| 118TH CONGRESS | $\mathbf{C}$ |  |
|----------------|--------------|--|
| 1st Session    | <b>5.</b>    |  |

To require the Secretary of Agriculture to establish and maintain a training program for Department of Agriculture personnel and third-party providers on the rapidly evolving methodologies, science, and practices of biological soil health management systems on agricultural land, and for other purposes.

## IN THE SENATE OF THE UNITED STATES

Mr. Merkley (for himself and Mr. Wyden) introduced the following bill; which was read twice and referred to the Committee on

## A BILL

To require the Secretary of Agriculture to establish and maintain a training program for Department of Agriculture personnel and third-party providers on the rapidly evolving methodologies, science, and practices of biological soil health management systems on agricultural land, and for other purposes.

- 1 Be it enacted by the Senate and House of Representa-
- 2 tives of the United States of America in Congress assembled,

| SECTION 1 | SHORT TITLE |
|-----------|-------------|

| 2  | This Act may be cited as the "Soil Conservation And    |
|----|--|
| 3  | Regeneration Education Act of 2023" or the "Soil CARE  |
| 4  | Act of 2023".  |
| 5  | SEC. 2. TRAINING FOR REGENERATIVE AGRICULTURE IN       |
| 6  | NRCS PROGRAMS.   |
| 7  | (a) Establishment of Training Program.—Sec-            |
| 8  | tion 1242 of the Food Security Act of 1985 (16 U.S.C.  |
| 9  | 3842) is amended—                                      |
| 10 | (1) in subsection (a)—                                 |
| 11 | (A) by redesignating paragraphs (1) and                |
| 12 | (2) as paragraphs (3) and (5), respectively;           |
| 13 | (B) by inserting before paragraph (3) (as              |
| 14 | so redesignated) the following:                        |
| 15 | "(1) BIOLOGICAL SOIL HEALTH MANAGE-                    |
| 16 | MENT.—The term 'biological soil health manage-         |
| 17 | ment' means land management methods that are           |
| 18 | employed to increase and balance soil biology, such    |
| 19 | as microbial biomass and macrofauna, for the pur-      |
| 20 | pose of improving biological functions, including      |
| 21 | forming and stabilizing soil structure, cycling nutri- |
| 22 | ents, controlling pests and disease, and degrading or  |
| 23 | detoxifying contaminants.                              |
| 24 | "(2) Department.—The term 'Department'                 |
| 25 | means the Department of Agriculture."; and             |

| 1  | (C) by inserting after paragraph (3) (as so            |
|----|--|
| 2  | redesignated) the following:                           |
| 3  | "(4) Soil biology.—The term 'soil biology' in-         |
| 4  | cludes the collective biomass and activities of soil-  |
| 5  | dwelling organisms from an array of trophic levels.";  |
| 6  | and  |
| 7  | (2) by adding at the end the following:                |
| 8  | "(j) Training for Biological Soil Health Man-          |
| 9  | AGEMENT IN NRCS PROGRAMS.—                             |
| 10 | "(1) Establishment of training pro-                    |
| 11 | GRAM.—Not later than 1 year after the date of en-      |
| 12 | actment of the Soil CARE Act of 2023, the Sec-         |
| 13 | retary shall establish a training program (referred to |
| 14 | in this subsection as the 'training program')—         |
| 15 | "(A) to provide education, resources, and              |
| 16 | technical support to Department personnel and          |
| 17 | third-party providers on the rapidly evolving          |
| 18 | methodologies, science, and practices for im-          |
| 19 | proving soil health; and                               |
| 20 | "(B) to assist Department personnel and                |
| 21 | third-party providers in supporting agricultural       |
| 22 | producers in understanding and implementing            |
| 23 | biological soil health management systems that         |
| 24 | regenerate farmland.                                   |

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| 1  | "(2) Program development and deliv-    |
|----|--|
| 2  | ERY.—                                  |
| 3  | "(A) IN GENERAL.—The training program  |
| 4  | shall—                                 |
| 5  | "(i) be made available in each Natural |
| 6  | Resources Conservation Service region  |
| 7  | twice every 2 years; and               |
| 8  | "(ii) include—                         |
| 9  | "(I) a nationally available online     |
| 10 | curriculum on biological soil health   |
| 11 | management systems that is—            |
| 12 | "(aa) developed through co-            |
| 13 | operative agreements with enti-        |
| 14 | ties described in subparagraph         |
| 15 | (B); and                               |
| 16 | "(bb) delivered by the Nat-            |
| 17 | ural Resources Conservation            |
| 18 | Service; and                           |
| 19 | "(II) in-person training work-         |
| 20 | shops on biological soil health man-   |
| 21 | agement systems that regenerate        |
| 22 | farmland, that—                        |
| 23 | "(aa) include coverage                 |
| 24 | across regions and geography           |
| 25 | types;                                 |

| 1  | "(bb) are developed through                 |
|----|---|
| 2  | cooperative agreements with enti-           |
| 3  | ties described in subparagraph              |
| 4  | (B); and                                    |
| 5  | "(cc) are delivered by the                  |
| 6  | Natural Resources Conservation              |
| 7  | Service.                                    |
| 8  | "(B) Cooperative agreements.—               |
| 9  | "(i) In General.—The training pro-          |
| 10 | gram shall be developed and delivered       |
| 11 | through cooperative agreements with enti-   |
| 12 | ties with biological soil health management |
| 13 | systems expertise and experience working    |
| 14 | with and training producers, including—     |
| 15 | "(I) farming consultants, includ-           |
| 16 | ing producers and producer coopera-         |
| 17 | tives;                                      |
| 18 | ``(II) nonprofit organizations              |
| 19 | serving organic, agroecological, and        |
| 20 | other regenerative producers;               |
| 21 | "(III) conservation districts;              |
| 22 | "(IV) land-grant colleges and               |
| 23 | universities (as defined in section         |
| 24 | 1404 of the National Agricultural Re-       |

| 1  | search, Extension, and Teaching Pol-        |
|----|---|
| 2  | icy Act of 1977 (7 U.S.C. 3103));           |
| 3  | "(V) Long-Term Agroecosystem                |
| 4  | Research sites; and                         |
| 5  | "(VI) other entities with ade-              |
| 6  | quate expertise in biological soil          |
| 7  | health management systems, as deter-        |
| 8  | mined by the Secretary.                     |
| 9  | "(ii) Initial agreements.—Not               |
| 10 | later than 1 year after the date of enact-  |
| 11 | ment of the Soil CARE Act of 2023, the      |
| 12 | Secretary shall enter into cooperative      |
| 13 | agreements under clause (i) for the initial |
| 14 | development and delivery of the training    |
| 15 | program.                                    |
| 16 | "(C) Participation.—                        |
| 17 | "(i) In General.—The Secretary              |
| 18 | shall encourage relevant Department per-    |
| 19 | sonnel and third-party providers—           |
| 20 | "(I) to complete the online cur-            |
| 21 | riculum described in subparagraph           |
| 22 | (A)(ii)(I); and                             |
| 23 | "(II) to the extent practicable, to         |
| 24 | attend at least 1 in-person training        |

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| 1  | workshop described in subparagraph          |
|----|---|
| 2  | (A)(ii)(II).                                |
| 3  | "(ii) Relevant department per-              |
| 4  | SONNEL.—For purposes of clause (i), rel-    |
| 5  | evant Department personnel shall include,   |
| 6  | at a minimum, Department personnel in-      |
| 7  | volved in conservation planning activities  |
| 8  | with, and the delivery of technical assist- |
| 9  | ance to, producers, including field office  |
| 10 | staff of the Natural Resources Conserva-    |
| 11 | tion Service.                               |
| 12 | "(iii) Completion schedules for             |
| 13 | THIRD-PARTY PROVIDERS.—                     |
| 14 | "(I) Establishment of sched-                |
| 15 | ULES.—The Secretary shall estab-            |
| 16 | lish—                                       |
| 17 | "(aa) a schedule for the                    |
| 18 | completion by third-party pro-              |
| 19 | viders of the online curriculum             |
| 20 | described in subparagraph                   |
| 21 | (A)(ii)(I); and                             |
| 22 | "(bb) a schedule of in-per-                 |
| 23 | son training workshops that will            |
| 24 | be provided in accordance with              |
| 25 | subparagraph (A)(ii)(II).                   |

| 1  | "(II) USE OF SCHEDULES.—The                       |
|----|---|
| 2  | Secretary shall encourage each third-             |
| 3  | party provider—                                   |
| 4  | "(aa) to complete the online                      |
| 5  | curriculum in accordance with                     |
| 6  | the schedule established under                    |
| 7  | subclause (I)(aa); and                            |
| 8  | "(bb) to the extent prac-                         |
| 9  | ticable, to attend at least 1 train-              |
| 10 | ing workshop identified on the                    |
| 11 | schedule established under sub-                   |
| 12 | clause (I)(bb).                                   |
| 13 | "(D) Continuing Education.—The Sec-               |
| 14 | retary shall provide continuing education for     |
| 15 | relevant Department personnel and third-party     |
| 16 | providers, with a focus on the use of new con-    |
| 17 | servation practice standards related to soil      |
| 18 | health.   |
| 19 | "(E) Materials for producers.—The                 |
| 20 | Secretary shall require relevant Department       |
| 21 | personnel and third-party providers to provide    |
| 22 | soil health education materials to producers      |
| 23 | through the programs and conservation activi-     |
| 24 | ties of the Natural Resources Conservation        |
| 25 | Service, including materials relating to the top- |

| 1  | ics covered by the curriculum described in para- |
|----|--|
| 2  | graph (3).                                       |
| 3  | "(3) Curriculum.—                                |
| 4  | "(A) In general.—The training program            |
| 5  | shall include the following minimum curriculum   |
| 6  | components:                                      |
| 7  | "(i) A unit on the principles of soil            |
| 8  | health published by the Natural Resources        |
| 9  | Conservation Service, with a focus on bio-       |
| 10 | logical function and regional context.           |
| 11 | "(ii) A unit on—                                 |
| 12 | "(I) the transition to agriculture               |
| 13 | management systems that build soil               |
| 14 | health, including operations, infra-             |
| 15 | structure, regulations, finance, and             |
| 16 | marketing needs; and                             |
| 17 | "(II) associated risks and oppor-                |
| 18 | tunities, including reducing input               |
| 19 | costs by building on-farm and ranch              |
| 20 | fertility.                                       |
| 21 | "(iii) A unit on organic production              |
| 22 | and soil health systems.                         |
| 23 | "(iv) A unit on diversified production           |
| 24 | systems, including—                              |
| 25 | "(I) perennial cropping systems;                 |

|    | 10  |
|----|---|
| 1  | "(II) agroforestry or silvopasture            |
| 2  | systems;                                      |
| 3  | "(III) livestock integration into             |
| 4  | cropping systems; and                         |
| 5  | "(IV) prescribed grazing.                     |
| 6  | "(v) A unit on the body of research on        |
| 7  | soil biology and agriculture that regen-      |
| 8  | erates farmland, including potential im-      |
| 9  | pacts on soil health, water quality and se-   |
| 10 | curity, biodiversity, ecosystem function, re- |
| 11 | silience to extreme weather, carbon seques-   |
| 12 | tration, and agricultural profitability.      |
| 13 | "(vi) A unit on key conservation prac-        |
| 14 | tices that maximize soil health and miti-     |
| 15 | gate climate impacts by implementing soil     |
| 16 | health principles.                            |
| 17 | "(vii) A unit on—                             |
| 18 | "(I) issues specific to Indian                |
| 19 | Tribes; and                                   |
| 20 | "(II) traditional ecological knowl-           |
| 21 | edge.   |
| 22 | "(viii) A unit on—                            |
| 23 | "(I) the special needs of new,                |
| 24 | small scale, and underserved pro-             |
| 25 | ducers: and                                   |

| 1  | "(II) how best to meet those                         |
|----|--|
| 2  | needs.   |
| 3  | "(ix) A unit on approaches, tools, and               |
| 4  | skills to support farmers in performing soil         |
| 5  | health tests.  |
| 6  | "(x) A unit on all conservation pro-                 |
| 7  | grams available to producers that improve            |
| 8  | soil health, reduce production inputs, and           |
| 9  | regenerate soil, farmland, and nearby eco-           |
| 10 | systems.   |
| 11 | "(B) UPDATES.—The Secretary shall re-                |
| 12 | view and update the curriculum of the training       |
| 13 | program every 2 years based on the latest—           |
| 14 | "(i) biological soil health management               |
| 15 | innovations; and                                     |
| 16 | "(ii) scientific and technological ad-               |
| 17 | vancements.  |
| 18 | "(4) Authorization of appropriations.—               |
| 19 | There is authorized to be appropriated to the Sec-   |
| 20 | retary to carry out this subsection \$10,000,000 for |
| 21 | the period of fiscal years 2024 through 2028.".      |