



(Original Signature of Member)

118TH CONGRESS  
2D SESSION

**H. R.** \_\_\_\_\_

To amend the National Agricultural Research, Extension, and Teaching Policy Act of 1977 to establish the Climate Scientific Research Advisory Committee and the Rural Climate Alliance Network, and for other purposes.

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IN THE HOUSE OF REPRESENTATIVES

Ms. BROWNLEY introduced the following bill; which was referred to the Committee on \_\_\_\_\_

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**A BILL**

To amend the National Agricultural Research, Extension, and Teaching Policy Act of 1977 to establish the Climate Scientific Research Advisory Committee and the Rural Climate Alliance Network, 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,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Improving Coordina-  
5 tion of Agriculture Research and Data Act”.

6 **SEC. 2. PURPOSES.**

7 The purposes of this Act are—

1 (1) to strategically align agriculture climate re-  
2 search and data systems;

3 (2) to strengthen technical assistance and tech-  
4 nology transfer; and

5 (3) to establish a national agriculture climate  
6 research agenda to mitigate and adapt to climate  
7 change.

8 **SEC. 3. AGRICULTURE CLIMATE RESEARCH COORDINA-**  
9 **TION AND DATA.**

10 (a) AGRICULTURE CLIMATE SCIENTIFIC RESEARCH  
11 ADVISORY COMMITTEE.—Subtitle B of the National Agri-  
12 cultural Research, Extension, and Teaching Policy Act of  
13 1977 (7 U.S.C. 3121 et seq.) is amended by adding at  
14 the end the following:

15 **“SEC. 1413C. AGRICULTURE CLIMATE SCIENTIFIC RE-**  
16 **SEARCH ADVISORY COMMITTEE.**

17 “(a) ESTABLISHMENT.—The Secretary shall estab-  
18 lish within the Office of the Chief Scientist an advisory  
19 committee, to be known as the ‘Agriculture Climate Sci-  
20 entific Research Advisory Committee’ (referred to in this  
21 section as the ‘Committee’).

22 “(b) DUTIES.—The Committee shall—

23 “(1) review, and make recommendations and  
24 provide consultation to the Secretary regarding, the

1 long-term and short-term national policies and prior-  
2 ities of the Department of Agriculture for—

3 “(A) data collection for climate-specific ag-  
4 ricultural research, extension, education, and  
5 economics; and

6 “(B) agricultural climate research priority  
7 areas and scientific agendas for measuring,  
8 monitoring, reporting, and verification of cli-  
9 mate and environmental outcomes that in-  
10 clude—

11 “(i) carbon removal, carbon sequestra-  
12 tion, and greenhouse gas emission related  
13 to agriculture;

14 “(ii) soil health;

15 “(iii) livestock methane production;

16 “(iv) wetland management; and

17 “(v) climate smart agriculture prac-  
18 tices;

19 “(2) identify gaps in current agriculture climate  
20 research and develop a biennial national research  
21 agenda and annual scientific recommendations to  
22 address areas of critical need for publicly funded ag-  
23 riculture climate research;

24 “(3)(A) every 5 years, evaluate the results and  
25 effectiveness of climate-specific agricultural research,

1 extension, education, and economics with respect to  
2 the policies and priorities described in paragraph  
3 (1); and

4 “(B) make recommendations to the Secretary  
5 based on such evaluation;

6 “(4) review and make programmatic and pri-  
7 ority research recommendations to the Under Sec-  
8 retary for Research, Education, and Economics on  
9 the climate-specific agricultural research, extension,  
10 education, and economics described in paragraph  
11 (3)(A);

12 “(5) review and make recommendations on the  
13 mechanisms of the Department of Agriculture for  
14 technology assessment, which shall be conducted by  
15 qualified professionals, for the purposes of—

16 “(A) performance measurement and eval-  
17 uation of the implementation by the Secretary  
18 of the strategic plan of the Department of Agri-  
19 culture required under section 306 of title 5,  
20 United States Code;

21 “(B) implementation of climate-specific na-  
22 tional research policies and priorities that are  
23 consistent with the purposes described in sec-  
24 tion 1402; and

1           “(C) the development of mechanisms for  
2           the assessment of emerging public and private  
3           climate-specific agricultural research and tech-  
4           nology transfer initiatives;

5           “(6) every 5 years, establish and update stand-  
6           ardized data collection, management, and dissemina-  
7           tion protocols for—

8           “(A) agriculture climate research programs  
9           of the Department of Agriculture; and

10           “(B) initiatives of the Rural Climate Alli-  
11           ance Network established under section  
12           1419(c);

13           “(7)(A) consult with industry groups, producer  
14           networks, advocacy organizations, scientific societies,  
15           and higher education associations on climate-specific  
16           agricultural research, extension, education, and eco-  
17           nomics; and

18           “(B) make recommendations to the Secretary  
19           based on such consultation;

20           “(8) consult with, and receive communications  
21           from, other Federal departments and agencies on  
22           climate plans and priorities relating to agriculture  
23           and forestry for the purpose of advising the Sec-  
24           retary of opportunities for collaboration, coordina-  
25           tion, and avoiding duplication;

1           “(9)(A) review climate research technology  
2 transfer and new scientific practices for climate miti-  
3 gation and adaptation; and

4           “(B) make recommendations to the Rural Cli-  
5 mate Alliance Network established under section  
6 1419(c) based on such review; and

7           “(10) review and suggest annual budget rec-  
8 ommendations to support a climate research agenda  
9 for the Secretary to propose in each annual budget  
10 of the Department of Agriculture.

11       “(c) MEMBERSHIP.—

12           “(1) NUMBER AND APPOINTMENT.—

13           “(A) IN GENERAL.—The Committee shall  
14 be composed of 18 members as follows:

15                   “(i) The Secretary.

16                   “(ii) The Chief Scientist.

17                   “(iii) The Director of the Global Cli-  
18 mate Change Program established under  
19 section 2402 of the Food, Agriculture,  
20 Conservation, and Trade Act of 1990 (7  
21 U.S.C. 6701).

22                   “(iv) The Under Secretary for Nat-  
23 ural Resources and Environment.

24                   “(v) The Under Secretary for Farm  
25 Production and Conservation.

1                   “(vi) The Under Secretary for Mar-  
2                   keting and Regulatory Programs.

3                   “(vii) The Executive Director of the  
4                   Foundation for Food and Agriculture Re-  
5                   search.

6                   “(viii) The Administrator of the Agri-  
7                   cultural Research Service.

8                   “(ix) The Director of the National In-  
9                   stitute of Food and Agriculture.

10                  “(x) The Administrator of the Eco-  
11                  nomic Research Service.

12                  “(xi) The Administrator of the Na-  
13                  tional Agricultural Statistics Service.

14                  “(xii) The Director of the Office of  
15                  Energy and Environmental Policy.

16                  “(xiii) The Deputy Chief for Research  
17                  and Development of the Forest Service.

18                  “(xiv) 1 member of the National  
19                  Academy of Sciences, to be appointed by  
20                  the Secretary.

21                  “(xv) 4 members to be appointed by  
22                  the Secretary from nominations submitted  
23                  by the nominating entities described in  
24                  subparagraph (B).

1           “(B) NOMINATING ENTITIES DE-  
2           SCRIBED.—The nominating entities described in  
3           this subparagraph are organizations, associa-  
4           tions, societies, cooperative extensions, State  
5           agricultural experiment stations, technical as-  
6           sistance provider organizations, councils, fed-  
7           erations, producer groups, agriculture manufac-  
8           turing entities, restaurants, the food service in-  
9           dustry, the agriculture technology industry, en-  
10          vironmental organizations, forestry organiza-  
11          tions, nonprofit organizations, and companies  
12          or other entities as determined appropriate by  
13          the Secretary.

14          “(2) TERMS.—

15                 “(A) IN GENERAL.—Except as provided in  
16                 subparagraph (B), members of the Committee  
17                 appointed under clause (xiv) or (xv) of para-  
18                 graph (1)(A) shall be appointed for a term of  
19                 not more than 6 years.

20                 “(B) TERMS OF INITIAL APPOINTEES.—  
21                 The initial members of the Committee ap-  
22                 pointed under clause (xiv) or (xv) of paragraph  
23                 (1)(A) shall be appointed for the following  
24                 terms:



1           “(i) 2 shall be appointed for a term of  
2           2 years, which may be extended by the  
3           Secretary for an additional 6 years.

4           “(ii) 2 shall be appointed for a term  
5           of 4 years, which may be extended by the  
6           Secretary for an additional 6 years.

7           “(iii) 1 shall be appointed for a term  
8           of 6 years.

9           “(C) LIMITATION.—Except as provided in  
10          subparagraph (B), members of the Committee  
11          appointed under clause (xiv) or (xv) of para-  
12          graph (1)(A) may not serve consecutive terms  
13          on the Committee.

14          “(D) VACANCIES.—Any vacancy on the  
15          Committee—

16                 “(i) shall not affect the duties of the  
17                 Committee under this section; and

18                 “(ii) shall be filled in the same man-  
19                 ner as the original appointment.

20          “(3) CHAIRPERSON, VICE CHAIRPERSON, AND  
21          EXECUTIVE SUBCOMMITTEE.—

22                 “(A) ELECTION.—At the first meeting of  
23                 the Committee each calendar year, the Com-  
24                 mittee shall elect from among the members of  
25                 the Committee—

1 “(i) a chairperson;

2 “(ii) a vice chairperson; and

3 “(iii) 7 members to serve on the execu-  
4 tive subcommittee established under sub-  
5 paragraph (B).

6 “(B) EXECUTIVE SUBCOMMITTEE.—The  
7 Committee shall establish an executive sub-  
8 committee charged with the responsibility of  
9 working with the Secretary and officers and  
10 employees of the Department of Agriculture to  
11 summarize and disseminate the recommenda-  
12 tions of the Committee.

13 “(d) CONSULTATION AND RECOMMENDATIONS.—

14 “(1) DUTIES OF COMMITTEE.—In fulfilling the  
15 duties of the Committee under this section, the  
16 Committee shall consult with appropriate agencies of  
17 the Department of Agriculture.

18 “(2) DUTIES OF SECRETARY.—After receiving  
19 recommendations from the Committee pursuant to  
20 any provision in this section, the Secretary shall pro-  
21 vide a written response to the Committee regarding  
22 the manner and extent to which the Secretary will  
23 implement such recommendations.

24 “(e) COMPENSATION AND PERSONNEL.—

1           “(1) APPOINTMENT OF EXECUTIVE DIRECTOR  
2           AND STAFF.—To assist the Committee in the per-  
3           formance of the duties of the Committee, the Sec-  
4           retary may appoint, without regard to the civil serv-  
5           ice laws, and after consultation with the chairperson  
6           of the Committee—

7                   “(A) a full-time executive director, who  
8                   shall—

9                           “(i) perform such duties as the chair-  
10                           person of the Committee may direct; and

11                           “(ii) receive compensation at a rate  
12                           not to exceed the rate payable for GS–15  
13                           of the General Schedule established by sec-  
14                           tion 5332 of title 5, United States Code;  
15                           and

16                           “(B) a professional staff of not more than  
17                           3 full-time employees qualified in climate-spe-  
18                           cific agricultural research, extension, education,  
19                           and economics, of which 1 shall serve as the ex-  
20                           ecutive secretary of the Committee.

21           “(2) ADDITIONAL ASSISTANCE AND PER-  
22           SONNEL.—The Secretary shall detail, on a reimburs-  
23           able basis, personnel of the Department of Agri-  
24           culture to the Committee as necessary to assist the

1 Commission in carrying out its duties under this sec-  
2 tion.

3 “(3) COMPENSATION OF MEMBERS.—

4 “(A) IN GENERAL.—Except as provided in  
5 subparagraph (B), members of the Committee  
6 shall serve without pay for each day during  
7 which such members are engaged in the actual  
8 performance of duties vested in the Committee.

9 “(B) PROHIBITION OF COMPENSATION OF  
10 FEDERAL EMPLOYEES.—Members of the Com-  
11 mittee who are full-time officers or employees of  
12 the United States may not receive additional  
13 pay, allowances, or benefits by reason of their  
14 service on the Committee.

15 “(C) TRAVEL EXPENSES.—A member of  
16 the Committee shall be allowed travel expenses,  
17 including per diem in lieu of subsistence, at  
18 rates authorized for employees of agencies  
19 under subchapter I of chapter 57 of title 5,  
20 United States Code, while away from the home  
21 or regular place of business of the member in  
22 the performance of services for the Committee.

23 “(f) FEDERAL ADVISORY COMMITTEE ACT CHAR-  
24 TER.—The Committee shall be deemed to have filed a  
25 charter for the purpose of section 1008(c) of title 5,

1 United States Code (commonly known as the ‘Federal Ad-  
2 visory Committee Act’).

3 “(g) TERMINATION.—Section 1013(a)(2) of title 5,  
4 United States Code, (relating to the termination of advi-  
5 sory committees) shall not apply to the Committee.

6 “(h) COMMITTEE EXPENSES NOT COUNTED TO-  
7 WARD GENERAL LIMITATIONS.—The expenses of the  
8 Committee shall not be counted toward any general limita-  
9 tion on the expenses of advisory committees, panels, com-  
10 missions, and task forces of the Department of Agri-  
11 culture contained in any Act making appropriations for  
12 the Department of Agriculture, whether enacted before,  
13 on, or after the date of enactment of this section, unless  
14 the appropriation Act specifically refers to this subsection  
15 and specifically includes the Committee within the general  
16 limitation.”.

17 (b) RURAL CLIMATE ALLIANCE NETWORK.—Subtitle  
18 C of title XIV of the National Agricultural Research, Ex-  
19 tension, and Teaching Policy Act of 1977 is amended by  
20 inserting after section 1418 (7 U.S.C. 3153) the following:  
21 **“SEC. 1419. RURAL CLIMATE ALLIANCE NETWORK.**

22 “(a) DEFINITION OF AGRICULTURAL PRODUCER.—  
23 In this section, the term ‘agricultural producer’ means an  
24 individual who is engaged in farming, ranching, forestry,  
25 aquaculture, or another occupation relating to agriculture.

1 “(b) PURPOSES.—The purposes of this section are—

2 “(1) to provide science-based climate adaptation  
3 and mitigation assistance and training programs to  
4 rural communities and agricultural producers;

5 “(2) to coordinate the transfer of new tech-  
6 nology and research relating to climate change that  
7 will impact behavioral and management changes to  
8 agricultural systems, including to—

9 “(A) individuals who work in the field of  
10 climate science, including agricultural pro-  
11 ducers; and

12 “(B) individuals, organizations, and other  
13 entities with an established history of working  
14 with agricultural producers;

15 “(3) to improve agriculture research collabora-  
16 tion, data collection, and partnerships and the shar-  
17 ing of information about new scientific advance-  
18 ments in climate research, as well as inform future  
19 research efforts; and

20 “(4) to facilitate the exchange of regional agri-  
21 culture climate data and research through a network  
22 of partners.

23 “(c) RURAL CLIMATE ALLIANCE NETWORK.—

24 “(1) IN GENERAL.—The Secretary shall estab-  
25 lish and administer through the Climate Hubs a net-

1 work, to be known as the ‘Rural Climate Alliance  
2 Network’ (referred to in this subsection as the ‘Net-  
3 work’)—

4 “(A) that serves as a coordination hub for  
5 the provision of agriculture climate research,  
6 climate data, extension, and technical assistance  
7 for agricultural producers, the food and agricul-  
8 tural industry, nonprofit organizations relating  
9 to food and agriculture, and researchers relat-  
10 ing to food and agriculture to address the ef-  
11 fects of climate change; and

12 “(B) to improve—

13 “(i) responses to climate disasters  
14 through data collection and information  
15 sharing;

16 “(ii) communication of climate risks;

17 “(iii) accessible education and tech-  
18 nical transfer of climate-related, regionally  
19 relevant agricultural data and research to  
20 agricultural producers in all regionally ap-  
21 propriate languages;

22 “(iv) tools and networks that deliver  
23 information to prevent damage from ex-  
24 treme weather events, pest and disease

1 outbreaks, and other related climate  
2 change impacts;

3 “(v) communication between agricul-  
4 tural producers and the agricultural re-  
5 search community to ensure that agricul-  
6 tural research considers the perspectives of  
7 agricultural producers, such as changes in  
8 yield and fluctuating costs of inputs;

9 “(vi) coordination between other Fed-  
10 eral agencies, as the Secretary determines  
11 appropriate; and

12 “(vii) coordination between entities in  
13 the private sector, such as participants in  
14 the agricultural and food supply chains  
15 that work with agricultural producers, re-  
16 lating to climate data, adaptation, mitiga-  
17 tion, and response.

18 “(2) COMPOSITION.—The Network shall in-  
19 clude—

20 “(A) entities, and employees of entities,  
21 that conduct research, exchange data, provide  
22 monitoring and verification services, or provide  
23 technical assistance relating to food and agri-  
24 culture, including—

25 “(i) colleges and universities;



- 1 “(ii) State cooperative institutions;
- 2 “(iii) State extension services;
- 3 “(iv) State departments of agri-  
4 culture;
- 5 “(v) State agricultural experiment  
6 stations;
- 7 “(vi) Indian Tribes (as defined in sec-  
8 tion 4 of the Indian Self-Determination  
9 and Education Assistance Act (25 U.S.C.  
10 5304));
- 11 “(vii) qualified nonprofit organiza-  
12 tions, as determined by the Secretary;
- 13 “(viii) qualified private businesses, as  
14 determined by the Secretary;
- 15 “(ix) agricultural producers, producer  
16 groups, or producer organizations, includ-  
17 ing agricultural trade associations and re-  
18 search and promotion boards (commonly  
19 known as ‘checkoffs’);
- 20 “(x) agencies and offices within the  
21 Department of Agriculture; and
- 22 “(xi) any other technical assistance  
23 provider, research entity, or data analytics  
24 entity that the Secretary determines to be  
25 qualified to participate in the Network;

1           “(B) climate resilience-related research  
2 networks within the Department of Agriculture,  
3 including—

4           “(i) the Long-Term Agroecosystem  
5 Research Network;

6           “(ii) the Extension Disaster Edu-  
7 cation Network;

8           “(iii) the Eastern Forest Environ-  
9 mental Threat Assessment Center;

10           “(iv) the Western Wildland Environ-  
11 mental Threat Assessment Center;

12           “(v) the Sustainable Agriculture Re-  
13 search and Education program;

14           “(vi) the National Soil Dynamics Lab-  
15 oratory;

16           “(vii) the National Cooperative Soil  
17 Survey;

18           “(viii) the Economic Research Service;

19           “(ix) regional and rural development  
20 centers; and

21           “(x) other existing climate-related re-  
22 search networks within the Department of  
23 Agriculture that the Secretary determines  
24 to be appropriate to participate in the Net-  
25 work; and

1           “(C) other government-affiliated entities  
2           and climate resilience-related research networks  
3           outside of the Department of Agriculture, in-  
4           cluding—

5                   “(i) the Foundation for Food and Ag-  
6                   riculture Research;

7                   “(ii) the U.S. Global Change Research  
8                   Program;

9                   “(ii) State and public weather station  
10                  networks;

11                  “(iii) the National Weather Service  
12                  and other weather data systems within the  
13                  National Oceanic and Atmospheric Admin-  
14                  istration;

15                  “(iv) the harvest program of the Na-  
16                  tional Aeronautics and Space Administra-  
17                  tion; and

18                  “(v) other existing local, State, or  
19                  Federal climate-related research networks,  
20                  as determined by the Secretary.

21           “(d) ACTIVITIES OF THE NETWORK.—

22                   “(1) IN GENERAL.—An individual or entity  
23                   within the Network may—

24                           “(A) through the means described in para-  
25                           graph (2)—

1                   “(i) initiate, expand, or sustain agri-  
2                   cultural research programs that build ca-  
3                   pacity to mitigate, respond to, and recover  
4                   from climate change disasters, including—  
5                   “ (I) programs of the Agricultural  
6                   Research Service;  
7                   “ (II) the Agriculture and Food  
8                   Research Initiative;  
9                   “ (III) the Sustainable Agri-  
10                  culture Research and Education pro-  
11                  gram;  
12                  “ (IV) the Agriculture Advanced  
13                  Research and Development Authority;  
14                  and  
15                  “ (V) programs of the Foundation  
16                  for Food and Agriculture Research;  
17                  “(ii) inform and advise about agricul-  
18                  tural climate variability, change, vulner-  
19                  ability, risk, adaptation, and mitigation;  
20                  “(iii) respond to climate impacts on  
21                  ecosystems, economics, and diversity;  
22                  “(iv) collect and store agricultural cli-  
23                  mate data to share with other individuals  
24                  and entities within the Network and Fed-  
25                  eral research partners;

1           “(v) assist agricultural producers in  
2           implementing new management approaches  
3           to adapt to, reduce the risk of, and provide  
4           societal solutions to mitigate climate  
5           change;

6           “(vi) transfer technology, research  
7           outcomes, and information; and

8           “(vii) improve climate change aware-  
9           ness, education, and planning assistance,  
10          as necessary; and

11          “(B) enter into cooperative agreements or  
12          contracts, on a multiyear basis, with commu-  
13          nity-based, direct-service organizations to ini-  
14          tiate, expand, or sustain—

15               “(i) activities carried out under sub-  
16               paragraph (A) and paragraph (2); or

17               “(ii) programs described in subsection  
18               (b)(1).

19          “(2) MEANS DESCRIBED.—An eligible entity  
20          may carry out the activities described in paragraph  
21          (1)(A) through—

22               “(A) the development of phone technology,  
23               online applications, websites, handbooks, manu-  
24               als, publications, warning systems, and other

1 communication networks in all regionally appro-  
2 priate languages;

3 “(B) training, including training programs  
4 and workshops, for disseminating information  
5 to—

6 “(i) crop insurance agents;

7 “(ii) loan and credit officers;

8 “(iii) agricultural suppliers;

9 “(iv) agricultural producers;

10 “(v) State cooperative agents;

11 “(vi) third-party providers (as defined  
12 in section 1242(a) of the Food Security  
13 Act of 1985 (16 U.S.C. 3842(a)));

14 “(vii) Certified Crop Advisers and  
15 Certified Professional Soil Scientists cer-  
16 tified by the American Society of Agron-  
17 omy;

18 “(viii) Federal officers and employees,  
19 including officers and employees of the  
20 Natural Resources Conservation Service,  
21 the Farm Service Agency, the Agricultural  
22 Research Service, and the Forest Service;

23 “(ix) non-Federal technical assistance  
24 providers;

1 “(x) climate change experts who work  
2 with agricultural producers; and

3 “(xi) other individuals and entities  
4 that may—

5 “(I) assist agricultural producers  
6 who are vulnerable to climate impacts;  
7 or

8 “(II) provide societal solutions to  
9 mitigate the climate impacts of agri-  
10 culture;

11 “(C) curriculum development for managing  
12 climate risks, mitigating climate change, and  
13 understanding climate risks and economic im-  
14 plications; and

15 “(D) such other means as the Secretary  
16 determines to be appropriate.

17 “(e) REPORT TO CONGRESS.—

18 “(1) IN GENERAL.—Not later than 1 year after  
19 the date of enactment of the Improving Coordination  
20 of Agriculture Research and Data Act, the Secretary  
21 shall submit to Congress and any relevant Federal  
22 department or agency, and make publicly available,  
23 a report describing—

1           “(A) the current needs of climate mitiga-  
2           tion and resilience research and data systems in  
3           the food and agriculture sector;

4           “(B) progress made toward developing and  
5           adopting climate solutions across the food and  
6           agriculture system;

7           “(C) technical assistance needs of rural  
8           communities and agricultural producers;

9           “(D) actions and recommendations of the  
10          Agriculture Climate Scientific Research Com-  
11          mittee (established under section 1413C); and

12          “(E) recommended Federal budget activi-  
13          ties and funding levels for research, data sys-  
14          tems, and technical assistance priorities relating  
15          to climate mitigation.

16          “(2) CONTENTS.—The report under paragraph  
17          (1) shall include—

18                 “(A) an inventory and assessment of ef-  
19                 forts to support the climate change adaptation,  
20                 mitigation, risk management, and resilience  
21                 tools for agricultural producers by—

22                         “(i) the Federal Government;

23                         “(ii) States and territories of the  
24                         United States;



1                   “(iii) Indian Tribes (as defined in sec-  
2                   tion 4 of the Indian Self-Determination  
3                   and Education Assistance Act (25 U.S.C.  
4                   5304));

5                   “(iv) units of local government;

6                   “(v) communities comprising agricul-  
7                   tural producers;

8                   “(vi) qualified nonprofit organizations,  
9                   as determined by the Secretary;

10                  “(vii) agriculture and food businesses;

11                  “(viii) State extension services;

12                  “(ix) land-grant colleges and univer-  
13                  sities; and

14                  “(x) other appropriate entities, as de-  
15                  termined by the Secretary;

16                  “(B) a baseline report on soil carbon se-  
17                  questration on measurable soil carbon stocks  
18                  and sequestration;

19                  “(C) a description of the challenges faced  
20                  by agricultural producers that may impact the  
21                  climate change resilience of those agricultural  
22                  producers;

23                  “(D) a long-term strategy for responding  
24                  to the challenges described under subparagraph  
25                  (C) and recommendations based on best prac-

1 tices for further action to be carried out by ap-  
2 propriate Federal departments or agencies—

3 “(i) to improve the response by the  
4 Federal Government to those challenges;  
5 and

6 “(ii) to seek to improve climate  
7 change resilience among rural communities  
8 and agricultural producers; and

9 “(E) an evaluation of the impact that cli-  
10 mate change challenges faced by rural commu-  
11 nities, Indian Tribes, and agricultural producers  
12 have on—

13 “(i) the agricultural workforce;

14 “(ii) agricultural production;

15 “(iii) rural families and communities,  
16 including relating to food security; and

17 “(iv) succession planning.”.