establishing a "state of the soils" baseline assessment of  
15 statewide agricultural soil health practices and characteristic soil  
16 health indicators, which may include, but is not limited to: Soil  
17 type, organic matter, aggregate stability, porosity, temperature,  
18 microbiology, and pathogens; carbon storage; nutrient management;  
19 crop rotations; cropping techniques; tillage systems; plant biomass  
20 input, residue, and cover levels; water infiltration rate; water  
21 retention; root exudates; electrical conductivity; soil nutrient,  
22 vitamin, and mineral levels including, but not limited to, levels of  
23 nitrogen, phosphorous, potassium, magnesium, sulfur, calcium, and  
24 micronutrients; and any other indicator of a soil's health, yield,  
25 profitability, or ecological function. Baseline assessments must be  
26 developed in a stepwise process to incrementally assess the baseline  
27 for each of Washington's major food production zones, soil types,  
28 tillage systems, and cropping methods, including both conventional  
29 and organic food production systems;

30        (c) Developing standardized methods and diagnostic tools to  
31 support accurate and cost-effective measurement of key soil health  
32 indicators at a scale and speed that supports broad implementation  
33 and verification of improved soil health stewardship across  
34 Washington's diverse agricultural landscapes;

35        (d) Developing and supporting an agricultural product marketing  
36 and promotion program that creates opportunities for participating  
37 producers to benefit from the emerging market for Washington food  
38 products grown under good soil health stewardship; and

1 (e) Consulting and collaborating with the commission and the  
2 university to support all soil health initiative goals, objectives,  
3 and components established in this chapter.

4 (2) In consultation with the commission and the university, the  
5 department may adopt rules as needed to carry out the purposes of  
6 this chapter.

7 NEW SECTION. **Sec. 6.** (1) The commission has primary  
8 responsibility for the following components of the soil health  
9 initiative:

10 (a) Developing, publishing, and distributing outreach and  
11 education materials to help conservation districts, cooperative  
12 extension, and local governments raise awareness of the importance of  
13 soil health to society and agriculture, including farmer case studies  
14 on soil health practices, experiences, and outcomes;

15 (b) Training and mobilizing technical service providers to  
16 encourage farmers, ranchers, and land managers to voluntarily  
17 implement desired soil health stewardship and enter into any  
18 maintenance or easement agreements needed to maintain soil health  
19 benefits obtained. The commission and the university must coordinate  
20 technical assistance, working with and through conservation districts  
21 and university extension, to avoid duplication of effort in carrying  
22 out soil health initiative technical assistance responsibilities;

23 (c) Training technical assistance providers, property owners,  
24 land managers, and others to voluntarily take ongoing soil health  
25 samples and measurements and submit results to the soil health  
26 monitoring database;

27 (d) In collaboration with the department and the university,  
28 developing equitable criteria for the awarding of grants to help  
29 producers improve soil health across the state's diverse agricultural  
30 systems; and

31 (e) Consulting and collaborating with the department and the  
32 university to support all soil health initiative goals, objectives,  
33 and components established in this chapter.

34 (2) In consultation with the department and the university, the  
35 commission may adopt rules as needed to carry out the purposes of  
36 this chapter.

37 (3) The commission shall perform its responsibilities within the  
38 appropriations provided for the soil health initiative.

1        NEW SECTION.    **Sec. 7.**    This chapter may be known and cited as the  
2    Washington soil health initiative act.

3        NEW SECTION.    **Sec. 8.**    Sections 1 through 7 of this act  
4    constitute a new chapter in Title 15 RCW.

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