[~116H5861]

		(Original Signature of Member)
117TH CONGRESS 1ST SESSION	H.R.	

To address the impact of climate change on agriculture, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

Ms.	PINGREE introduce	d the	following	bill;	which	was	referred	. to	the
	Committee or	1							

A BILL

To address the impact of climate change on agriculture, 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; TABLE OF CONTENTS.
- 4 (a) Short Title.—This Act may be cited as the
- 5 "Agriculture Resilience Act".
- 6 (b) Table of Contents.—The table of contents for
- 7 this bill is as follows:

Sec. 1. Short title; table of contents.

TITLE I—NATIONAL GOAL

- Sec. 101. Goals.
- Sec. 102. Action plan.

TITLE II—RESEARCH

- Sec. 201. Research, extension, and education purpose.
- Sec. 202. Regional hubs for risk adaptation and mitigation to climate change.
- Sec. 203. Sustainable agriculture research and education resilience initiative.
- Sec. 204. Sustainable agriculture technology development and transfer program.
- Sec. 205. Long-Term Agroecological Network.
- Sec. 206. Public breed and cultivar research.
- Sec. 207. ARS Climate Scientist Career Development Program.
- Sec. 208. Agricultural Climate Adaptation and Mitigation through AFRI.
- Sec. 209. Specialty crop research initiative.
- Sec. 210. Integrated pest management.
- Sec. 211. National Academy of Sciences Study.
- Sec. 212. Appropriate technology transfer to rural areas.

TITLE III—SOIL HEALTH

- Sec. 301. Crop insurance.
- Sec. 302. Environmental Quality Incentives Program.
- Sec. 303. Conservation Stewardship Program.
- Sec. 304. State assistance for soil health.
- Sec. 305. Funding and administration.
- Sec. 306. Carbon tax credit feasibility study.
- Sec. 307. Conservation compliance.
- Sec. 308. Agroforestry centers.

TITLE IV—FARMLAND PRESERVATION AND FARM VIABILITY

- Sec. 401. Local Agriculture Market Program.
- Sec. 402. Organic certification cost-share program.
- Sec. 403. Exclusion of gain from sale of certain farm property and agricultural easements.
- Sec. 404. Farmland Protection Policy Act.
- Sec. 405. Agriculture conservation easement program.

TITLE V—PASTURE-BASED LIVESTOCK

- Sec. 501. Animal raising claims.
- Sec. 502. Processing Resilience Grant Program.
- Sec. 503. Conservation of private grazing land.
- Sec. 504. Conservation reserve program.
- Sec. 505. Alternative Manure Management Program.

TITLE VI—ON-FARM RENEWABLE ENERGY

- Sec. 601. Rural Energy For America Program.
- Sec. 602. Study on dual-use renewable energy systems.
- Sec. 603. AgSTAR program.

TITLE VII—FOOD LOSS AND WASTE

Subtitle A—Food Date Labeling

Sec. 701. Definitions.

1

- Sec. 702. Quality dates and discard dates.
- Sec. 703. Misbranding.
- Sec. 704. Regulations.
- Sec. 705. Delayed applicability.

Subtitle B—Other Provisions

- Sec. 711. Composting as conservation practice.
- Sec. 712. Amendments to Federal Food Donation Act.
- Sec. 713. Grants for composting and anaerobic digestion food waste-to-energy projects.
- Sec. 714. School food waste reduction grant program.

TITLE I—NATIONAL GOAL

2 SEC. 101. GOALS.

- 3 (a) United States Agriculture Goal.—As part
- 4 of a national greenhouse gas emission reduction effort to
- 5 prevent climate change from exceeding 1.5 degrees Celsius
- 6 of warming above preindustrial levels, the goal for the ag-
- 7 ricultural sector in the United States shall be to achieve
- 8 at least a 50 percent reduction in net greenhouse gases
- 9 from 2010 levels by not later than 2030 and to achieve
- 10 net zero emissions by not later than 2040.

11 (b) Subgoals.—

- 12 (1) Research.—To help achieve the goal speci-
- fied in subsection (a), the total Federal investment
- in public food and agriculture research and exten-
- sion should, at a minimum, triple by not later than
- 16 2030 and quadruple by not later than 2040, with a
- heightened emphasis on climate change adaptation
- and mitigation, soil health and carbon sequestration,
- 19 nutrient and manure management to curb nitrous
- 20 oxide and methane emissions, agroforestry, advanced

1	grazing management and crop-livestock integration,
2	other agro-ecological systems, on-farm and food sys-
3	tem energy efficiency and renewable energy produc-
4	tion, farmland preservation and viability, food waste
5	reduction, and related topics to accelerate progress
6	toward net zero emissions by not later than 2040.
7	(2) Soil Health.—To help achieve the goal
8	specified in subsection (a) the United States
9	should—
10	(A) immediately become a member of the
11	4 per 1000 Initiative's forum and consortium,
12	hosted by the Consultative Group for Inter-
13	national Agricultural Research (commonly re-
14	ferred to as the "CGIAR"), with the aim of in-
15	creasing total soil carbon stocks by 0.4 percent
16	annually to reduce carbon in the atmosphere,
17	restore soil health and productivity, and thereby
18	improve food security;
19	(B) expand adoption of soil health prac-
20	tices (including diverse crop rotations, cover
21	cropping, conservation tillage, perennial crop
22	production systems, agroforestry, composting,
23	biologically based nutrient management, and
24	advanced grazing management including
25	silvopasture) sufficiently to—

1	(i) reduce nitrous oxide emissions
2	from agricultural soils in the United States
3	by 25 percent by not later than 2030 and
4	75 percent by not later than 2040; and
5	(ii) increase soil carbon stocks by 0.4
6	percent annually on at least 50 percent of
7	United States agricultural lands by not
8	later than 2030, and to meet or exceed
9	that threshold on all United States agricul-
10	tural lands by not later than 2040;
11	(C) expand implementation of regionally
12	appropriate cover crops and other continual liv-
13	ing cover so that—
14	(i) at least 50 percent of cropland
15	acres nationwide include one or more cover
16	crops or other continual living cover in
17	their rotations by not later than 2030, ris-
18	ing to at least 75 percent of cropland acres
19	nationwide by not later than 2040;
20	(ii) cropland acres are covered by
21	crops (including forages and hay crops),
22	cover crops, or residue for an average of
23	75 percent of the calendar year by not
24	later than 2030, rising to at least 85 per-

1	cent of the calendar year by not later than
2	2040;
3	(D) encourage conversion of at least 15
4	percent of current annual grain crop acres to
5	agroforestry, perennial grazing, perennial grain
6	crops, or other perennial production systems by
7	not later than 2030, rising to at least 30 per-
8	cent by not later than 2040.
9	(3) FARMLAND PRESERVATION.—To help
10	achieve the goal specified in subsection (a), the rate
11	of conversion in the United States of agricultural
12	land to development, as well as the rate of grassland
13	conversion to cropping, should be reduced by at least
14	80 percent by not later than 2030 and eliminated by
15	not later than 2040.
16	(4) Pasture-based Livestock.—To help
17	achieve the goal specified in subsection (a), the live-
18	stock sector in the United States should—
19	(A) establish advanced grazing manage-
20	ment, including management-intensive rota-
21	tional grazing, on at least 50 percent of all
22	grazing lands by not later than 2030 and 100
23	percent of all grazing land by not later than
24	2040;

1	(B) reduce greenhouse gas emissions re-
2	lated to feeding of ruminants by at least a third
3	by not later than 2030 and by at least 50 per-
4	cent by not later than 2040 by reducing non-
5	grazing feeding of ruminants, growing feed
6	grains and forages with soil health and nutrient
7	management practices that minimize net green-
8	house gas emissions from cropland, and design-
9	ing livestock feed mixtures and supplements to
10	mitigate enteric methane emissions;
11	(C) re-integrate livestock and crop produc-
12	tion systems at farm, local and regional levels
13	to facilitate environmentally sound management
14	and field application of manure and reduce the
15	need for long-term manure storage by increas-
16	ing acreage on individual farms under crop-live-
17	stock integrated management by at least 100
18	percent over 2017 levels by not later than 2030
19	and by 300 percent over 2017 levels by not
20	later than 2040; and
21	(D) immediately cease building any new or
22	expanded waste lagoons for confined animal
23	feeding operations and convert at least one
24	third of wet manure handling and storage to al-
25	ternative manure management (as described in

1	section 1240T of the Food Security Act of
2	1985 (as added by this Act)) by not later than
3	2030 and at least two thirds by not later than
4	2040.
5	(5) On-farm renewable energy.—To help
6	achieve the goal specified in subsection (a), the agri-
7	culture sector in the United States should—
8	(A) implement energy audits and energy
9	efficiency improvements on at least 50 percent
10	of farms by not later than 2030 and 100 per-
11	cent of farms by not later than 2040;
12	(B) expand on-farm clean renewable en-
13	ergy production to at least double 2017 levels
14	by not later than 2030 and at least triple by
15	not later than 2040; and
16	(C) install and manage on-farm renewable
17	energy infrastructure in a way that does not
18	compromise the climate resilience and green-
19	house gas mitigation goals of this Act or ad-
20	versely impact farmland, soil, and water re-
21	sources, or food production.
22	(6) FOOD LOSS AND WASTE.—Consistent with
23	the Food Waste Challenge launched by the Depart-
24	ment of Agriculture and the Environmental Protec-
25	tion Agency in June 2013 and the national food loss

1	and waste goal announced in September 2015, the
2	food and agriculture sector in the United States
3	should commit to—
4	(A) at least a 50 percent reduction in food
5	loss and waste by not later than 2030;
6	(B) at least a 75 percent reduction in food
7	loss and waste by not later than 2040; and
8	(C) in a manner consistent with the Food
9	Recovery Hierarchy established by the Environ-
10	mental Protection Agency, diverting from land-
11	fills through composting and other means at
12	least 50 percent of unavoidable food waste and
13	food processing byproducts by not later than
14	2030, and 90 percent of such food waste and
15	byproducts by not later than 2040.
16	SEC. 102. ACTION PLAN.
17	(a) Plan Development.—The Secretary shall de-
18	velop a plan for actions to achieve, in combination with
19	the other Federal agencies, the national goals declared by
20	section 101. The plan shall include actions that will make
21	significant and rapid progress toward meeting such goals.
22	(b) Actions To Meet Goals.—
23	(1) In general.—Actions selected by the Sec-
24	retary to include in a plan developed under sub-
25	section (a) may include issuing regulations, pro-

1	viding incentives, carrying out research and develop-
2	ment programs, and any other action the Secretary
3	determines appropriate to achieve the goals declared
4	by section 101.
5	(2) Selection.—In selecting actions to include
6	in a plan developed under subsection (a), the Sec-
7	retary shall select actions designed to—
8	(A) fully implement the provisions of this
9	Act (and the amendments made by this Act);
10	(B) provide benefits for farmers and
11	ranchers, rural communities, small businesses,
12	and consumers;
13	(C) improve public health, resilience, and
14	environmental outcomes, especially for rural
15	and low-income households, communities of
16	color, Tribal and indigenous communities, and
17	communities that are disproportionately vulner-
18	able to the impacts of climate change, air and
19	water pollution, and other resource degradation;
20	and
21	(D) prioritize investments that reduce
22	emissions of greenhouse gases and sequester
23	carbon while simultaneously helping to solve
24	other pressing agro-environmental resource con-
25	cerns, increase farming and ranching opportuni-

1	ties, create quality jobs, improve farmworker
2	working conditions and living standards, and
3	make communities more resilient to the effects
4	of climate change.
5	(c) Plan Implementation.—
6	(1) Public comment.—Not later than 12
7	months after the date of enactment of this Act, the
8	Secretary shall make the proposed plan developed
9	under subsection (a) available for public comment.
10	(2) Submission.—Not later than 18 months
11	after the date of enactment of this Act, the Sec-
12	retary shall make public and submit to Congress a
13	plan developed under subsection (a) that incor-
14	porates revisions to the proposed plan, as appro-
15	priate, to address the recommendations provided by
16	the public pursuant to paragraph (1).
17	(3) Implementation.—Beginning not later
18	than 18 months after the date of enactment of this
19	Act, the Secretary shall implement the plan devel-
20	oped under subsection (a) and submitted to Con-
21	gress under paragraph (2).
22	(4) Revisions.—Beginning 24 months after
23	the date on which the Secretary submits to Congress
24	the plan under paragraph (2) and not less frequently
25	than once every 24 months thereafter, the Secretary

1	shall review and revise the plan to ensure it is suffi-
2	cient to achieve the national goals declared by sec-
3	tion 101. The Secretary shall include the conclusion
4	of each such review and any revised plan resulting
5	from such review in the next annual report required
6	under paragraph (5).
7	(5) Annual Report.—The Secretary shall
8	issue an annual public report on the plan (including
9	any revisions to such plan), actions taken pursuant
10	to such plan, and the effects of such actions, during
11	the preceding calendar year.
10	TITLE II—RESEARCH
12	
	SEC. 201. RESEARCH, EXTENSION, AND EDUCATION PUR
13	
13 14	SEC. 201. RESEARCH, EXTENSION, AND EDUCATION PUR
13 14 15	SEC. 201. RESEARCH, EXTENSION, AND EDUCATION PURPOSE.
13 14 15 16	SEC. 201. RESEARCH, EXTENSION, AND EDUCATION PURPOSE. Section 1402 of the National Agricultural Research.
13 14 15 16	POSE. Section 1402 of the National Agricultural Research. Extension, and Teaching Policy Act of 1977 (7 U.S.C.
113 114 115 116 117	POSE. Section 1402 of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (7 U.S.C. 3101) is amended—
13 14 15 16 17 18	POSE. Section 1402 of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (7 U.S.C. 3101) is amended— (1) by redesignating paragraphs (8) and (9) as
13 14 15 16 17 18 19 20	POSE. Section 1402 of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (7 U.S.C. 3101) is amended— (1) by redesignating paragraphs (8) and (9) as paragraphs (9) and (10), respectively; and
13 14 15 16 17 18 19 20 21	POSE. Section 1402 of the National Agricultural Research. Extension, and Teaching Policy Act of 1977 (7 U.S.C. 3101) is amended— (1) by redesignating paragraphs (8) and (9) as paragraphs (9) and (10), respectively; and (2) by inserting after paragraph (7) the following paragraph (7) the following paragraph (8) and (9) as paragraphs (9) and (10), respectively; and
12 13 14 15 16 17 18 19 20 21 22 23	POSE. Section 1402 of the National Agricultural Research. Extension, and Teaching Policy Act of 1977 (7 U.S.C. 3101) is amended— (1) by redesignating paragraphs (8) and (9) as paragraphs (9) and (10), respectively; and (2) by inserting after paragraph (7) the following:

1	bon positive by removing additional carbon dioxide
2	from the atmosphere;".
3	SEC. 202. REGIONAL HUBS FOR RISK ADAPTATION AND
4	MITIGATION TO CLIMATE CHANGE.
5	Title IV of the Agricultural Research, Extension, and
6	Education Reform Act of 1998 is amended by inserting
7	before section 404 (7 U.S.C. 7624) the following new sec-
8	tion:
9	"SEC. 401. REGIONAL HUBS FOR RISK ADAPTATION AND
10	MITIGATION TO CLIMATE CHANGE.
11	"(a) Establishment.—The Secretary shall estab-
12	lish a national network of regional hubs for risk adapta-
13	tion and mitigation to climate change to deliver science-
14	based, region-specific, cost-effective, and practical infor-
15	mation and program support to farmers, ranchers, forest
16	landowners, and other agricultural and natural resource
17	managers to support science-informed decision-making in
18	light of the increased costs, opportunities, risks, and
19	vulnerabilities associated with a changing climate, and to
20	provide access to assistance to implement those decisions.
21	"(b) Eligibility.—An entity is eligible to be selected
22	as a regional hub under subsection (a) if such entity is
23	any office of the Agricultural Research Service, the Forest
24	Service, or any other agency of the Department of Agri-
25	culture that the Secretary determines is appropriate.

1	"(c) Administration.—
2	"(1) In General.—The network established
3	under subsection (a) shall be designated and admin-
4	istered jointly by the Agricultural Research Service
5	and the Forest Service, in partnership with other
6	Federal agencies, including the following:
7	"(A) Within the Department of Agri-
8	culture, the following agencies:
9	"(i) The Natural Resource Conserva-
10	tion Service.
11	"(ii) The Farm Service Agency.
12	"(iii) The Risk Management Agency.
13	"(iv) The Animal and Plant Health
14	Inspection Service.
15	"(v) The National Institute for Food
16	and Agriculture.
17	"(B) The Department of the Interior.
18	"(C) The Department of Energy.
19	"(D) The Environmental Protection Agen-
20	cy.
21	"(E) The United States Geological Survey.
22	"(F) National Oceanic and Atmospheric
23	Administration.
24	"(G) National Aeronautics and Space Ad-
25	ministration.

1	"(H) Other Federal agencies as the Sec-
2	retary determines appropriate.
3	"(2) Partners.—The regional hubs estab-
4	lished under subsection (a) shall work in close part-
5	nership with other stakeholders and partners, includ-
6	ing—
7	"(A) colleges and universities;
8	"(B) cooperative extension services (as de-
9	fined in section 1404 of the Food and Agri-
10	culture Act of 1977 (7 U.S.C. 3103));
11	"(C) State agricultural experiment stations
12	(as defined in such section);
13	"(D) private entities;
14	"(E) State, local and regional govern-
15	ments;
16	"(F) Tribes;
17	"(G) agriculture and commodity organiza-
18	tions;
19	"(H) nonprofit and community-based orga-
20	nizations; and
21	"(I) other partners, as determined by the
22	Secretary.
23	"(d) Responsibilities.—A regional hub established
24	under this section shall—

1	"(1) offer tools, strategic management options,
2	and technical support to farmers, ranchers, and for-
3	est landowners to help such farmers, ranchers, and
4	landowners mitigate and adapt to climate change;
5	"(2) direct farmers, ranchers, and forest land-
6	owners to Federal agencies that can provide pro-
7	gram support to enable such farmers, ranchers, and
8	forest landowners to implement science-informed
9	management practices that address climate change;
10	"(3) determine how climate and weather projec-
11	tions will impact the agricultural and forestry sec-
12	tors;
13	"(4) provide periodic regional assessments of
14	risk and vulnerability in the agricultural and for-
15	estry sectors to help farmers, ranchers, and forest
16	landowners better understand the potential direct
17	and indirect impacts of climate change and to in-
18	form the United States Global Change Research
19	Program;
20	"(5) provide to farmers, ranchers, forest land-
21	owners, and rural communities outreach, education,
22	and extension on science-based risk management
23	through partnerships with the land-grant colleges
24	and universities (as defined in section 1404 of the

1	Food and Agriculture Act of 1977 (7 U.S.C. 3103)),
2	cooperative extension services, and other entities;
3	"(6) work with any cooperative extension serv-
4	ices (as defined in section 1404 of the National Ag-
5	ricultural Research, Extension, and Teaching Policy
6	Act of 1977 (7 U.S.C. 3103)), conservation districts,
7	and non-governmental organizations involved in
8	farmer outreach in the region served by such hub to
9	assist producers in developing business plans and
10	conservation plans that take into account emerging
11	climate risk science with respect to crop, production,
12	and conservation system changes that will help pro-
13	ducers adapt to a changing climate; and
14	"(7) establish, working in partnership with pro-
15	grams and projects carried out under subtitle B of
16	title XVI of the Food, Agriculture, Conservation,
17	and Trade Act of 1990 (7 U.S.C. 5801 et seq.), ad-
18	ditional partnerships with farmers and non-profit
19	and community-based organizations to conduct ap-
20	plied on-farm research on climate change.
21	"(e) Priorities.—A regional hub established under
22	this section shall prioritize research and data collection ac-
23	tivities in the following areas:
24	"(1) Improved measurement and monitoring
25	of—

1	"(A) soil organic carbon sequestration; and
2	"(B) total net greenhouse gas impacts of
3	different farming systems and practices.
4	"(2) Lifecycle analysis for total net greenhouse
5	gas emissions related to—
6	"(A) alternative cropping systems;
7	"(B) alternative livestock production sys-
8	tems;
9	"(C) integrated cropping-livestock systems;
10	"(D) alternative biofuel crop production
11	systems and biofuel end uses;
12	"(E) alternative agroforestry practices and
13	systems; and
14	"(F) alternative forestry management sys-
15	tems.
16	"(3) Research and education on—
17	"(A) optimal soil health practices;
18	"(B) advanced biological nutrient manage-
19	ment based on optimal soil health practices;
20	"(C) enhanced synergies between crop
21	roots and soil biota;
22	"(D) linkages between soil, plant, animal,
23	and human health;
24	"(E) adaption and mitigation needs of
25	stakeholders;

1	"(F) new crops or new varieties to help
2	producers be profitable while adapting to a
3	changing climate;
4	"(G) social and economic barriers to stake-
5	holder adoption of new practices that improve
6	adaptation, mitigation, and soil sequestration;
7	and
8	"(H) evaluation and assessment of climate-
9	related decision tools of the Department of Ag-
10	riculture.
11	"(4) Grazing-based livestock management sys-
12	tems to optimize net greenhouse gas footprint in-
13	cluding—
14	"(A) grazing land carbon sequestration;
15	and
16	"(B) mitigation of enteric methane.
17	"(5) Perennial production systems that seques-
18	ter carbon, enhance soil health, and increase resil-
19	ience, including—
20	"(A) perennial forages;
21	"(B) perennial grains; and
22	"(C) agroforestry.
23	"(f) Stakeholder Input.—Each regional hub es-
24	tablished under this section shall solicit input from stake-
25	holders on pressing needs, important issues, and outreach

1	strategies through a variety of mechanisms including re-
2	gional stakeholder committees and may partner with
3	stakeholders in conducting research and developing tools.
4	"(g) Risk Management.—
5	"(1) In general.—The Secretary shall appoint
6	a team of individuals representing the regional hubs,
7	regional hub partners, and the Risk Management
8	Agency to develop recommendations to better ac-
9	count for—
10	"(A) climate risk in actuarial tables; and
11	"(B) soil health and other risk-reducing
12	conservation activities in the Federal crop in-
13	surance program under the Federal Crop Insur-
14	ance Act (7 U.S.C. 1508 et seq.).
15	"(2) Submission of Recommendations.—
16	The team appointed under paragraph (1) shall sub-
17	mit to the Secretary on an iterative basis, but not
18	less frequently than once every two years, the team's
19	recommendations developed pursuant to such para-
20	graph.
21	"(h) AUTHORIZATION OF APPROPRIATIONS.—There
22	is authorized to be appropriated to carry out this section
23	\$50,000,000 for each of fiscal years 2022 through 2030.".

1	SEC. 203. SUSTAINABLE AGRICULTURE RESEARCH AND
2	EDUCATION RESILIENCE INITIATIVE.
3	(a) Sustainable Agriculture Research and
4	Education.—Section 1619 of the Food, Agriculture,
5	Conservation, and Trade Act of 1990 (7 U.S.C. 5801) is
6	amended—
7	(1) in subsection (a)—
8	(A) in paragraph (5), by striking "and" at
9	the end;
10	(B) in paragraph (6), by striking the pe-
11	riod at the end and inserting "; and"; and
12	(C) by adding at the end the following:
13	"(7) increase resilience in the context of a
14	changing climate and related economic, social, and
15	environmental shocks."; and
16	(2) in subsection (b)—
17	(A) in paragraph (2)—
18	(i) by striking "management" and in-
19	serting "systems and practices"; and
20	(ii) by inserting "resilience," after
21	"profitability,"; and
22	(B) by amending paragraph (3) to read as
23	follows:
24	"(3) The term 'resilience' means, with respect
25	to an agricultural management system, the ability of
26	such system to absorb and recover from climate and

1	other disturbances, such that the system thrives in
2	the face of severe shocks.".
3	(b) Eligibility of Tribal Colleges To Enter
4	INTO RESEARCH AND EXTENSION PROJECT AGREE-
5	MENTS.—Section 1621(b) of the Food, Agriculture, Con-
6	servation, and Trade Act of 1990 (7 U.S.C. 5811(b)) is
7	amended by striking "or Federal or State" inserting
8	"1994 Institutions (as defined in section 532 of the Eq-
9	uity in Educational Land-Grant Status Act of 1994 (7
10	U.S.C. 301 note; Public Law 103–382)), or Federal,
11	State, or Tribal".
12	(c) AGRICULTURAL AND FOOD SYSTEM RESILIENCE
13	Initiative.—
14	(1) In General.—Section 1627 of the Food,
15	Agriculture, Conservation, and Trade Act of 1990 (7
16	U.S.C. 5821) is amended—
17	(A) in subsection (a)—
18	(i) in the matter preceding paragraph
19	(1)—
20	(I) by striking the first sentence
21	and inserting the following: "In close
22	conjunction with programs and
23	projects established under sections
24	1621 and 1623, the Secretary shall
25	establish a research, education, exten-

1	sion, and outreach initiative, which
2	may include farmer and rancher re-
3	search and demonstration grants, and
4	use an interdisciplinary approach
5	wherever appropriate, to increase the
6	resilience of agriculture and the food
7	system in the context of a changing
8	climate and related economic, social,
9	and environmental shocks."; and
10	(II) in the second sentence, by
11	striking "program" and inserting
12	"initiative";
13	(ii) by striking paragraph (3);
14	(iii) by redesignating paragraphs (1),
15	(2), (4), and (5) as paragraphs (3), (4),
16	(5), and (6), respectively;
17	(iv) by inserting before paragraph (3)
18	(as so redesignated), the following:
19	"(1) to equip farmers to prepare for, adapt, and
20	transform their farming systems when confronted by
21	shocks and stresses to their agricultural production
22	and livelihoods;
23	"(2) to support local and regional food systems
24	that support resilience and enhance local access and
25	control over productive resources;";

1	(v) in paragraph (3) (as redesignated
2	by clause (iii))—
3	(I) by inserting "climate and"
4	after "adverse";
5	(II) by inserting "soil quality
6	and" after "enhance"; and
7	(III) by inserting "reduce de-
8	pendency on fossil fuels," after "in-
9	puts,";
10	(vi) in paragraph (4) (as redesignated
11	by clause (iii)), by inserting "increase resil-
12	ience" after "practices to"; and
13	(vii) in paragraph (6) (as redesignated
14	by clause (iii)), by striking "integrated"
15	and all that follows through "programs"
16	and inserting "policies and programs to
17	improve food and agricultural system resil-
18	ience'';
19	(B) by striking subsections (b), (c), and
20	(d); and
21	(C) by inserting after subsection (a) the
22	following:
23	"(b) Funding.—
24	"(1) Mandatory funding.—Of the funds of
25	the Commodity Credit Corporation, the Secretary

1	shall make available to carry out this section
2	\$50,000,000 for fiscal year 2022 and each fiscal
3	year thereafter.
4	"(2) DISCRETIONARY FUNDING.—There are au-
5	thorized to be appropriated to carry out this section
6	through the National Institute of Food and Agri-
7	culture \$20,000,000 for each of fiscal years 2013
8	through 2030.".
9	(2) Conforming amendment.—The chapter
10	heading of chapter 2 of subtitle B of title XVI of the
11	Food, Agriculture, Conservation, and Trade Act of
12	1990 (7 U.S.C. 5821) is amended to read as follows:
13	"AGRICULTURAL AND FOOD SYSTEM
1314	"AGRICULTURAL AND FOOD SYSTEM RESILIENCE INITIATIVE".
14	RESILIENCE INITIATIVE".
14 15	RESILIENCE INITIATIVE". SEC. 204. SUSTAINABLE AGRICULTURE TECHNOLOGY DE-
14151617	RESILIENCE INITIATIVE". SEC. 204. SUSTAINABLE AGRICULTURE TECHNOLOGY DE- VELOPMENT AND TRANSFER PROGRAM.
14151617	RESILIENCE INITIATIVE". SEC. 204. SUSTAINABLE AGRICULTURE TECHNOLOGY DE- VELOPMENT AND TRANSFER PROGRAM. (a) TECHNICAL GUIDES AND BOOKS.—Section 1628
14 15 16 17 18	RESILIENCE INITIATIVE". SEC. 204. SUSTAINABLE AGRICULTURE TECHNOLOGY DE- VELOPMENT AND TRANSFER PROGRAM. (a) TECHNICAL GUIDES AND BOOKS.—Section 1628 of the Food, Agriculture, Conservation, and Trade Act of
141516171819	RESILIENCE INITIATIVE". SEC. 204. SUSTAINABLE AGRICULTURE TECHNOLOGY DE- VELOPMENT AND TRANSFER PROGRAM. (a) TECHNICAL GUIDES AND BOOKS.—Section 1628 of the Food, Agriculture, Conservation, and Trade Act of 1990 (7 U.S.C. 5831) is amended—
14151617181920	RESILIENCE INITIATIVE". SEC. 204. SUSTAINABLE AGRICULTURE TECHNOLOGY DE- VELOPMENT AND TRANSFER PROGRAM. (a) TECHNICAL GUIDES AND BOOKS.—Section 1628 of the Food, Agriculture, Conservation, and Trade Act of 1990 (7 U.S.C. 5831) is amended— (1) in subsection (d)—
14 15 16 17 18 19 20 21	RESILIENCE INITIATIVE". SEC. 204. SUSTAINABLE AGRICULTURE TECHNOLOGY DEVELOPMENT AND TRANSFER PROGRAM. (a) TECHNICAL GUIDES AND BOOKS.—Section 1628 of the Food, Agriculture, Conservation, and Trade Act of 1990 (7 U.S.C. 5831) is amended— (1) in subsection (d)— (A) by redesignating paragraphs (3) and

1	"(3) adapting to and mitigating the effects of
2	climate change;"; and
3	(2) in subsection (e), by striking "Soil Con-
4	servation" and inserting "Natural Resources Con-
5	servation".
6	(b) National Training Program.—Section 1629
7	of the Food, Agriculture, Conservation, and Trade Act of
8	1990 (7 U.S.C. 5832) is amended—
9	(1) in subsection (g)—
10	(A) in paragraph (5), by striking "Soil
11	Conservation Service and the Agricultural Sta-
12	bilization and Conservation Service" and insert-
13	ing "Natural Resources Conservation Service
14	and the Farm Service Agency';
15	(B) by redesignating paragraphs (10) and
16	(11) as paragraphs (11) and (12), respectively;
17	and
18	(C) by inserting after paragraph (9) the
19	following;
20	"(10) develop and provide information con-
21	cerning climate change adaptation and mitigation
22	developed under this subtitle and other research and
23	education programs of the Department:":

1	(2) in subsection (h), by striking "Soil Con-
2	servation Service" and inserting "Natural Resources
3	Conservation Service"; and
4	(3) in subsection (i), by striking "2023" and in-
5	serting the following: "2021, and \$30,000,000 for
6	each of fiscal years 2022 through 2030".
7	SEC. 205. LONG-TERM AGROECOLOGICAL NETWORK.
8	Title IV of the Agricultural Research, Extension, and
9	Education Reform Act of 1998 is amended by inserting
10	after section 401 (as added by section 201), the following:
11	"SEC. 402. LONG-TERM AGROECOLOGICAL NETWORK.
12	"(a) In General.—The Secretary, acting through
13	the Administrator of the Agricultural Research Service,
14	shall provide for the establishment and maintenance of a
15	network of research sites operated by the Agricultural Re-
16	search Service for research on the sustainability of agricul-
17	tural systems in the United States, to be known as the
18	'Long-Term Agroecological Research Network' (in this
19	section referred to as the 'Network') with the following
20	goals:
21	"(1) To understand and enhance the sustain-
22	ability of agriculture.
23	"(2) To integrate research projects with com-
24	mon measurements on multiple agroecosystems
25	(such as croplands, rangelands, and pasturelands).

1	"(3) To develop new farming systems, practices,
2	and technologies to address agricultural challenges
3	and opportunities, including challenges and opportu-
4	nities posed by climate change.
5	"(b) Activities Described.—The activities of the
6	Network shall include—
7	"(1) research conducted for a minimum of 30
8	years to develop novel scientific insights at regional
9	and national scales and evaluate the applicability
10	and adaptation to local conditions;
11	"(2) the establishment and maintenance of mul-
12	tiple sites or research centers that capture the diver-
13	sity of agricultural production systems that function
14	as a network; and
15	"(3) the coordination of large-scale data collec-
16	tion related to the sustainability of agricultural sys-
17	tems and the provision of infrastructure to research
18	sites to allow for analyzing and disseminating such
19	data.
20	"(c) Coordination of Research.—The Secretary,
21	shall, in carrying out subsection (a)—
22	"(1) coordinate long-term agroecological re-
23	search to improve understanding within the Depart-
24	ment of Agriculture of how agroecosystems function
25	at the field, regional, and national scales;

1	"(2) designate research sites for inclusion in
2	the Network that are representative of major agri-
3	cultural regions;
4	"(3) ensure that every research site so included
5	conducts experiments with common goals and meth-
6	ods—
7	"(A) to increase agricultural productivity
8	and profitability;
9	"(B) to enhance agricultural resilience and
10	the capacity to mitigate and adapt to climate
11	change;
12	"(C) boost the provision of ecosystem serv-
13	ices from agricultural landscapes; and
14	"(D) improve opportunities for rural com-
15	munities;
16	"(4) make data collected at research sites in-
17	cluded in the Network open to researchers and the
18	public whenever practicable, and integrate data
19	across the network and partner sites; and
20	"(5) provide infrastructure to research sites in-
21	cluded in the Network for data collection, common
22	measurements, and data streams that complement
23	other national networks, such as the National Eco-
24	logical Observatory Network (NEON) and the Long-
25	Term Ecological Research (LTER) network.

1	"(d) AUTHORIZATION OF APPROPRIATIONS.—There
2	are authorized to be appropriated to carry out this section
3	\$50,000,000 for each of fiscal years 2022 through 2030.".
4	SEC. 206. PUBLIC BREED AND CULTIVAR RESEARCH.
5	(a) In General.—The Competitive, Special, and Fa-
6	cilities Research Grant Act (7 U.S.C. 3157) is amended—
7	(1) in subsection (a), by adding at the end the
8	following:
9	"(3) Definitions.—In this section:
10	"(A) CONVENTIONAL BREEDING.—The term
11	'conventional breeding' means the development of
12	new varieties of an organism through controlled
13	mating and selection without the use of transgenic
14	methods, provided that information gained through
15	gene sequencing, genomic, and metabolomics anal-
16	yses can be used to inform mating and selection
17	choices.
18	"(B) Cultivar.—The term 'cultivar' means a
19	variety of a species of plant that has been inten-
20	tionally selected for use in cultivation because of the
21	improved characteristics of that variety of the spe-
22	cies.
23	"(C) PUBLIC BREED AND CULTIVAR.—The
24	term 'public breed and cultivar' means an animal
25	breed or crop cultivar that is the commercially avail-

1	able end product of a publicly funded breeding pro-
2	gram that has been sufficiently tested to dem-
3	onstrate improved characteristics and stable per-
4	formance, and for which the farmers' rights to save
5	and use, and breeders' rights to share and improve
6	are protected."; and
7	(2) by adding at the end the following:
8	"(l) Public Breed and Cultivar Development
9	Funding.—
10	"(1) In general.—Of the amount of grants
11	made under subsections (b) and (c), the Secretary
12	shall ensure that not less than the following amounts
13	are used for competitive research grants that sup-
14	port the development of public breeds and cultivars:
15	"(A) \$50,000,000 for fiscal year 2022;
16	"(B) $60,000,000$ for fiscal year 2023;
17	"(C) \$70,000,000 for fiscal year 2024;
18	"(D) $80,000,000$ for fiscal year 2025 ;
19	"(E) $90,000,000$ for fiscal year 2026; and
20	(F) \$100,000,000 for each of the fiscal
21	years 2027 through 2030.
22	"(2) Priority.—In making grants under para-
23	graph (1), the Secretary shall give priority to high-
24	potential research projects that lead to the release of

1	public breeds and cultivars that assist producers in
2	mitigating and adapting to climate change.
3	"(3) Grants.—The Secretary shall ensure
4	that—
5	"(A) the terms for any competitive grants
6	made under subsection (b) are not less than 5
7	years;
8	"(B) any such term or associated renewal
9	process facilitates the development and commer-
10	cialization of public breeds and cultivars
11	through long-term grants; and
12	"(C) when necessary, Tribal consultation
13	occurs to ensure public breed and cultivar de-
14	velopment does not infringe on Tribes' abilities
15	to maintain culturally sensitive breeds and
16	cultivars.".
17	(b) Public Breed and Cultivar Research Ac-
18	TIVITIES COORDINATOR.—Section 251 of the Department
19	of Agriculture Reorganization Act of 1994 (7 U.S.C.
20	6971) is amended—
21	(1) in subsection (e), by adding at the end the
22	following:
23	"(7) Public breed and cultivar research
24	ACTIVITIES COORDINATOR.—

1	"(A) IN GENERAL.—The Under Secretary
2	shall appoint a coordinator within the Office of
3	the Chief Scientist that reports to the Under
4	Secretary to coordinate research activities at
5	the Department relating to the breeding of pub-
6	lic breeds and cultivars (as defined in para-
7	graph (3) of subsection (a) of the Competitive,
8	Special, and Facilities Research Grant Act (7
9	U.S.C. 3157(a))).
10	"(B) Duties of Coordinator.—The co-
11	ordinator appointed under subparagraph (A)
12	shall—
13	"(i) coordinate animal and plant
14	breeding research activities funded by the
15	Department relating to the development
16	and delivery to producers of climate resil-
17	ient and regionally adapted public breeds
18	and crop cultivars;
19	"(ii)(I) carry out ongoing analysis and
20	track activities for any Federal research
21	funding supporting animal and plant
22	breeding (including any public breeds and
23	cultivars developed with Federal funds);
24	and

1	"(II) ensure that the analysis and ac-
2	tivities are made available to the public not
3	later than 60 days after the last day of
4	each fiscal year;
5	"(iii) develop a strategic plan that es-
6	tablishes targets for public breed and
7	cultivar research investments across the
8	Department to ensure that a diverse range
9	of animal and crop needs are being met in
10	a timely and transparent manner, with a
11	strong focus on delivery of resource-effi-
12	cient, stress-tolerant, regionally adapted
13	animal breeds and crop cultivars that help
14	build agricultural resilience to climate
15	change and support on-farm carbon se-
16	questration and greenhouse gas mitigation,
17	nutritional quality, and other farmer-iden-
18	tified priority agronomic and market traits;
19	"(iv) convene a working group in
20	order to carry out the coordination func-
21	tions described in this subparagraph com-
22	prised of individuals who are responsible
23	for the management, administration, or
24	analysis of public breeding programs with-
25	in the Department from—

1	"(I) the National Institute of
2	Food and Agriculture;
3	"(II) the Agricultural Research
4	Service; and
5	"(III) the Economic Research
6	Service;
7	"(v) in order to maximize delivery of
8	public breeds and cultivars, promote col-
9	laboration among—
10	"(I) the coordinator;
11	"(II) the working group convened
12	under clause (iv);
13	"(III) the advisory council estab-
14	lished under section 1634 of the
15	Food, Agriculture, Conservation, and
16	Trade Act of 1990 (7 U.S.C. 5843);
17	"(IV) genetic resource conserva-
18	tion centers;
19	"(V) land-grant colleges and uni-
20	versities (as defined in section 1404 of
21	the National Agricultural Research,
22	Extension, and Teaching Policy Act of
23	1977 (7 U.S.C. 3103));
24	"(VI) Hispanic-serving institu-
25	tions (as defined in section 502(a) of

1	the Higher Education Act of 1965 (20
2	U.S.C. 1101a(a));
3	"(VII) Native American-serving
4	nontribal institutions (as defined in
5	section 371(c) of the Higher Edu-
6	cation Act of 1965 (20 U.S.C.
7	1067q(e)));
8	"(VIII) Tribal organizations (as
9	defined in section 4 of the Indian
10	Self-Determination and Education As-
11	sistance Act (25 U.S.C. 5304));
12	"(IX) nongovernmental organiza-
13	tions with interest or expertise in pub-
14	lic breeding; and
15	"(X) public and private plant
16	breeders;
17	"(vi) convene regular stakeholder lis-
18	tening sessions to provide input on na-
19	tional and regional priorities for public
20	breed and cultivar research activities
21	across the Department; and
22	"(vii) evaluate and make rec-
23	ommendations to the Under Secretary on
24	training and resource needs to meet future
25	breeding challenges, including the chal-

1	lenges stemming from climate change.";
2	and
3	(2) in subsection $(f)(1)(D)(i)$, by striking "(7
4	U.S.C. 450i(b))" and inserting "(7 U.S.C.
5	3157(b))".
6	(e) Conforming Amendment.—Section
7	296(b)(6)(B) of the Department of Agriculture Reorga-
8	nization Act of 1994 (7 U.S.C. 7014(b)(6)(B)) is amended
9	by striking "Office; and" and inserting "Office (including
10	the public breed and cultivar research activities coordi-
11	nator under subsection (e)(7) of that section); and".
12	(d) Public Breed and Cultivar Develop-
13	MENT.—Subtitle H of the Food, Agriculture, Conserva-
14	tion, and Trade Act of 1990 (7 U.S.C. 5921) is amended
15	by adding at the end the following new section:
16	"SEC. 1681. PUBLIC BREED AND CULTIVAR DEVELOPMENT.
17	"(a) Funding.—The Secretary of Agriculture, in
18	conjunction with the Director of the National Genetic Re-
19	sources Program appointed under section 1633 and acting
20	through the Agricultural Research Service, shall support
21	the development of public breeds and cultivars (as defined
22	in paragraph (3) of subsection (a) of the Competitive, Spe-
23	cial, and Facilities Research Grant Act (7 U.S.C.
24	3157(a))) by Federal researchers.

1	"(b) Priority.—In supporting research under sub-
2	section (a) using funds made available pursuant to sub-
3	section (d), the Secretary shall give priority to high-poten-
4	tial research projects that lead to the release of public
5	breeds and cultivars that assist producers in mitigating
6	and adapting to climate change.
7	"(c) REPORT.—Not later than October 1 of each
8	year, the Secretary shall submit to Congress a report that
9	provides information on all public breed and cultivar re-
10	search funded by the Agricultural Research Service and
11	the National Institute for Food and Agriculture, includ-
12	ing—
13	"(1) a list of public breeds and cultivars devel-
14	oped and released in a commercially available form;
15	"(2) areas of high priority research;
16	"(3) identified research gaps relating to public
17	breed and cultivar development, including newly
18	emerging needs stemming from climate change; and
19	"(4) an assessment of the state of commer-
20	cialization for breeds and cultivars that have been
21	developed.
22	"(d) Funding.—Of the funds made available to the
23	Administrator of the Agricultural Research Service for a
24	fiscal year, not less than \$50,000,000 shall be made avail-
25	able to carry out this section.".

1	SEC. 207. ARS CLIMATE SCIENTIST CAREER DEVELOPMENT
2	PROGRAM.
3	(a) In General.—The Secretary of Agriculture
4	shall, in accordance with section 922 of the Federal Agri-
5	culture Improvement and Reform Act of 1996 (7 U.S.C.
6	2279c), carry out an internship program within the Agri-
7	cultural Research Service for graduate students pursuing
8	a degree or conducting research related to climate change
9	and agriculture.
10	(b) Funding.—Of the funds of the Commodity Cred-
11	it Corporation, the Secretary may use not more than
12	\$10,000,000 for each of fiscal years 2022 through 2030
13	to carry out the program referred to in subsection (a).
14	SEC. 208. AGRICULTURAL CLIMATE ADAPTATION AND MITI-
14 15	SEC. 208. AGRICULTURAL CLIMATE ADAPTATION AND MITI-GATION THROUGH AFRI.
15	GATION THROUGH AFRI.
15 16	GATION THROUGH AFRI. Subsection (b)(2) of the Competitive, Special, and
15 16 17 18	GATION THROUGH AFRI. Subsection (b)(2) of the Competitive, Special, and Facilities Grant Act (7 U.S.C. 3157(b)(2)) is amended by
15 16 17 18 19	GATION THROUGH AFRI. Subsection (b)(2) of the Competitive, Special, and Facilities Grant Act (7 U.S.C. 3157(b)(2)) is amended by adding at the end the following:
15 16 17	Gation through afri. Subsection (b)(2) of the Competitive, Special, and Facilities Grant Act (7 U.S.C. $3157(b)(2)$) is amended by adding at the end the following: "(G) AGRICULTURAL CLIMATE ADAPTA-
15 16 17 18 19 20	GATION THROUGH AFRI. Subsection (b)(2) of the Competitive, Special, and Facilities Grant Act (7 U.S.C. 3157(b)(2)) is amended by adding at the end the following: "(G) AGRICULTURAL CLIMATE ADAPTATION AND MITIGATION.—Agricultural climate
15 16 17 18 19 20 21	GATION THROUGH AFRI. Subsection (b)(2) of the Competitive, Special, and Facilities Grant Act (7 U.S.C. 3157(b)(2)) is amended by adding at the end the following: "(G) AGRICULTURAL CLIMATE ADAPTATION AND MITIGATION.—Agricultural climate adaptation and mitigation, including—
15 16 17 18 19 20 21 22	GATION THROUGH AFRI. Subsection (b)(2) of the Competitive, Special, and Facilities Grant Act (7 U.S.C. 3157(b)(2)) is amended by adding at the end the following: "(G) AGRICULTURAL CLIMATE ADAPTATION AND MITIGATION.—Agricultural climate adaptation and mitigation, including— "(i) strategies for agricultural adapta-
15 16 17 18 19 20 21 22 23	GATION THROUGH AFRI. Subsection (b)(2) of the Competitive, Special, and Facilities Grant Act (7 U.S.C. 3157(b)(2)) is amended by adding at the end the following: "(G) AGRICULTURAL CLIMATE ADAPTATION AND MITIGATION.—Agricultural climate adaptation and mitigation, including— "(i) strategies for agricultural adaptation to climate change, including adapta-

1	"(ii) on-farm mitigation strategies and
2	solutions, including infrastructure, equip-
3	ment, and agricultural ecosystems-based
4	strategies;
5	"(iii) the economic costs, benefits, ef-
6	fectiveness, and viability of producers
7	adopting conservation practices and tech-
8	nologies designed to improve soil health,
9	including carbon sequestration in soil;
10	"(iv) the effectiveness of existing con-
11	servation practices and enhancements to
12	improve soil health, including the effective-
13	ness to sequester carbon in soil;
14	"(v) new technologies to measure and
15	verify environmentally beneficial outcomes
16	of healthy soils practices, including carbon
17	sequestration in soil; and
18	"(vi) links between human health and
19	soil health.".
20	SEC. 209. SPECIALTY CROP RESEARCH INITIATIVE.
21	Section 412 of the Agricultural Research, Extension,
22	and Education Reform Act of 1998 (7 U.S.C. 7632) is
23	amended—
24	(1) in subsection (b)—

1	(A) in the matter preceding paragraph (1),
2	by inserting ", multi-crop production systems,"
3	after "specific crops";
4	(B) in paragraph (4)(E), by striking ";
5	and" at the end and inserting a semicolon;
6	(C) in paragraph (5), by striking the pe-
7	riod at the end and inserting "; and; and
8	(D) by adding at the end the following:
9	"(6) efforts to mitigate and adapt to climate
10	change, including—
11	"(A) on-farm mitigation strategies and so-
12	lutions, including agricultural ecosystems-based
13	strategies;
14	"(B) conservation practices and tech-
15	nologies designed to improve soil health, includ-
16	ing those that sequester carbon in soil; and
17	"(C) breeding research and cultivar devel-
18	opment to help adapt to climate change."; and
19	(2) in subsection (g)(3)(A), by striking "equal
20	to not less than the amount of the grant" and in-
21	serting "in an amount that is equal to not less than
22	25 percent of the funds provided through the
23	grant".

1 SEC. 210. INTEGRATED PEST MANAGEMENT.

- 2 Section 406 of the Agricultural Research, Extension,
- 3 and Education Reform Act of 1998 (7 U.S.C. 7626) is
- 4 amended—
- 5 (1) by redesignating subsections (d), (e), and
- 6 (f) as subsections (f), (g), and (h), respectively; and
- 7 (2) by inserting after subsection (c) the fol-
- 8 lowing:
- 9 "(d) Emphasis on Climate Resilience.—The Sec-
- 10 retary shall ensure that grants made under this section
- 11 are, where appropriate, consistent with the development
- 12 of food and agricultural systems that improve climate re-
- 13 silience.
- 14 "(e) Ecologically Based Pest Management.—
- 15 The Secretary shall ensure that grants made under this
- 16 section to support pest management prioritize ecologically
- 17 based approaches that are effective, affordable, and envi-
- 18 ronmentally sound, maintain agricultural productivity and
- 19 healthy communities, and improve climate resilience.".
- 20 SEC. 211. NATIONAL ACADEMY OF SCIENCES STUDY.
- 21 (a) Study.—The Secretary of Agriculture, in con-
- 22 sultation with the Secretary of Health and Human Serv-
- 23 ices, shall enter into an agreement with the National
- 24 Academy of Sciences, under which the National Academy
- 25 agrees to produce an analysis of current scientific findings

1	to determine the links between human health and soil
2	health by—
3	(1) reviewing existing research on the connec-
4	tions between the human microbiome and soil
5	microbiome;
6	(2) identifying linkages between soil manage-
7	ment practices and the nutrient density of foods for
8	human consumption;
9	(3) exploring potential impact of increasing soil
10	organic matter across the agricultural and food
11	value chain;
12	(4) determining how to best leverage healthy
13	soil management practices to maximize benefits and
14	minimize adverse impacts on human health; and
15	(5) highlighting areas for future research.
16	(b) Report.—The agreement under subsection (a)
17	shall include a requirement that the National Academy of
18	Sciences, not later than 2 years after the date of the enact-
19	ment of this Act, submit to the Committee on Agriculture
20	of the House of Representatives and the Committee on
21	Agriculture, Nutrition, and Forestry of the Senate a re-
22	port on the results of the study conducted pursuant to
23	subsection (a).

1	SEC. 212. APPROPRIATE TECHNOLOGY TRANSFER TO
2	RURAL AREAS.
3	Section 310B(i)(2) of the Consolidated Farm and
4	Rural Development Act (7 U.S.C. 1932(i)(2)) is amend-
5	ed—
6	(1) in subparagraph (C), by striking "and" at
7	the end; and
8	(2) by redesignating subparagraph (D) as sub-
9	paragraph (E) and inserting after subparagraph (C)
10	the following:
11	"(D) increase resilience by adapting to and
12	mitigating the effects of climate change; and".
13	TITLE III—SOIL HEALTH
14	SEC. 301. CROP INSURANCE.
15	(a) Voluntary Good Farming Practices.—Sec-
16	tion 508(a)(3) of the Federal Crop Insurance Act (7
17	U.S.C. 1508(a)(3)) is amended—
18	(1) in subparagraph (A)(iii), by striking "prac-
19	tices" the first place it appears and all that follows
20	through the period at the end and inserting "prac-
21	tices.";
22	(2) by redesignating subparagraphs (B) and
23	(C) as subparagraphs (C) and (D), respectively; and
24	(3) by inserting after subparagraph (A) the fol-
25	lowing:

1	"(B) GOOD FARMING PRACTICES.—For
2	purposes of subparagraph (A)(iii), good farming
3	practices include the following:
4	"(i) Scientifically sound, sustainable,
5	and organic farming practices, as deter-
6	mined by the Secretary.
7	"(ii) Conservation farming practices
8	that are approved by—
9	"(I) the Natural Resources Con-
10	servation Service; or
11	"(II) an agricultural expert, as
12	determined by the Secretary.".
13	(b) Risk-Reduction-Based Discounts.—Section
14	508(d) of the Federal Crop Insurance Act (7 U.S.C.
15	1508(d)) is amended—
16	(1) by redesignating paragraph (4) as para-
17	graph (5); and
18	(2) by inserting after paragraph (3) the fol-
19	lowing:
20	"(4) Risk-reduction-based discount.—
21	"(A) In General.—Effective beginning
22	with the 2022 reinsurance year, the Corpora-
23	tion may provide a risk-reduction-based pre-
24	mium discount for a producer of an agricultural

1	commodity who uses risk-reduction farming
2	practices, as determined by the Corporation.
3	"(B) RISK-REDUCTION FARMING PRAC-
4	TICES.— For purposes of subparagraph (A),
5	risk-reduction farming practices may include
6	the following:
7	"(i) The use of cover crops.
8	"(ii) Resource-conserving crop rota-
9	tions.
10	"(iii) Management-intensive rotational
11	grazing.
12	"(iv) Composting.
13	"(v) Other risk-reducing and soil
14	health promoting farming practices as de-
15	termined by the Corporation.".
16	(c) Crop Production on Native Sod Applica-
17	BILITY.—
18	(1) Amendment.—Section 508(o) of the Fed-
19	eral Crop Insurance Act (7 U.S.C. 1508(o)) is
20	amended by striking paragraph (3).
21	(2) Effective date.—The amendment made
22	by paragraph (1) shall take effect on the first day
23	of the first reinsurance year beginning at least 1
24	year after the date of the enactment of this Act.

1	SEC. 302. ENVIRONMENTAL QUALITY INCENTIVES PRO-
2	GRAM.
3	(a) Purposes.—Section 1240 of the Food Security
4	Act of 1985 (16 U.S.C. 3839aa) is amended—
5	(1) in the matter preceding paragraph (1), by
6	striking "and environmental quality" and inserting
7	"environmental quality, and climate change adapta-
8	tion and mitigation";
9	(2) in paragraph (1)—
10	(A) in subparagraph (B), by striking ";
11	and" and inserting a semicolon;
12	(B) in subparagraph (C), by striking the
13	semicolon at the end and inserting "; and; and
14	(C) by adding at the end the following:
15	"(D) greenhouse gas emissions reduction
16	and carbon sequestration;";
17	(3) in paragraph (3)(C), by inserting "reducing
18	greenhouse gas emissions and" before "conserving
19	energy"; and
20	(4) in paragraph (4), by inserting "climate
21	change and" before "increasing weather volatility".
22	(b) Definitions.—Section 1240A(6)(B) of the Food
23	Security Act of 1985 (16 U.S.C. 3839aa–1(6)(B)) is
24	amended—
25	(1) in clause (v), by striking "; and" and insert-
26	ing a semicolon;

1	(2) by redesignating clause (vi) as clause (vii);
2	and
3	(3) by inserting after clause (v) the following:
4	"(vi) greenhouse gas emissions reduc-
5	tion planning; and".
6	(c) Establishment and Administration of En-
7	VIRONMENTAL QUALITY INCENTIVES PROGRAM.—
8	(1) Establishment.—Section 1240B(a) of the
9	Food Security Act of 1985 (16 U.S.C. 3839aa-2(a))
10	is amended by striking "2023" and inserting
11	"2030".
12	(2) Payments.—Section 1240B(d)(7)(A) of the
13	Food Security Act of 1985 (16 U.S.C. 3839aa-
14	2(d)(7)(A)) is amended—
15	(A) in clause (iii), by striking "; or" and
16	inserting a semicolon;
17	(B) in clause (iv), by striking the period at
18	the end and inserting "; or"; and
19	(C) by adding at the end the following:
20	"(v) increases carbon sequestration or
21	reduces greenhouse gas emissions.".
22	(3) Allocation of Funding.—Section
23	1240B(f) of the Food Security Act of 1985 (16
24	U.S.C. 3839aa–2(f)) is amended—

1	(A) by striking "2023" each place it ap-
2	pears and inserting "2030"; and
3	(B) in paragraph (1), by striking "includ-
4	ing grazing management" and inserting "of
5	which not less than two thirds shall be targeted
6	at practices relating to grazing management".
7	(4) Payments for conservation practices
8	RELATED TO ORGANIC PRODUCTION.—Section
9	1240B(i) of the Food Security Act of 1985 (16
10	U.S.C. 3839aa-2(i)) is amended by striking para-
11	graph (3) and redesignating paragraphs (4) and (5)
12	as paragraphs (3) and (4), respectively.
13	(5) Conservation incentive contracts.—
14	Section 1240B(j) of the Food Security Act of 1985
15	(16 U.S.C. 3839aa-2(j)) is amended—
16	(A) in paragraph (1), by adding at the end
17	the following:
18	"(C) CLIMATE CHANGE ADAPTATION AND
19	MITIGATION.—For the purposes of this sub-
20	section, priority resource concerns include cli-
21	mate change adaptation and mitigation.";
22	(B) in paragraph (2)(A)(ii)—
23	(i) in subclause (I), by striking "or";
24	(ii) in subclause (II), by striking the
25	period at the end and inserting "; or"; and

1	(iii) by adding at the end the fol-
2	lowing:
3	"(III) funding, through annual
4	payments, for a suite of incentive
5	practices that are appropriate for the
6	region and land use and that best en-
7	hance soil health and carbon seques-
8	tration and reduce greenhouse gas
9	emissions, as determined by the Sec-
10	retary."; and
11	(C) by amending paragraph (2)(B) to read
12	as follows:
13	"(B) TERM.—
14	"(i) In general.—A contract under
15	this subsection shall have a term of not
16	less than 5, and not more than 10, years.
17	"(ii) Graduation option.—The Sec-
18	retary may reduce the term for a contract
19	under this subsection if the producer en-
20	ters into a conservation stewardship con-
21	tract under section 1240K with respect to
22	the eligible land that is subject to the con-
23	tract under this subsection.".
24	(d) Environmental Quality Incentives Plan.—
25	Section 1240E(a)(3) of the Food Security Act of 1985 (16

- 1 U.S.C. 3839aa-5(a)(3)) is amended by inserting ", and
- 2 a greenhouse gas emissions reduction plan" after "if appli-
- 3 cable".
- 4 (e) Limitation on Payments.—Section 1240G of
- 5 the Food Security Act of 1985 (16 U.S.C. 3839aa-7) is
- 6 amended by striking "Not including payments made under
- 7 section 1240B(j), a person or legal entity may not receive,
- 8 directly or indirectly, cost-share or incentive payments
- 9 under this subchapter that, in aggregate, exceed \$450,000
- 10 for all contracts entered into under this subchapter by the
- 11 person or legal entity during the period of fiscal years
- 12 2014 through 2018, or the period of fiscal years 2019
- 13 through 2023" and inserting "A person or legal entity (in-
- 14 cluding a joint venture and a general partnership) may
- 15 not receive, directly or indirectly, cost-share or incentive
- 16 payments under this subchapter that, in aggregate, exceed
- 17 \$450,000 for all contracts entered into under this sub-
- 18 chapter by the person or legal entity during any 5-fiscal-
- 19 year period".
- 20 (f) Conservation Innovation Grants.—
- 21 (1) AIR QUALITY CONCERNS FROM AGRICUL-
- 22 TURAL OPERATIONS.—Section 1240H(b) of the
- 23 Food Security Act of 1985 (16 U.S.C. 3839aa–8(b))
- is amended—

1	(A) in paragraph (1), by inserting "and to
2	meet Federal, State, and local goals with re-
3	spect to greenhouse gas emissions reductions"
4	after "local regulatory requirements"; and
5	(B) in paragraph (2), by striking "2019
6	through 2023" and inserting "2019 through
7	2021, and \$50,000,000 for each of fiscal years
8	2022 through 2030".
9	(2) On-farm conservation innovation
10	TRIALS.—Section 1240H(c)(2) of the Food Security
11	Act of 1985 (16 U.S.C. $3839aa-8(c)(2)$) is amended
12	by striking "2019 through 2023" and inserting
13	"2019 through 2021, $$50,000,000$ of the funds
14	made available to carry out this subchapter for each
15	of fiscal years 2022 and 2023 , and $$100,000,000$ of
16	the funds made available to carry out this sub-
17	chapter for each of fiscal years 2024 through 2030".
18	SEC. 303. CONSERVATION STEWARDSHIP PROGRAM.
19	(a) Definitions.—Section 1240I of the Food Secu-
20	rity Act of 1985 (16 U.S.C. 3839aa–21) is amended—
21	(1) in paragraph (2)—
22	(A) in subparagraph (A), by inserting "en-
23	hancements," after "practices,"; and

1	(B) in subparagraph (B)(v), by inserting
2	"and climate change" before the period at the
3	end; and
4	(2) in paragraph (3)(C), by inserting "main-
5	tained, actively" after "implemented,".
6	(b) Conservation Stewardship Program.—Sec-
7	tion 1240J(a) of the Food Security Act of 1985 (16
8	U.S.C. 3839aa–22(a)) is amended—
9	(1) in the matter preceding paragraph (1), by
10	striking "2023" and inserting "2030"; and
11	(2) by striking paragraphs (1) and (2) and in-
12	serting the following:
13	"(1) by maintaining, actively managing, and,
14	where possible, improving upon existing conservation
15	activities; and
16	"(2) by undertaking additional conservation ac-
17	tivities.".
18	(c) Stewardship Contracts.—
19	(1) Submission of contract offers.—Sec-
20	tion 1240K(a)(2)(B) of the Food Security Act of
21	1985 (16 U.S.C. 3839aa–23(a)(2)(B)) is amended
22	by striking "improving, maintaining, and managing"
23	and inserting "maintaining, actively managing, and,
24	where possible, improving".

1	(2) Evaluation of contract offers.—Sec-
2	tion 1240K(b) of the Food Security Act of 1985 (16
3	U.S.C. 3839aa–23(b)) is amended—
4	(A) by amending paragraph (1)(A)(iii) to
5	read as follows:
6	"(iii) other criteria consistent with an
7	equal weighting of the factors described in
8	clauses (i) and (ii), as determined by the
9	Secretary, including criteria the Secretary
10	determines are necessary to ensure that—
11	"(I) the program effectively tar-
12	gets improvements to soil health, in-
13	creases in carbon sequestration, and
14	reductions in greenhouse gas emis-
15	sions; and
16	"(II) other national, State, and
17	local priority resource concerns are ef-
18	fectively addressed."; and
19	(B) by striking paragraph (3).
20	(3) Contract Renewal.—Section 1240K(e)
21	of the Food Security Act of 1985 (16 U.S.C.
22	3839aa–23(e)) is amended to read as follows:
23	"(e) Contract Renewal.—
24	"(1) In general.—The Secretary may provide
25	the producer an opportunity to renew an existing

1	contract in the first half of the fifth year of the con-
2	tract period if the producer—
3	"(A) demonstrates compliance with the
4	terms of the existing contract;
5	"(B) agrees to adopt and continue to inte-
6	grate new or improved conservation activities
7	across the entire agricultural operation, dem-
8	onstrating continued improvement during the
9	additional 5-year period as determined by the
10	Secretary; and
11	"(C) agrees, by the end of the contract pe-
12	riod, to meet the stewardship threshold of at
13	least 2 additional priority resource concerns on
14	the agricultural operation, if applicable.
15	"(2) Ranking and Payments.—In deter-
16	mining whether to accept an application for contract
17	renewal under this subsection, and when calculating
18	payments for such renewal contracts, the Secretary
19	shall consider the full conservation benefits across
20	the entire agricultural operation, including—
21	"(A) the number of priority resource con-
22	cerns with respect to which the producer is ex-
23	pected to meet or exceed the stewardship
24	threshold by the end of the contract period; and

1	"(B) the active management and mainte-
2	nance of ongoing conservation activities, includ-
3	ing—
4	"(i) the conservation activities adopt-
5	ed during a prior contract period; and
6	"(ii) the new or improved conservation
7	activities to be adopted if a contract is re-
8	newed.".
9	(d) Duties of the Secretary.—
10	(1) CLIMATE CHANGE ADAPTATION AND MITI-
11	GATION.—Section 1240L(a)(2) of the Food Security
12	Act of 1985 (16 U.S.C. 3839aa-24(a)(2)) is amend-
13	ed by inserting "(which may include climate change
14	adaptation and mitigation)" after "priority resource
15	concerns".
16	(2) Conservation Stewardship Pay-
17	MENTS.—Section 1240L(c) of the Food Security Act
18	of 1985 (16 U.S.C. 3839aa–24(c)) is amended—
19	(A) in paragraph (1)—
20	(i) in subparagraph (A), by inserting
21	"on one or more types of eligible land cov-
22	ered by the contract" after "activities";
23	and
24	(ii) in subparagraph (B), by striking
25	"improving, maintaining, and managing"

1	and inserting "maintaining, actively man-
2	aging, and improving";
3	(B) in paragraph (2)—
4	(i) by amending subparagraph (B) to
5	read as follows:
6	"(B) Income forgone by the producer, in-
7	cluding amounts that reflect—
8	"(i) increased economic risk; and
9	"(ii) loss in revenue due to production
10	changes, anticipated reductions in yield,
11	transitioning to an organic system, re-
12	source-conserving cropping system, or pe-
13	rennial production system, or acreage con-
14	verted to conservation uses.";
15	(ii) in subparagraph (E), by inserting
16	", actively managed, and, where applicable,
17	improved" after "maintained"; and
18	(C) by adding at the end the following:
19	"(6) Payment for conservation activities
20	RELATED TO ORGANIC PRODUCTION SYSTEMS.—
21	"(A) IN GENERAL.—The Secretary shall
22	provide payments under this subsection for con-
23	servation activities related to—
24	"(i) organic production; and

1	"(ii) transitioning to organic produc-
2	tion.
3	"(B) Conservation activities.—Such
4	conservation activities may include both gen-
5	erally available and specifically tailored con-
6	servation activities, and both individual con-
7	servation activities and bundles of conservation
8	activities.
9	"(7) MINIMUM PAYMENT.—The amount of an
10	annual payment under the program shall be not less
11	than \$2,000.".
12	(3) Supplemental payments.—Section
13	1240L(d) of the Food Security Act of 1985 (16
14	U.S.C. 3839aa-24(d)) is amended—
15	(A) in the subsection heading, by inserting
16	", Perennial Production Systems, and"
17	after "Rotations";
18	(B) in paragraph (1), by adding at the end
19	the following:
20	"(D) PERENNIAL PRODUCTION SYSTEM.—
21	The term 'perennial production system'
22	means—
23	"(i) the use of cropland for agro-
24	forestry, including alley cropping,

1	silvopasture, and related production prac-
2	tices, as determined by the Secretary;
3	"(ii) the use of woodland for agro-
4	forestry, including forest farming, multi-
5	story cropping, and related production
6	practices, as determined by the Secretary;
7	and
8	"(iii) the use of cropland for perennial
9	forages or perennial grain crops.";
10	(C) in paragraph (2)—
11	(i) in subparagraph (A), by striking
12	"or";
13	(ii) in subparagraph (B), by striking
14	the period and inserting "; or"; and
15	(iii) by adding at the end the fol-
16	lowing:
17	"(C) a perennial production system."; and
18	(D) in paragraph (3), by striking "or ad-
19	vanced grazing management" and inserting
20	"advanced grazing management, or a perennial
21	production system".
22	(4) Payment for comprehensive conserva-
23	TION PLAN.—Section 1240L(e)(1) of the Food Secu-
24	rity Act of 1985 (16 U.S.C. 3839aa–24(e)(1)) is
25	amended to read as follows:

1	"(1) Definition of comprehensive con-
2	SERVATION PLAN.—In this subsection, the term
3	'comprehensive conservation plan' means a conserva-
4	tion plan that—
5	"(A) meets or exceeds the stewardship
6	threshold for each priority resource concern
7	identified by the Secretary under subsection
8	(a)(2); and
9	"(B) with respect to an organic production
10	system—
11	"(i) is integrated with an organic sys-
12	tem plan approved under the national or-
13	ganic program established under the Or-
14	ganic Foods Production Act of 1990 (7
15	U.S.C. 6501 et seq.); or
16	"(ii) allows a producer to transition to
17	organic production systems and pursue
18	certification under the Organic Foods Pro-
19	duction Act of 1990 (7 U.S.C. 6501 et
20	seq.).".
21	(5) Payment limitations.—Section 1240L(f)
22	of the Food Security Act of 1985 (16 U.S.C.
23	3839aa-24(f)) is amended—

1	(A) by striking "fiscal years 2019 through
2	2023" and inserting "any consecutive 5-year
3	period"; and
4	(B) by inserting "(including joint ventures
5	and general partnerships)" before the period at
6	the end.
7	(6) Specialty crop and organic pro-
8	DUCERS.—Section 1240L(g) of the Food Security
9	Act of 1985 (16 U.S.C. 3839aa-24(g)) is amended
10	by inserting ", and producers transitioning to or-
11	ganic production systems," after "organic pro-
12	ducers".
13	(7) Soil Health.—Section 1240L(k) of the
14	Food Security Act of 1985 (16 U.S.C. 3839aa-
15	24(k)) is amended by striking the period at the end
16	and inserting ", including by—
17	"(1) conducting outreach to encourage the use
18	of contracts to improve soil health and sequester
19	carbon in the soil; and
20	"(2) offering payments for soil testing to pro-
21	vide producers and the Secretary with information
22	on the soil health and carbon sequestration impacts
23	of conservation activities.".
24	(i) On-Farm Conservation Stewardship Innova-
25	TION GRANTS.—Subchapter B of chapter 4 of subtitle D

- 1 of subtitle D of title XII of the Food Security Act of 1985
- 2 (16 U.S.C. 3839aa–21 et seq.) is amended by adding at
- 3 the end the following:
- 4 "SEC. 1240L-2. ON-FARM CONSERVATION STEWARDSHIP IN-
- 5 NOVATION GRANTS.
- 6 "(a) Definition.—In this section, the term 'agricul-
- 7 tural professional' means university researchers and edu-
- 8 cators, including extension agents and specialists, Federal
- 9 agency field staff, agricultural consultants, State and local
- 10 agency staff, tribal agency staff, Federally-Recognized
- 11 Tribes Extension Program agents, and nonprofit organiza-
- 12 tion staff assisting farmers and ranchers at the local level.
- 13 "(b) Grants.—Out of the funds made available to
- 14 carry out this chapter, the Secretary may pay the cost of
- 15 competitive grants that are intended to stimulate innova-
- 16 tive approaches on farms and ranches to leverage Federal
- 17 investment in conservation stewardship, in conjunction
- 18 with agricultural production or forest resource manage-
- 19 ment, through the program.
- 20 "(c) Participants.—The Secretary shall carry out
- 21 on-farm conservation innovation projects on eligible land
- 22 of program participants—
- "(1) directly with producers participating in the
- program; or

1	"(2) through partnerships between agricultural
2	professionals and small groups of program partici-
3	pants.
4	"(d) USE.—The Secretary may provide grants di-
5	rectly or through partnerships under this section to agri-
6	cultural operations enrolled in the program, or groups of
7	such operations, on a competitive basis, to carry out
8	projects that—
9	"(1) facilitate on-farm research and demonstra-
10	tion or pilot testing of new technologies or innovative
11	conservation systems and practices that aim to re-
12	duce greenhouse gas emissions and decarbonize agri-
13	culture;
14	"(2) facilitate on-farm research and demonstra-
15	tion or pilot testing of practices and systems with
16	proven high impact for greenhouse gas emissions re-
17	duction and decarbonization with low national or re-
18	gional adoption rates; or
19	"(3) help prepare program participants for par-
20	ticipation in environmental services markets that
21	have as a primary goal greenhouse gas emissions re-
22	duction or decarbonization of agriculture.
23	"(e) Incentive Payments.—
24	"(1) AGREEMENTS.—In carrying out this sec-
25	tion, the Secretary shall enter into agreements with

1	producers (either directly or through governmental
2	or non-governmental organizations involved in a
3	partnership) on whose land an on-farm conservation
4	innovation trial is being carried out to provide pay-
5	ments to the producers to assist with adopting and
6	evaluating new or innovative conservation ap-
7	proaches to achieve conservation benefits. Payments
8	shall reflect the direct costs of the research and
9	demonstration and compensation for foregone in-
10	come, as appropriate to address the increased eco-
11	nomic risk or lower economic return potentially asso-
12	ciated with the innovative conservation approach.
13	"(2) Adjusted gross income require-
14	MENTS.—
15	"(A) In general.—Adjusted gross income
16	requirements under section $1001D(b)(1)$
17	shall—
18	"(i) apply to producers receiving pay-
19	ments under this subsection; and
20	"(ii) be enforced by the Secretary.
21	"(B) Reporting.—A governmental or
22	non-governmental organization participating in
23	an on-farm conservation stewardship innovation
24	partnership project under this subsection shall
25	report annually to the Secretary on the amount

1	of payments made to individual farm operations
2	under this subsection.
3	"(3) Research, technical assistance, and
4	ADMINISTRATIVE EXPENSES.—The Secretary may
5	provide partnerships under this section with up to
6	\$50,000 per project for research, technical assist-
7	ance, and administrative expenses.
8	"(4) Length of agreements.—An agreement
9	entered into under paragraph (1) shall be for a pe-
10	riod determined by the Secretary that is—
11	"(A) not less than 2 years; and
12	"(B) if appropriate, more than 2 years, in-
13	cluding if such a period is appropriate to sup-
14	port—
15	"(i) adaptive management over mul-
16	tiple crop years; and
17	"(ii) adequate data collection and
18	analysis by a producer or partnership to
19	report the natural resource and agricul-
20	tural production benefits of the new or in-
21	novative conservation approaches to the
22	Secretary.

1	"SEC. 1240L-3. CONTRIBUTIONS AND CONTRIBUTION
2	AGREEMENTS.
3	"(a) Contributions.—In carrying out the program,
4	the Secretary may accept financial or other contributions
5	from individuals and public and private entities, if the Sec-
6	retary determines that the contributions will further the
7	purposes of the program. Such contributions may include
8	support for conservation activities to sequester carbon, re-
9	duce greenhouse gas emissions, and achieve other related
10	environmental benefits, under such terms and conditions
11	as the Secretary may require.
12	"(b) Contribution Agreements.—
13	"(1) IN GENERAL.—The Secretary may accept
14	a contribution to the program under subsection (a)
15	from an individual or a public or private entity.
16	"(2) Considerations.—In determining wheth-
17	er to accept a contribution under this subsection, the
18	Secretary shall consider whether the contribution
19	would target one or more of the following:
20	"(A) Resource-conserving crop rotations,
21	advanced grazing management, or perennial
22	production systems.
23	"(B) Cover crop activities.
24	"(C) Organic production systems.

1	"(D) Beginning and socially disadvantaged
2	farmers and ranchers, or other underserved
3	producers.
4	"(3) AGREEMENTS.—Any contribution under
5	this subsection shall be made subject to an agree-
6	ment between the contributing individual or entity
7	and the Secretary, under such terms and conditions
8	as the Secretary may require.".
9	SEC. 304. STATE ASSISTANCE FOR SOIL HEALTH.
10	Chapter 5 of subtitle D of title XII of the Food Secu-
11	rity Act of 1985 (16 U.S.C. 3839bb et seq.) is amended
12	by adding at the end the following:
13	"SEC. 1240S. STATE ASSISTANCE FOR SOIL HEALTH.
14	"(a) Availability and Purpose of Grants.—
15	Using funds made available under subsection (k), the Sec-
16	retary shall make grants to States or tribal governments
17	for each of fiscal years 2022 through 2030 to be used by
18	State departments of agriculture or appropriate tribal au-
19	thorities to develop and implement plans to improve soil
20	health on agricultural lands.
21	"(b) Application.—
22	"(1) In general.—A State department of ag-
23	riculture or tribal government requesting a grant
24	under this section may prepare and submit, for ap-
25	proval by the Secretary, an application at such time,

1	in such a manner, and containing such information
2	as the Secretary shall require, including an assur-
3	ance that grant funds received under this section
4	shall supplement the expenditure of State or tribal
5	funds in support of soil health, rather than replace
6	State or tribal funds.
7	"(2) USE OF FUNDS.—A State or tribal govern-
8	ment may request funds under this section to—
9	"(A) develop or modify a State or tribal
10	soil health plan; or
11	"(B) implement a State or tribal soil
12	health plan approved by the Secretary under
13	this section, including through—
14	"(i) technical assistance;
15	"(ii) financial assistance;
16	"(iii) on-farm research and dem-
17	onstration;
18	"(iv) education, outreach, and train-
19	ing;
20	"(v) monitoring and evaluation; or
21	"(vi) such other activities as the Sec-
22	retary deems appropriate.
23	"(3) Plan components.—Prior to approving a
24	State or tribal soil health plan, the Secretary shall
25	ensure that the plan, at a minimum—

1	"(A) is broadly consistent with the soil
2	health principles of the Natural Resources Con-
3	servation Service; and
4	"(B) identifies effective strategies for in-
5	creasing adoption of regionally appropriate soil
6	health practices and systems on privately owned
7	agricultural land under the jurisdiction of the
8	applicable State or tribal government.
9	"(4) Eligibility.—A State or tribal govern-
10	ment may—
11	"(A) apply for a grant under paragraph
12	(2)(A) at any time; and
13	"(B) apply for a grant under paragraph
14	(2)(B) upon approval by the Secretary of its
15	soil health plan.
16	"(c) Tribal Option.—At the sole discretion of a
17	tribal government, an Indian tribe or tribal organization
18	shall have the option of being incorporated into a State
19	application rather than submitting its own application.
20	"(d) Grant Amount.—
21	"(1) Maximum.—The maximum grant any one
22	State or tribal government may receive under this
23	section for a fiscal year shall be—
24	"(A) for a grant under subsection
25	(b)(2)(A), \$1,000,000.

1	"(B) for a grant under subsection
2	(b) $(2)(B)$, \$5,000,000.
3	"(2) Federal share.—
4	"(A) Grants to states.—The grant
5	amount to a State shall not exceed 75 percent
6	of the cost of developing or modifying a soil
7	health plan, or 50 percent of the cost of imple-
8	menting the soil health plan.
9	"(B) Grants to tribes.—The grant
10	amount to a tribal government shall not exceed
11	90 percent of the cost of developing or modi-
12	fying a soil health plan, or 75 percent of the
13	cost of implementing the soil health plan.
14	"(3) Non-federal funds.—A grant made
15	under this section shall be made on the condition
16	that the non-Federal share of expenditures under
17	paragraph (2) be provided by non-Federal sources.
18	"(e) Grant Term.—A grant under this section shall
19	be for one year and may be renewed annually, at the dis-
20	cretion of the Secretary.
21	"(f) Priority.—The Secretary shall give priority to
22	States or tribal governments with a climate action plan
23	that includes soil health, as determined by the Secretary.
24	"(\(\rho\)) Performance Measures and Evaluation.—

1	"(1) Performance measures.—Each applica-
2	tion under subsection (b) shall include performance
3	measures to be used to evaluate the results of the
4	assistance received under this section.
5	"(2) Review.—The State department of agri-
6	culture or the tribal authority shall submit a review
7	and evaluation of its progress using the performance
8	measures under paragraph (1) to the Secretary at
9	such intervals as the Secretary shall establish.
10	"(h) Effect of Noncompliance.—If the Sec-
11	retary, after reasonable notice to a State or tribal govern-
12	ment, finds that there has been a failure by the State or
13	tribal government to comply with the terms of a grant
14	made under this section, the Secretary may disqualify, for
15	one or more years, the State or tribal government from
16	receipt of future grants under this section.
17	"(i) Audit Requirement.—For each year that a
18	State or tribal government receives a grant under this sec-
19	tion, the State or tribal government shall conduct an audit
20	of the expenditures of grant funds by the State or tribal
21	government and shall submit a copy of the audit to the
22	Secretary within 30 days of its completion.
23	"(j) Administration.—
24	"(1) Department.—The Secretary may not
25	use more than 3 percent of the funds made available

1	to carry out this section for a fiscal year for admin-
2	istrative expenses.
3	"(2) States or tribal
4	government receiving a grant under this section may
5	not use more than 7 percent of the funds received
6	under the grant for a fiscal year for administrative
7	expenses.
8	"(k) Funding.—Of the funds of the Commodity
9	Credit Corporation, the Secretary shall make grants under
10	this section using—
11	"(1) $$60,000,000$ for fiscal years 2022 through
12	2023;
13	(2) \$80,000,000 for fiscal years 2024 through
14	2026; and
15	" (3) \$100,000,000 for fiscal year 2027 and
16	each fiscal year thereafter.".
17	SEC. 305. FUNDING AND ADMINISTRATION.
18	(a) Commodity Credit Corporation.—
19	(1) Annual funding.—Section 1241(a) of the
20	Food Security Act of 1985 (16 U.S.C. 3841(a)) is
21	amended—
22	(A) in the matter preceding paragraph (1),
23	by striking "For each of fiscal years 2014
24	through 2023, the Secretary" and inserting
25	"The Secretary";

1	(B) in paragraph (1)—
2	(i) in subparagraph (A), by inserting
3	", and \$17,000,000 for the period of fiscal
4	years 2024 through 2030," after "2023";
5	and
6	(ii) in subparagraph (B), by inserting
7	"and \$70,000,000 for the period of fiscal
8	years 2024 through 2030, including not
9	more than \$5,000,000 to provide outreach
10	and technical assistance," after "technical
11	assistance,";
12	(C) in paragraph (2)—
13	(i) in subparagraph (E), by striking ";
14	and" and inserting a semicolon;
15	(ii) in subparagraph (F), by striking
16	"2023." and inserting "2022; and"; and
17	(iii) by adding at the end the fol-
18	lowing:
19	"(G) \$700,000,000 for each of fiscal years
20	2023 through 2030."; and
21	(D) in paragraph (3)—
22	(i) in subparagraph (A)—
23	(I) in clause (iv), by striking ";
24	and" and inserting a semicolon; and

1	(II) by adding at the end the fol-
2	lowing:
3	"(vi) \$3,000,000,000 for fiscal years
4	2024 through 2030; and"; and
5	(ii) in subparagraph (B)—
6	(I) in clause (iii), by striking
7	"\$750,000,000" and inserting
8	``\$2,000,000,000`';
9	(II) in clause (iv), by striking
10	"\$800,000,000 for fiscal year 2022;
11	and" and inserting "\$2,500,000,000
12	for fiscal year 2022;";
13	(III) in clause (v), by striking
14	"\$1,000,000,000 for fiscal year
15	2023." and inserting "\$3,000,000,000
16	for fiscal year 2023; and"; and
17	(IV) by adding at the end the fol-
18	lowing:
19	"(vi) \$4,000,000,000 for fiscal years
20	2024 through 2030.".
21	(2) Availability of funds.—Section 1241(b)
22	of the Food Security Act of 1985 (16 U.S.C.
23	3841(b)) is amended by striking "2023" and insert-
24	ing "2030".

1	(3) Technical assistance.—Section 1241(c)
2	of the Food Security Act of 1985 (16 U.S.C.
3	3841(c)) is amended by adding at the end the fol-
4	lowing:
5	"(5) Special initiative.—
6	"(A) In General.—Beginning in fiscal
7	year 2022 and every year thereafter through
8	fiscal year 2030, the Secretary shall use for a
9	special technical assistance initiative to assist
10	producers in mitigating and adapting to climate
11	change, from the Commodity Credit Corpora-
12	tion, an amount equal to not less than 1 per-
13	cent of Commodity Credit Corporation funds
14	made available for a fiscal year for each of the
15	programs specified in subsection (a).
16	"(B) Provision of Technical Assist-
17	ANCE.—The Secretary shall provide technical
18	assistance under this special initiative to pro-
19	ducers—
20	"(i) directly;
21	"(ii) through an agreement with a
22	third-party provider (as defined in section
23	1242), or, at the option of the producer,
24	through a payment, as determined by the
25	Secretary, to the producer for a third-party

1	provider approved under section 1242, if
2	available; or
3	"(iii) through a cooperative agreement
4	or contract with—
5	"(I) a cooperative extension;
6	"(II) a non-governmental organi-
7	zation; or
8	"(III) a State, tribal, or Federal
9	agency.
10	"(C) Underserved producers.—In pro-
11	viding technical assistance under this para-
12	graph, the Secretary shall give priority to pro-
13	ducers who are covered persons (as defined in
14	section 1244(a)(2)).".
15	(4) Assistance to certain farmers or
16	RANCHERS FOR CONSERVATION ACCESS.—Section
17	1241(h) of the Food Security Act of 1985 (16
18	U.S.C. 3841(h)) is amended—
19	(A) in paragraph (1)(B), by striking "to
20	the maximum extent practicable" and all that
21	follows through the period at the end and in-
22	serting "to the maximum extent practicable, 30
23	percent to assist beginning farmers or ranchers
24	and socially disadvantaged farmers or ranch-
25	ers."; and

1	(B) in paragraph (2), by striking "2023"
2	and inserting "2030".
3	(b) Administrative Requirements for Con-
4	SERVATION PROGRAMS.—
5	(1) Incentives for certain farmers and
6	RANCHERS AND INDIAN TRIBES.—Section
7	1244(a)(1) of the Food Security Act of 1985 (16
8	U.S.C. 3844(a)(1)) is amended—
9	(A) in subparagraph (A), by striking ";
10	and" and inserting a semicolon; and
11	(B) by striking subparagraph (B) and in-
12	serting the following:
13	"(B) to establish a new generation of pro-
14	ducers who use the full array of climate-friendly
15	conservation activities that reduce greenhouse
16	gas emissions, increase soil carbon, and improve
17	resilience to weather extremes; and
18	"(C) to enhance other long-term environ-
19	mental goals.".
20	(2) REVIEW AND GUIDANCE FOR PRACTICE
21	COSTS AND PAYMENT RATES.—Section
22	1244(j)(1)(B) of the Food Security Act of 1985 (16
23	U.S.C. 3844(j)(1)(B)) is amended—
24	(A) in clause (ii), by striking "; and and
25	inserting a semicolon;

1	(B) in clause (iii), by striking the period at
2	the end and inserting "; and"; and
3	(C) by adding at the end the following:
4	"(iv) accelerates progress in meeting
5	the goals established under title I of the
6	Agriculture Resilience Act.".
7	(3) ADVANCED GRAZING MANAGEMENT.—Sec-
8	tion 1244 of the Food Security Act of 1985 (16
9	U.S.C. 3844) is amended by adding at the end the
10	following:
11	"(q) Advanced Grazing Management.—
12	"(1) In general.—In carrying out any con-
13	servation program administered by the Secretary,
14	the Secretary shall encourage advanced grazing
15	management, including management-intensive rota-
16	tional grazing, as such terms are defined in section
17	1240L(d).
18	"(2) Reservation of funds.—In each of fis-
19	cal years 2022 through 2030, the Secretary shall use
20	to carry out this subsection not less than two thirds
21	of any funds available for activities related to live-
22	stock production under conservation programs ad-
23	ministered by the Secretary under this title (other
24	than the conservation reserve program established

1	under subchapter B of chapter 1 of subtitle D, ex-
2	cept for acres enrolled under section 1231(d)(2)).".
3	(c) Environmental Services Markets.—Section
4	1245 of the Food Security Act of 1985 (16 U.S.C. 3845)
5	is amended by adding at the end the following:
6	"(f) Soil Health and Greenhouse Gas Federal
7	ADVISORY COMMITTEE.—
8	"(1) Establishment.—Not later than 6
9	months after the date of enactment of this sub-
10	section, the Secretary shall establish an advisory
11	committee, to be known as the Soil Health and
12	Greenhouse Gas Federal Advisory Committee.
13	"(2) Membership.—In carrying out paragraph
14	(1), the Secretary shall appoint members to the ad-
15	visory committee that reflect diversity in gender,
16	age, race, and geography and include—
17	"(A) farmers and ranchers, including those
18	operating small and mid-sized farms;
19	"(B) organizations representing farmers
20	and ranchers, including those representing
21	small and mid-sized farms;
22	"(C) scientists;
23	"(D) environmental nonprofit organiza-
24	tions;

1	"(E) existing private sector carbon and
2	ecosystem services market development initia-
3	tives;
4	"(F) businesses working to reduce green-
5	house gas emissions from agriculture in their
6	supply chains;
7	"(G) relevant Federal agencies;
8	"(H) youth engaged in the agriculture or
9	food sector;
10	"(I) tribal communities; and
11	"(J) State agriculture agencies.
12	"(3) Terms.—
13	"(A) TERM LENGTH.—The term of a
14	member of the advisory committee shall be 2
15	years.
16	"(B) REAPPOINTMENT.—The Secretary
17	may reappoint a member for not more than 2
18	consecutive terms.
19	"(4) Meetings.—The advisory committee shall
20	meet at least 4 times in the first year after it is es-
21	tablished, and at least twice annually thereafter.
22	"(5) Recommendations.—Not later than 12
23	months after the date on which the advisory com-
24	mittee is established, and periodically thereafter, the

1	advisory committee shall submit to the Secretary
2	recommendations on—
3	"(A) the feasibility of establishing reliable
4	outcomes-based measurement systems, as de-
5	scribed in subsection (g);
6	"(B) existing technology that provides reli-
7	able measurement data;
8	"(C) for those parameters for which exist-
9	ing technology does not provide reliable meas-
10	urement data, research and technical needs
11	and, as appropriate, goals and plans for such
12	research;
13	"(D) standards for data collection and dis-
14	semination;
15	"(E) farmer data management and pri-
16	vacy;
17	"(F) greenhouse gas emissions and soil
18	health inventories and databases, as described
19	in subsection (h); and
20	"(G) criteria for soil health and green-
21	house gas emissions reductions payments and
22	environmental markets, as described in sub-
23	section (i).
24	"(g) Measurement System.—

1 "(1) Purpose.—The Secretary shall evaluate 2 existing outcomes-based measurement systems for 3 recordkeeping, modeling, and measurement of farm-4 level greenhouse gas emissions and soil carbon se-5 questration, including measures of soil disturbance, 6 plant diversity, continual living cover, residue man-7 agement, advanced grazing management, and crop-8 livestock integration, to determine which such sys-9 tems can be implemented quickly, improve in accu-10 racy and ease over time, use the best available science and technology, and are cost-effective. 12 "(2) GUIDANCE.—Not later than 18 months 13 after the date of enactment of this subsection, the 14 Secretary shall issue guidance on the outcomes-15 based measurement system evaluated under para-16 graph (1), based on recommendations from the advisory committee under subsection (f), and informa-

17 18 tion from agroecosystem models (including COMET 19 Farm and COMET Farm Planner), remote sensing 20 data and analysis (including the Operational Tillage 21 Information System), soil health demonstration 22 trials carried out under section 1240H(c)(7), exist-23 ing and emerging public and private environmental

services protocols, measurement systems, and bench-

marks, and field-level measurement.

24

1	"(3) Review.—The Secretary, based on rec-
2	ommendations from the advisory committee estab-
3	lished under subsection (f), shall—
4	"(A) establish and maintain such an out-
5	comes-based measurement system when fea-
6	sible;
7	"(B) conduct periodic review of such sys-
8	tem, and any necessary updates; and
9	"(C) establish research and development
10	goals and plans as needed.
11	"(h) Inventory.—
12	"(1) IN GENERAL.—Not later than 18 months
13	after the date of enactment of this subsection, and
14	every 2 years thereafter, the Secretary, in consulta-
15	tion with the advisory committee established under
16	subsection (f) and the Administrator of the Environ-
17	mental Protection Agency, shall conduct a nation-
18	wide soil health and agricultural greenhouse gas
19	emissions inventory that uses the best available
20	science and data to establish expected average per-
21	formance for soil carbon drawdown and storage and
22	greenhouse gas emissions reduction by primary pro-
23	duction type and production region.
24	"(2) Database.—The Secretary shall create an
25	accessible and interoperable database for the infor-

1	mation collected through the inventory conducted
2	under paragraph (1), and shall improve and update
3	such database at least once every two years as new
4	data is collected.
5	"(i) Criteria.—The Secretary, in consultation with
6	the advisory committee established under subsection (f),
7	shall establish criteria for payments, credits, or other
8	forms of incentives to inform policy and markets estab-
9	lished to promote soil carbon sequestration or greenhouse
10	gas emissions reductions. The criteria shall—
11	"(1) have a documented likelihood to lead to
12	long-term net increases in soil carbon sequestration
13	and net reductions in greenhouse gas emissions, ac-
14	cording to the best available science;
15	"(2) be based in part on environmental impact
16	modeling of the changes of shifting from baseline ag-
17	ricultural practices to new or improved agricultural
18	practices; and
19	"(3) be designed to prevent the degradation of
20	other natural resource or environmental conditions.
21	"(j) Demonstration Trials.—
22	"(1) In General.—The Secretary shall peri-
23	odically review the results from soil health dem-
24	onstration trials carried out under section
25	1240H(c)(7), and other similar public and private

1 demonstration trials the Secretary determines appro-2 priate, to inform the activities under subsections (g), 3 (h), and (i). 4 "(2) Recommendations.—In submitting re-5 ports pursuant to section 1240H(c)(7)(C), the Sec-6 retary shall include any recommendations to Congress for changes or additions to the conservation 7 8 programs under this Act the Secretary determines 9 appropriate to accelerate net increases in soil carbon 10 sequestration and other improvements in soil 11 health.". 12 SEC. 306. CARBON TAX CREDIT FEASIBILITY STUDY. 13 (a) STUDY.—The Secretary of the Treasury ("the 14 Secretary"), in coordination with the Secretary of Agri-15 culture, shall conduct a study of the feasibility of developing a credit against tax to incentivize carbon capture 16 on farms and ranches. 17 18 (b) REPORT.—Not later than one year after the date 19 of the enactment of this section, the Secretary shall sub-20 mit to Congress a report that describes the results of the 21 study in subsection (a), including whether or not to pro-22 ceed with a tax credit and, if so, detailed recommendations 23 for— 24 (1) which taxpayers should be eligible for the 25 credit:

1	(2) methods for measuring (if feasible) or esti-
2	mating baseline soil carbon conditions on a farm or
3	ranch;
4	(3) methods for measuring (if feasible) or esti-
5	mating the amount of soil carbon sequestered or
6	abated on a farm or ranch;
7	(4) incentivizing early adoption of carbon cap-
8	ture practices;
9	(5) the number of years a taxpayer should be
10	eligible for the credit;
11	(6) establishing rules for recapture in instances
12	in which carbon capture ceases or carbon is not re-
13	tained in soil;
14	(7) establishing rules for recapture if ownership
15	of land is transferred;
16	(8) setting the dollar value of the tax credit;
17	(9) setting phase outs for tax credit eligibility;
18	(10) establishing certification requirements for
19	carbon capture;
20	(11) establishing rules for attributing the credit
21	to a taxpayer;
22	(12) establishing rules for carrying over unused
23	credits; and
24	(13) such other provisions as the Secretary de-
25	termines necessary.

SEC. 307. CONSERVATION COMPLIANCE. 2 (a) Definitions.— 3 (1) Conservation Plan.—Section 1201(a)(3) 4 of the Food Security Act of 1985 (16 U.S.C. 5 3801(a)(3)) is amended— (A) by striking "highly erodible" each 6 7 place it appears; and (B) in subparagraph (B), by striking "and 8 9 conservation treatment measures" and inserting 10 "crop rotation and cover crop systems, and 11 other relevant conservation treatment meas-12 ures". 13 (2)CONSERVATION SYSTEM.—Section 14 1201(a)(4) of the Food Security Act of 1985 (16 15 U.S.C. 3801(a)(4)) is amended— 16 (A) in subparagraph (A), by striking "; 17 and" and inserting a semicolon; 18 (B) in subparagraph (B)— 19 (i) by striking "or a substantial im-20 provement in soil conditions on a field or 21 group of fields containing highly erodible 22 cropland" and inserting "and a substantial 23 improvement in soil health conditions (in-24 cluding soil carbon levels) on a field or

group of fields containing cropland"; and

1	(ii) by striking the period at the end
2	and inserting a semicolon; and
3	(C) by adding at the end the following:
4	"(C) are designed to achieve, within five
5	years of actively applying a conservation plan,
6	a level of erosion not to exceed twice the soil
7	loss tolerance level; and
8	"(D) are designed to effectively prevent the
9	formation of new, or treat all existing, ephem-
10	eral gullies.".
11	(3) Highly erodible land.—Section
12	1201(a)(11)(A)(ii) of the Food Security Act of 1985
13	(16 U.S.C. 3801(a)(11)(A)(ii)) is amended by strik-
14	ing "excessive average annual rate of erosion in rela-
15	tion to" and inserting "average annual rate of ero-
16	sion exceeding twice".
17	(b) Cropland Conservation.—
18	(1) Program ineligibility.—Section 1211 of
19	the Food Security Act of 1985 (16 U.S.C. 3811) is
20	amended—
21	(A) in subsection (a)—
22	(i) in the matter preceding paragraph
23	(1), by striking "produces an agricultural
24	commodity on a field on which highly erod-
25	ible land is predominant, or designates

1	land on which highly erodible land is pre-
2	dominant to be set aside, diverted, devoted
3	to conservation uses, or otherwise not cul-
4	tivated under a program administered by
5	the Secretary to reduce production of an
6	agricultural commodity, as determined by
7	the Secretary" and inserting "carries out
8	an activity described in subsection (b), as
9	determined by the Secretary,"; and
10	(ii) in paragraph (1)(D), by inserting
11	"cropland or" before "highly erodible
12	land"; and
13	(B) by striking subsection (b) and insert-
14	ing the following:
15	"(b) Activities Described.—Activities described
16	in this subsection are—
17	"(1) the production of an agricultural com-
18	modity on a field on which highly erodible land is
19	predominant;
20	"(2) the designation of land on which highly
21	erodible land cropland is predominant to be set
22	aside, diverted, devoted to conservation uses, or oth-
23	erwise not cultivated under a program administered
24	by the Secretary to reduce production of an agricul-
25	tural commodity; and

1	"(3) the production of an agricultural com-
2	modity without having in place a conservation plan.
3	"(c) Authority of Secretary.—The Secretary
4	shall have, and shall not delegate to any private person
5	or entity, authority to determine whether a person has
6	complied with this subtitle.".
7	(2) Exemptions.—Section 1212 of the Food
8	Security Act of 1985 (16 U.S.C. 3812) is amend-
9	ed —
10	(A) in subsection (a)(3), by striking "only
11	be required to apply a conservation plan estab-
12	lished under this subtitle. The person shall not
13	be required to meet a higher conservation
14	standard than" and inserting "be required to
15	apply a conservation plan established under this
16	subtitle consistent with"; and
17	(B) in subsection $(f)(4)(A)$ —
18	(i) in clause (i), by striking "highly
19	erodible"; and
20	(ii) in clause (ii)(II), by inserting
21	"and soil health" after "erosion control".
22	(3) Conforming amendment.—Subtitle B of
23	title XII of the Food Security Act of 1985 (16
24	U.S.C. 3810 et seq.) is amended in the subtitle

1	heading by striking "Highly Erodible Land"
2	and inserting "Cropland".
3	SEC. 308. AGROFORESTRY CENTERS.
4	Section 1243 of the Food, Agriculture, Conservation,
5	and Trade Act of 1990 (16 U.S.C. 1642 note; Public Law
6	101–624) is amended—
7	(1) by amending the section heading to read as
8	follows: "NATIONAL AND REGIONAL AGRO-
9	FORESTRY CENTERS'';
10	(2) by amending subsection (a) to read as fol-
11	lows:
12	"(a) National and Regional Agroforestry
13	CENTERS.—The Secretary of Agriculture shall establish
14	at the Forestry Sciences Laboratory of the United States
15	Forest Service, in Lincoln, Nebraska, a Semiarid Agro-
16	forestry Research, Development, and Demonstration Cen-
17	ter, and acting through the Chief of the Forest Service
18	and in cooperation with the Natural Resources Conserva-
19	tion Service, shall establish not less than three additional
20	regional agroforestry centers at other locations to be de-
21	termined by the Secretary (referred to in this section as
22	the 'Centers'). The Secretary shall appoint a National Di-
23	rector and Regional Directors to manage and coordinate
24	the program established under subsection (b).";
25	(3) in subsection (b)—

1	(A) in the matter preceding paragraph (1),
2	by striking "Center" and inserting "Centers";
3	(B) in paragraph (1), by striking "on
4	semiarid lands that" and inserting "that build
5	soil health and";
6	(C) in paragraph (3), by striking "from
7	semiarid land'';
8	(D) in paragraph (4)—
9	(i) by striking "in semiarid regions";
10	and
11	(ii) by striking "the Great Plains re-
12	gion" and inserting "particular regions";
13	(E) by amending paragraph (6) to read as
14	follows:
15	"(6) develop improved silvopasture, alley crop-
16	ping, forest farming, multistory cropping, riparian
17	buffer, windbreak and shelterbelt, and other peren-
18	nial production and conservation systems and tech-
19	nologies to improve soil health, carbon sequestration,
20	drought preparedness, soil and water conservation,
21	environmental quality, and biological diversity;";
22	(F) in paragraph (7), by striking "on
23	semiarid lands'';

1	(G) in paragraph (8), by striking "on
2	semiarid lands worldwide" and inserting
3	"worldwide, including on semiarid lands"; and
4	(H) in paragraph (9)—
5	(i) by striking "on semiarid lands";
6	and
7	(ii) by inserting "and climate change"
8	after "pollution";
9	(4) in subsection (c), in the matter preceding
10	paragraph (1), by striking "Center" and inserting
11	"Centers"; and
12	(5) in subsection (d), by striking "through
13	2023" and inserting "through 2021 and
14	\$25,000,000 for each of fiscal years 2022 through
15	2030".
16	TITLE IV—FARMLAND PRESER-
17	VATION AND FARM VIABILITY
18	SEC. 401. LOCAL AGRICULTURE MARKET PROGRAM.
19	Section 210A of the Agricultural Marketing Act of
20	1946 (7 U.S.C. 1627c) is amended—
21	(1) in subsection (a)(12)—
22	(A) by redesignating clauses (iv) and (v) as
23	clauses (vi) and (vii), respectively; and
24	(B) by inserting after clause (iii) the fol-
25	lowing:

1	"(iv) is produced and marketed in a
2	manner that significantly improves soil
3	health and carbon sequestration or signifi-
4	cantly reduces greenhouse gas emissions;
5	"(v) when added to the crop or graz-
6	ing rotation on a farm, will significantly
7	improve soil health and carbon sequestra-
8	tion or significantly reduce greenhouse gas
9	emissions;";
10	(2) in subsection (b)—
11	(A) in paragraph (1)—
12	(i) in subparagraph (B), by striking ";
13	and" and inserting a semicolon;
14	(ii) in subparagraph (C), by striking
15	the period at the end and inserting ", in-
16	cluding value-added agricultural products
17	from crops or animals that when added
18	into crop or grazing rotations on a farm
19	will significantly improve soil health and
20	carbon sequestration or significantly re-
21	duce greenhouse gas emissions; and"; and
22	(iii) by adding at the end the fol-
23	lowing:
24	"(D) markets for agricultural commodities
25	and products produced in a manner that signifi-

1	cantly improve soil health and carbon seques-
2	tration or significantly reduce greenhouse gas
3	emissions.";
4	(B) in paragraph (3)—
5	(i) by striking "and local" and insert-
6	ing ", local"; and
7	(ii) by inserting before the semicolon
8	at the end the following: ", and production
9	and marketing approaches to significantly
10	improve soil health and carbon sequestra-
11	tion or significantly reduce greenhouse gas
12	emissions";
13	(C) in paragraph (5), by striking "and" at
14	the end;
15	(D) by redesignating paragraph (6) as
16	paragraph (7); and
17	(E) by inserting after paragraph (5) the
18	following:
19	"(6) enhances the economic viability of pro-
20	ducers and related agricultural enterprises; and";
21	(3) in subsection (d)—
22	(A) in paragraph (2)—
23	(i) in subparagraph (C)—
24	(I) in clause (i), by striking
25	"and" at the end;

1	(II) in clause (ii), by adding
2	"and" at the end; and
3	(III) by adding at the end the
4	following:
5	"(iii) agricultural commodities and
6	products that are produced and marketed
7	in a manner that significantly improve soil
8	health and carbon sequestration or signifi-
9	cantly reduce greenhouse gas emissions, or
10	that when added to a crop or grazing rota-
11	tion on a farm will significantly improve
12	soil health and carbon sequestration or sig-
13	nificantly reduce greenhouse gas emis-
14	sions;"; and
15	(ii) in subparagraph (F), by striking
16	"and value-added agricultural products in
17	new and existing markets" and inserting
18	the following: ", value-added agricultural
19	products in new and existing markets, and
20	agricultural commodities and products that
21	are produced in a manner that enhances
22	soil health and carbon sequestration or sig-
23	nificantly reduces greenhouse gas emis-
24	sions, or that when added to a crop or
25	grazing rotation on a farm will signifi-

1	cantly improve soil health and carbon se-
2	questration or significantly reduce green-
3	house gas emissions";
4	(B) in paragraph (5)(A), by inserting be-
5	fore the period at the end the following: "and
6	the Chief of the Natural Resources Conserva-
7	tion Service";
8	(4) by redesignating subsections (f), (g), (h),
9	and (i) as subsections (g), (h), (i), and (j), respec-
10	tively;
11	(5) by inserting after subsection (e) the fol-
12	lowing new subsection:
13	"(f) FARM VIABILITY AND LOCAL CLIMATE RESIL-
14	IENCY CENTERS.—
15	"(1) In General.—The Secretary, acting
16	through the Administrator of the Agricultural Mar-
17	keting Service and in coordination with Adminis-
18	trator of the Rural Business-Cooperative Service and
19	the Chief of the Natural Resources Conservation
20	Service, shall provide grants to eligible entities de-
21	scribed in paragraph (2) to serve as farm viability
22	and local climate resiliency centers (referred to in
23	this section as 'centers') to support efforts to en-
24	hance farm viability, and the development, coordina-
25	tion, and expansion of markets for commodities and

1	farm products that significantly improve soil health
2	and carbon sequestration or significantly reduce
3	greenhouse gas emissions.
4	"(2) Eligible entities.—An entity is eligible
5	to receive a grant under this subsection if the entity
6	is—
7	"(A) an agricultural cooperative or other
8	agricultural business entity or a producer net-
9	work or association;
10	"(B) a local, State or Tribal government;
11	"(C) a nonprofit corporation;
12	"(D) a public benefit corporation;
13	"(E) an economic development corporation;
14	"(F) an institution of higher education; or
15	"(G) such other entity as the Secretary
16	may designate.
17	"(3) USE OF FUNDS.—An eligible entity receiv-
18	ing a grant under this subsection may use grant
19	funds to provide to entities described in $(d)(5)(B)$ —
20	"(A) assistance for the development of
21	business plans and feasibility studies;
22	"(B) assistance in developing marketing
23	strategies for—
24	"(i) local products; and

1	"(ii) value-added agriculture products
2	in new and existing markets;
3	"(C) assistance in enterprise development
4	for the processing, aggregation, distribution,
5	and storage of—
6	"(i) local and regional food products
7	that are marketed locally or regionally; and
8	"(ii) value-added agricultural prod-
9	uets;
10	"(D) assistance related to financial and
11	recordkeeping;
12	"(E) assistance related to enterprise and
13	business management;
14	"(F) assistance related to ownership suc-
15	cession planning;
16	"(G) outreach and assistance in the adop-
17	tion of farming practices that enhance soil
18	health and carbon sequestration or significantly
19	reduce greenhouse gas emissions;
20	"(H) outreach regarding assistance avail-
21	able under subsection (d);
22	"(I) outreach regarding assistance avail-
23	able through other programs administers by
24	any other Federal Agency that supports the
25	adoption of farming practices that enhance soil

1	health and carbon sequestration or significantly
2	reduce greenhouse gas emissions; or
3	"(J) at the request of such an eligible enti-
4	ty, provide assistance in applying for a grant
5	under subsection (d), including acting on behalf
6	of such a producer in applying for a grant
7	under subsection (d).
8	"(4) Geographic diversity.—To the max-
9	imum extent practicable, the Secretary shall ensure
10	geographic diversity in selecting entities to receive a
11	grant under this subsection.
12	"(5) Non-federal share.—An entity receiv-
13	ing a grant under this subsection shall provide fund-
14	ing in an amount equal to not less than 25 percent
15	of the total amount of the Federal portion of the
16	grant.
17	"(6) Applications.—
18	"(A) In general.—To be eligible to re-
19	ceive a grant under this subsection an eligible
20	entity shall submit to the Secretary an applica-
21	tion at such time, in such manner, and con-
22	taining such information as the Secretary con-
23	siders necessary to evaluate and select applica-
24	tions.

1	"(B) Competitive process.—The Sec-
2	retary—
3	"(i) shall conduct a competitive proc-
4	ess to select applications submitted under
5	subparagraph (A);
6	"(ii) may assess and rank applications
7	with similar proposals as a group; and
8	"(iii) shall, prior to accepting applica-
9	tions under such subparagraph, make pub-
10	lic the criteria to be used in evaluating
11	such applications.
12	"(7) Priority.—The Secretary may give pri-
13	ority to applications submitted under paragraph (1)
14	that include—
15	"(A) plans to use funds for 3 or more of
16	purposes specified in paragraph (3); or
17	"(B) activities related to improving the uti-
18	lization and expanded adoption of farming prac-
19	tices that enhance soil health and carbon se-
20	questration or significantly reduce greenhouse
21	gas emissions while simultaneously improving
22	farm viability.
23	"(8) Administrative expenses.—An entity
24	receiving a grant under paragraph (1) may use not

1	more than 4 percent of funds received through the
2	grant for administrative expenses.";
3	(6) in subsection (i)(1) (as redesignated by
4	paragraph (4)), in the matter preceding subpara-
5	graph (A), by striking "subsection (i)(3)(E)" and in-
6	serting "subsection (j)(3)(E)"; and
7	(7) in subsection (j) (as redesignated by para-
8	graph (4))—
9	(A) in paragraph (1) by striking "fiscal
10	year 2019" and inserting "each of fiscal years
11	2019 through 2021 and $$150,000,000$ for fiscal
12	year 2022";
13	(B) in paragraph (3)—
14	(i) in subparagraph (A)(i), by striking
15	"35" and inserting "36"; and
16	(ii) by amending subparagraph (B) to
17	read as follows:
18	"(B) Farmers' market and local food
19	PROMOTION GRANTS.—
20	"(i) In GENERAL.—Of the funds
21	made available to carry out this section for
22	a fiscal year, 36 percent shall be used for
23	grants under subsection (d)(6).

1	"(ii) Allocation among subpro-
2	GRAMS.—Of the funds reserved under
3	clause (i) for a fiscal year—
4	"(I) 40 percent shall be made
5	available for farmers market pro-
6	motion program grants; and
7	"(II) 60 percent shall be made
8	available for local food promotion pro-
9	gram grants.";
10	(C) by redesignating subparagraphs (D)
11	and (E) as subparagraphs (E) and (F), respec-
12	tively; and
13	(D) by inserting after subparagraph (C)
14	the following:
15	"(D) FARM VIABILITY AND LOCAL CLI-
16	MATE RESILIENCY.—Of the funds made avail-
17	able to carry out this section for a fiscal year,
18	10 percent shall be used to provide grants
19	under subsection (f).".
20	SEC. 402. ORGANIC CERTIFICATION COST-SHARE PRO-
21	GRAM.
22	(a) Section 10606(b)(2) of the Farm Security and
23	Rural Investment Act of 2002 (7 U.S.C. 6523(b)(2)) is
24	amended by striking "\$750" and inserting "\$1,000".

1	(b) Section 10606(d)(1) of the Farm Security and
2	Rural Investment Act of 2002 (7 U.S.C.6523(d)(1)) is
3	amended by striking "shall make available" and all that
4	follows through the period at the end and inserting "shall
5	use such sums as are necessary to carry out this section.".
6	SEC. 403. EXCLUSION OF GAIN FROM SALE OF CERTAIN
7	FARM PROPERTY AND AGRICULTURAL EASE-
8	MENTS.
9	(a) In General.—Part III of subchapter B of chap-
10	ter 1 of the Internal Revenue Code of 1986 is amended
11	by adding after section 121 the following new sections:
12	"SEC. 121A. EXCLUSION OF GAIN FROM SALE OF QUALIFIED
13	FARM PROPERTY.
14	"(a) Exclusion.—Gross income shall not include
15	gain from the sale or exchange of qualified farm property
16	if such property is sold to or exchanged with a transferee
17	who—
18	"(1) is a qualified farmer, and
19	"(2) meets the certification requirement of sub-
20	section (c).
21	"(b) Limitation.—
22	"(1) In general.—The amount of gain ex-
23	cluded from gross income under subsection (a) with
24	respect to any taxable year shall not exceed the ex-
25	cess, if any of—

1	"(A) $$500,000$ ($$1,000,000$ in the case of
2	a joint return), over
3	"(B) the amount excluded from the gross
4	income of the taxpayer for all prior taxable
5	years.
6	"(2) Special rule for joint returns.—The
7	amount of the exclusion under subsection (a) on a
8	joint return for any taxable year shall be allocated
9	equally between the spouses for purposes of applying
10	the limitation under paragraph (1) for any suc-
11	ceeding taxable year.
12	"(c) Certification Requirement.—A qualified
13	farmer meets the certification requirement of this sub-
14	section if such person signs a written certification stating
15	the following:
16	"(1) Use certification as farm for farm-
17	ING PURPOSES.—The use of such property will be as
18	a farm for farming purposes at all times during the
19	recapture period.
20	"(2) RECAPTURE AGREEMENT.—The transferee
21	has been notified of the recapture liability arising
22	from a disposition or change in the use of such prop-
23	erty at any time during the recapture period.
24	"(d) Treatment of Disposition or Change in
25	Use of Property.—

1	"(1) In General.—If there is a recapture
2	event during the recapture period with respect to
3	any qualified farm property, then the tax imposed
4	under this chapter on the transferee referred to in
5	subsection (a) for the taxable year which includes
6	the first such recapture event shall be increased by
7	the amount excluded from the product of—
8	"(A) the transferor's gross income under
9	subsection (a) with respect to such qualified
10	farm property, multiplied by
11	"(B) the rate of tax in effect under section
12	(1)(h)(1)(D).
13	"(2) Recapture event defined.—For pur-
14	poses of this subsection, the term 'recapture event'
15	means, with respect to any qualified farm prop-
16	erty—
17	"(A) CESSATION OF OPERATION.—The
18	cessation of the operation of such property as
19	a farm for farming purposes at any time in the
20	recapture period.
21	"(B) Failure to materially partici-
22	PATE.—The failure of a qualified farmer to ma-
23	terially participate in the operation of the farm
24	at any time during the recapture period.
25	"(C) Change in Ownership.—

1	"(i) In general.—Except as pro-
2	vided in clause (ii), the disposition of any
3	interest in such property by the transferee
4	referred to in subsection (a) during the re-
5	capture period.
6	"(ii) AGREEMENT TO ASSUME RECAP-
7	TURE LIABILITY.—Clause (i) shall not
8	apply to any farm property if the person
9	acquiring the interest referred to in such
10	clause agrees in writing to assume the re-
11	capture liability of the person disposing of
12	such interest. In the event of such an as-
13	sumption, this subsection shall apply to the
14	person acquiring such interest as though
15	such person were the transferee referred to
16	therein (and this subsection shall be ap-
17	plied as if there had been no change in
18	ownership).
19	"(3) Special rules.—
20	"(A) No credits against tax.—Any in-
21	crease in tax under this subsection shall not be
22	treated as a tax imposed by this chapter for
23	purposes of determining the amount of any
24	credit under subpart A, B, or D of this part.

1	"(B) NO RECAPTURE BY REASON OF
2	HARDSHIP.—The increase in tax under this
3	subsection shall not apply to any disposition of
4	property or cessation of the operation of any
5	property as a farm for farming purposes if such
6	disposition or cessation occurs by reason of any
7	hardship.
8	"(e) Special Rules.—For purposes of this section,
9	rules similar to the rules of subsections (e) and (f) of sec-
10	tion 121 shall apply.
11	"(f) Definitions.—For purposes of this section—
12	"(1) QUALIFIED FARMER.—The term 'qualified
13	farmer' means—
14	"(A) a beginning farmer, socially disadvan-
15	taged farmer, qualified veteran farmer, young
16	farmer, or
17	"(B) any entity if 50 percent or more of
18	the capital and profits of such entity are owned
19	by one or more individuals described in para-
20	graph (A).
21	"(2) Beginning farmer.—The term begin-
22	ning farmer' means an individual that—
23	"(A) has not operated a farm, or
24	"(B) has operated a farm for not more
25	than 10 years.

1	"(3) Socially disadvantaged farmer.—The
2	term 'socially disadvantaged farmer' means an indi-
3	vidual who is a member of one or more of the fol-
4	lowing groups:
5	"(A) American Indians.
6	"(B) Alaska Natives.
7	"(C) Asians.
8	"(D) Blacks or African Americans.
9	"(E) Native Hawaiians or other Pacific Is-
10	landers.
11	"(F) Hispanies.
12	"(G) Women.
13	"(4) QUALIFIED VETERAN FARMER.—The term
14	'qualified veteran farmer' means an individual
15	who—
16	"(A) first obtained status as a veteran (as
17	defined in section 101(2) of title 38 United
18	States Code) in the most recent 10-year period,
19	and
20	"(B) has not operated a farm for more
21	than 10 years.
22	"(5) Young farmer.—The term 'young farm-
23	er' means an individual who has not attained age 46
24	as of the date of the sale or transfer referred to in
25	subsection (a).

1	"(6) Qualified farm property.—
2	"(A) IN GENERAL.—The term 'qualified
3	farm property' means real property located in
4	the United States if—
5	"(i) during the 5-year period ending
6	on the date of the sale or exchange re-
7	ferred to in subsection (a), such property
8	has been used by the taxpayer or a mem-
9	ber of the family of the taxpayer as a farm
10	for farming purposes for periods aggre-
11	gating 3 years or more, and
12	"(ii) there was material participation
13	by the taxpayer or a member of the family
14	of the taxpayer in the operation of the
15	farm during such 3 years.
16	"(B) Special rule for qualified farm
17	PROPERTY HELD BY AN ENTITY.—For purposes
18	of this section, if the taxpayer referred to in
19	paragraph (A) is other than an individual and
20	all of the capital and profits interests of such
21	entity are held by members of a single family,
22	then such members shall be treated as members
23	of the family of such taxpayer.
24	"(7) RECAPTURE PERIOD.—The term 'recap-
25	ture period' means the 10-year period following the

1	sale or exchange of qualified farm property described
2	in subsection (a).
3	"(8) Other definitions.—The terms 'mem-
4	ber of the family', 'farm', 'farming purposes', and
5	'material participation' have the respective meanings
6	given such terms in section 2032A(e).
7	"SEC. 121B. EXCLUSION OF GAIN FROM SALE OF AGRICUL-
8	TURAL CONSERVATION EASEMENT.
9	"(a) Exclusion.—Gross income shall not include
10	gain from the sale or exchange of an agricultural conserva-
11	tion easement.
12	"(b) Limitation.—
13	"(1) In general.—The amount of gain ex-
14	cluded from gross income under subsection (a) with
15	respect to any taxable year shall not exceed the ex-
16	cess, if any of—
17	"(A) $$500,000$ ($$1,000,000$ in the case of
18	a joint return), over
19	"(B) the amount excluded from the gross
20	income of the taxpayer for all prior taxable
21	years.
22	"(2) Special rule for joint returns.—The
23	amount of the exclusion under subsection (a) on a
24	joint return for any taxable year shall be allocated
25	equally between the spouses for purposes of applying

1	the limitation under paragraph (1) for any suc-
2	ceeding taxable year.
3	"(c) AGRICULTURAL CONSERVATION EASEMENT DE-
4	FINED.—The term 'agricultural conservation easement'
5	means an easement or conservation-related restriction on
6	agricultural land (granted in perpetuity) that—
7	"(1) is conveyed for the purpose of protecting
8	natural resources and the agricultural nature of the
9	land, and
10	"(2) permits the landowner the right to con-
11	tinue agricultural production and related uses.
12	"(d) Special Rules.—For purposes of this section,
13	rules similar to the rules of subsections (e) and (f) of sec-
14	tion 121 shall apply.".
15	(b) Conforming Amendment.—The table of sec-
16	tions for part III of subchapter B of chapter 1 of the In-
17	ternal Revenue Code of 1986 is amended by adding after
18	the item relating to section 121 the following new items:
	"121A. Exclusion of gain from sale of qualified farm property. "121B. Exclusion of gain from sale of agricultural conservation easement.".
19	(e) Effective Date.—The amendments made by
20	this section shall apply to any sale or exchange in taxable

21 years ending after December 31, 2021.

1	SEC. 404. FARMLAND PROTECTION POLICY ACT.
2	(a) Findings, Purpose, and Definitions.—Sec-
3	tion 1540 of the Agriculture and Food Act of 1981 (7
4	U.S.C. 4201) is amended—
5	(1) in subsection (a)—
6	(A) by redesignating paragraphs (4)
7	through (7) as paragraphs (5) through (8), re-
8	spectively; and
9	(B) by inserting after paragraph (3) the
10	following:
11	"(4) the Nation's farmland is a vital source of
12	environmental services, such as carbon sequestra-
13	tion;";
14	(2) in subsection (b), by inserting "tribal,"
15	after "State,"; and
16	(3) in subsection (c)—
17	(A) in paragraph (1)—
18	(i) in subparagraph (B), by striking
19	"that is used for" and inserting "that is
20	suitable for"; and
21	(ii) in subparagraph (C), by inserting
22	"and is suitable" after "local importance";
23	(B) in paragraph (4), by striking "; and"
24	and inserting a semicolon;
25	(C) in paragraph (5), by striking the pe-
26	riod at the end and inserting a semicolon; and

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1	(D) by adding at the end the following:
2	"(6) the term 'conversion' means—
3	"(A) the physical conversion of farmland
4	to a nonagricultural use;
5	"(B) the effective conversion of farmland
6	as a consequence of physical conversion of adja-
7	cent farmland, which threatens the continued
8	viability of the land for agricultural use; or
9	"(C) a change in management of federally
10	owned land historically used for agriculture to
11	a non-agricultural use;
12	"(7) the term 'farmland of national signifi-
13	cance' is farmland that is the most suitable for in-
14	tensive crop and food production, as determined by
15	the Secretary, taking into consideration, among
16	other factors, its physical and chemical characteris-
17	ties; and
18	"(8) the term 'permanently protected farmland'
19	means farmland encumbered by a conservation ease-
20	ment held by the Federal government, by a State,
21	tribal, or local unit of government, or by a land con-
22	servation organization, that is perpetual or the max-
23	imum number of years allowed by State law.".

1	(b) Farmland Protection Policy.—Section 1541
2	of the Agriculture and Food Act of 1981 (7 U.S.C. 4202)
3	is amended to read as follows:
4	"SEC. 1541. FARMLAND PROTECTION POLICY.
5	"(a) In General.—It is the policy of the United
6	States that Federal programs—
7	"(1) shall minimize the conversion of farmland
8	to nonagricultural uses; and
9	"(2) shall not convert to nonagricultural uses
10	farmland—
11	"(A) that is permanently protected farm-
12	land;
13	"(B) that has been defined and delineated
14	by the Secretary under subsection (b) as farm-
15	land of national significance; or
16	"(C) that has been defined and delineated
17	by a State as significant to the State or a pri-
18	ority for inclusion in a State farmland protec-
19	tion program and for which the State has sub-
20	mitted a description under subsection (b).
21	"(b) Definition and Delineation of Land.—
22	"(1) National Significance.—The Secretary
23	shall define and delineate farmland of national sig-
24	nificance, and shall convene a group of experts, in-

1	cluding agronomists and soil scientists, to assist in
2	such definition and delineation.
3	"(2) State significance.—Any State wishing
4	to have land recognized under subsection (a)(2)(C)
5	shall provide a definition and delineation of such
6	lands to the Secretary.
7	"(c) Process and Criteria.—
8	"(1) Process and Criteria.—The Secretary
9	shall develop a process, including criteria—
10	"(A) to—
11	"(i) determine the potential conver-
12	sion of farmland as a consequence of any
13	action or activity conducted through a
14	Federal program;
15	"(ii) minimize the conversion of farm-
16	land or, for land identified under sub-
17	section (a)(2), avoid conversion; and
18	"(iii) provide notice regarding such
19	actions to the Secretary; and
20	"(B) that the Secretary shall use to make
21	determinations under subsection (d).
22	"(2) USE REQUIRED.—Each department, agen-
23	cy, independent commission, and other unit of the
24	Federal Government shall use the process and cri-

1	teria developed under paragraph (1) in carrying out
2	a Federal program.
3	"(d) Exemption.—Subsection (a)(2) shall not apply
4	if the Secretary determines, based on the process and cri-
5	teria developed under subsection (c), that converting farm-
6	land to nonagricultural uses cannot be avoided. In in-
7	stances where the Secretary makes such a determination,
8	the Federal program shall minimize the conversion of land
9	described in subsection (a)(2) to the maximum extent
10	practicable.
11	"(e) Information.—The Secretary may make avail-
12	able to States, units of local government, individuals, orga-
13	nizations, and other units of the Federal Government in-
14	formation—
15	"(1) useful in restoring, maintaining, and im-
16	proving the quantity and quality of farmland; and
17	"(2) concerning the location of permanently
18	protected farmland.
19	"(f) Assistance.—The Secretary shall provide as-
20	sistance to departments, agencies, independent commis-
21	sions, and other units of the Federal Government, upon
22	request, in using the process and criteria developed under
23	subsection (e).".

1	SEC. 405. AGRICULTURE CONSERVATION EASEMENT PRO-
2	GRAM.
3	Section 1265B of the Food Security Act of 1985 (16
4	U.S.C. 3865b) is amended—
5	(1) in subsection (b)—
6	(A) in paragraph (4)(C)(iv), by striking
7	"only"; and
8	(B) by adding at the end the following:
9	"(6) Condition of Assistance.—As a condi-
10	tion of receiving cost-share assistance under this sec-
11	tion, the owner of eligible land must agree to have
12	in place a conservation plan that addresses applica-
13	ble resource concerns for the land subject to the
14	easement, including soil health and greenhouse gas
15	emissions reduction, not later than three years fol-
16	lowing the grant of the easement. The requirement
17	of this subparagraph may be satisfied by having in
18	place a conservation plan developed or recognized by
19	the Bureau of Indian Affairs."; and
20	(2) by striking subsection (d) and inserting the
21	following:
22	"(d) Technical Assistance.—The Secretary may
23	provide technical assistance, if requested, to assist in—
24	"(1) compliance with the terms and conditions
25	of easements; and

1	"(2) development and implementation of a con-
2	servation plan required under subsection (b)(6), in-
3	cluding, as applicable, a conservation plan for highly
4	erodible land required under subsection (b)(4)(C)(iv)
5	or a comprehensive conservation plan developed pur-
6	suant to subsection (e)(1).
7	"(e) Financial Assistance.—
8	"(1) In general.—
9	"(A) ENROLLMENT IN CSP.—At the sole
10	option of the owner of the land subject to the
11	easement, the Secretary shall provide for the
12	automatic enrollment of the land subject to the
13	easement in the conservation stewardship pro-
14	gram established by subchapter B of chapter 4
15	of subtitle D, including financial assistance for
16	the development of a comprehensive conserva-
17	tion plan as provided by 1240L(e), if the person
18	or entity farming the land is otherwise eligible
19	for the program, as determined by the Sec-
20	retary.
21	"(B) DETERMINATION OF COMPLIANCE.—
22	Determining compliance with the terms of the
23	conservation stewardship program contract is
24	the sole responsibility of the Secretary.

1	"(C) Funding received by an
2	eligible entity pursuant to this paragraph shall
3	not be considered in the calculation of costs
4	under subsection (b).
5	"(2) TIMING.—The owner of the land subject to
6	the easement shall have up to three years after the
7	grant of the easement to exercise the option to enroll
8	in the conservation stewardship program as provided
9	under subparagraph (A).".
10	TITLE V—PASTURE-BASED
11	LIVESTOCK
12	SEC. 501. ANIMAL RAISING CLAIMS.
13	The Agricultural Marketing Act of 1946 (7 U.S.C.
14	1621 et seq.) is amended by adding at the end the fol-
15	lowing:
16	"Subtitle H—Animal Raising
17	Claims
18	"SEC. 298. REQUIRED VERIFICATION PROCESS FOR ANIMAL
19	RAISING CLAIMS.
20	"(a) In General.—In order to facilitate marketing,
21	truth in labeling, and new economic opportunities for pro-
22	ducers and businesses using animal raising claims, the
23	Secretary, acting through the Administrator of the Agri-
24	cultural Marketing Service in coordination with the Ad-
25	ministrator of the Food Safety and Inspection Service,

1	shall establish, not later than 2 years after the date of
2	the enactment of this subtitle, after providing notice and
3	an opportunity to comment, and in a manner consistent
4	with United States obligations under international agree-
5	ments—
6	"(1) mandatory standards with respect to ani-
7	mal raising claims that may be made on the labeling
8	of any meat food products or poultry product;
9	"(2) procedures to verify any such claims prior
10	to the use in commerce of any meat food product or
11	poultry product bearing labeling with such a claim;
12	"(3) procedures whereby any such verification
13	is subsequently incorporated seamlessly with labeling
14	requirements under the Federal Meat Inspection Act
15	(21 U.S.C. 601 et seq.) and the Poultry Products
16	Inspection Act (21 U.S.C. 451 et seq.); and
17	"(4) on-farm and supply chain auditing and
18	verification procedures for ensuring the truthfulness
19	of such claims.
20	"(b) Standards.—In developing and approving ani-
21	mal raising claim standards under subsection (a), the Sec-
22	retary shall include standards relating to—
23	"(1) diet claims, including grass-fed, vege-
24	tarian-fed, and fed no animal byproducts;

1	"(2) living and raising condition claims, includ-
2	ing but not limited to cage free, free range, and pas-
3	ture raised;
4	"(3) antibiotic and hormone claims, including
5	but not limited to raised without antibiotics, no hor-
6	mones added (beef cattle, sheep), and raised without
7	growth promotants;
8	"(4) source claims demonstrating the animal
9	can be traced back to its farm of origin from birth
10	to slaughter;
11	"(5) age claims;
12	"(6) animal welfare claims;
13	"(7) environmental stewardship claims, includ-
14	ing greenhouse gas reduction and carbon sequestra-
15	tion claims;
16	"(8) breed claims; and
17	"(9) any other such claim as the Secretary de-
18	termines is appropriate.
19	"(c) Third-Party Certification.—A producer of
20	a meat food product or a poultry product may use an ani-
21	mal raising claim that is verified by a third party so long
22	as—
23	"(1) the claim is made consistent with stand-
24	ards established by the Secretary pursuant to sub-
25	section (a); and

1	"(2) the procedures used by such third party
2	for purposes of that verification and any subsequent
3	auditing are equivalent (as determined by the Sec-
4	retary) to the procedures used by the Secretary for
5	that verification and auditing.
6	"(d) Approval Process.—To the maximum extent
7	practicable, the Secretary shall require that a producer
8	seeking to make an animal raising claim, submit to the
9	Secretary prior to using the product that is the subject
10	of such animal raising claim the following documentation
11	to support such claim—
12	"(1) detailed written descriptions explaining the
13	controls used for ensuring that the raising claim is
14	valid from birth to harvest or the period of raising
15	being referenced by the claim;
16	"(2) a signed and dated document describing
17	how the animals are raised to support that specific
18	claim made is truthful and not misleading;
19	"(3) a written description of the product trac-
20	ing and segregation mechanism from time of slaugh-
21	ter or further processing through packaging and dis-
22	tribution;
23	"(4) a written description for the identification,
24	control, and segregation of non-conforming animals
25	or products; and

1	"(5) if a third party certifies a claim, a current
2	copy of the certificate.
3	"(e) Effect on Other Laws.—Nothing in this sec-
4	tion shall be construed to alter the authority of the Sec-
5	retary under the Federal Meat Inspection Act (21 U.S.C.
6	601 et seq.) or the Poultry Products Inspection Act (21
7	U.S.C. 451 et. seq.).
8	"(f) Consistency With Other Laws.—The Sec-
9	retary shall ensure consistency between the animal raising
10	claims standards established pursuant to subsection (a)
11	and the Organic Food Production Act of 1990 (7 U.S.C.
12	6501 et seq.) and any rules or regulations implementing
13	that Act.
14	"(g) Compliance Requirements.—Beginning on
15	the date that is three years after the date of the enactment
16	of this Act—
17	"(1) in the case of a domestic meat food prod-
18	uct or poultry product—
19	"(A) a person may sell or label a meat
20	food product or poultry product with an animal
21	raising label claim only if such products is pro-
22	duced and handled in accordance with the
23	standards established pursuant to subsection
24	(a); and

1	"(B) no person may sell or label a meat
2	food product or poultry product with an animal
3	raising label claim that is not in compliance
4	with such standards; and
5	"(2) in the case of an imported meat food prod-
6	uct or poultry product, such a product may be sold
7	or labeled with animal raising label claims if the
8	Secretary determines such product has been pro-
9	duced and handled under a verification program that
10	provides safeguards and guidelines that are at least
11	equivalent to the requirements of the standards es-
12	tablished pursuant to subsection (a).
13	"(h) VIOLATION OF THIS TITLE.—
14	"(1) MISUSE OF LABEL.—Any person who,
15	after notice and an opportunity to be heard, is found
16	by the Secretary to have knowingly sold or labeled
17	any meat food product or poultry product with an
18	animal raising claim, except in accordance with this
19	subtitle, shall be assessed a civil penalty of not more
20	than \$10,000.
21	"(2) False statement.—Any person who
22	after notice and an opportunity to be heard, has
23	been found by the Secretary to makes a false, fraud-
24	ulent, or fictitious statement to the Secretary, a gov-
25	erning Federal or State official, or a third-party cer-

1	tifier, or conceals, covers up, falsifies, or deceives a
2	material fact to the Secretary, a governing Federal
3	or State official, or a third-party certifier with re-
4	spect to an animal raising claim subject to the re-
5	quirements of this subtitle shall be subject to a pen-
6	alty specified in section 1001 of title 18, United
7	States Code.
8	"(i) AUTHORIZATION OF APPROPRIATIONS.—There
9	are authorized to be appropriated to carry out this subtitle
10	such sums as may be necessary.
11	"SEC. 299. APPLICABILITY.
12	"This subtitle shall only apply to meat food products
13	and poultry products that are subject to labeling require-
14	ments under the Federal Meat Inspection Act (21 U.S.C.
15	601 et seq.) and the Poultry Products Inspection Act (21
16	U.S.C. 451 et seq.).
17	"SEC. 300. DEFINITIONS.
18	"In this subtitle:
19	"(1) The term 'animal raising claim' means a
20	statement on the labeling of meat food products or
21	poultry products used in interstate commerce that
22	reference the way that the source animal for a meat
23	food product or poultry product was raised, includ-
24	ing production practices that were used, such as liv-
25	ing or raising conditions, the breed, or the location

1	or source of where the product is born, raised, and
2	processed.
3	"(2) The term 'meat food product' has the
4	meaning given such term in section 1(j) of the Fed-
5	eral Meat Inspection Act (21 U.S.C. 601(j)).
6	"(3) The term 'poultry product' has the mean-
7	ing given such term in section 4(f) of the Poultry
8	Products Inspection Act (7 U.S.C. 453(f)).".
9	SEC. 502. PROCESSING RESILIENCE GRANT PROGRAM.
10	Subtitle A of the Agricultural Marketing Act of 1946
11	(7 U.S.C. 1621 et seq.) is amended by adding at the end
12	the following:
13	"SEC. 210B. PROCESSING RESILIENCE GRANT PROGRAM.
1314	"SEC. 210B. PROCESSING RESILIENCE GRANT PROGRAM. "(a) Eligible Entity.—In this section, the term
14	"(a) Eligible Entity.—In this section, the term
14 15	"(a) ELIGIBLE ENTITY.—In this section, the term 'eligible entity' means—
141516	"(a) Eligible Entity.—In this section, the term 'eligible entity' means— "(1) a small or very small establishment, as de-
14151617	"(a) Eligible Entity.—In this section, the term 'eligible entity' means— "(1) a small or very small establishment, as defined in the final rule entitled 'Pathogen Reduction;
1415161718	"(a) Eligible Entity.—In this section, the term 'eligible entity' means— "(1) a small or very small establishment, as defined in the final rule entitled 'Pathogen Reduction; Hazard Analysis and Critical Control Point
141516171819	"(a) ELIGIBLE ENTITY.—In this section, the term 'eligible entity' means— "(1) a small or very small establishment, as defined in the final rule entitled 'Pathogen Reduction; Hazard Analysis and Critical Control Point (HACCP) Systems' (61 Fed. Reg. 33806 (July 25,
14151617181920	"(a) ELIGIBLE ENTITY.—In this section, the term 'eligible entity' means— "(1) a small or very small establishment, as defined in the final rule entitled 'Pathogen Reduction; Hazard Analysis and Critical Control Point (HACCP) Systems' (61 Fed. Reg. 33806 (July 25, 1996));
14 15 16 17 18 19 20 21	"(a) ELIGIBLE ENTITY.—In this section, the term 'eligible entity' means— "(1) a small or very small establishment, as defined in the final rule entitled 'Pathogen Reduction; Hazard Analysis and Critical Control Point (HACCP) Systems' (61 Fed. Reg. 33806 (July 25, 1996)); "(2) a slaughtering or processing establishment

1	tion 5 of the Poultry Products Inspection Act (21
2	U.S.C. 454);
3	"(3)(A) a person, firm, or corporation exempt
4	from inspection under the Federal Meat Inspection
5	Act (21 U.S.C. 601 et seq.) pursuant to section 23
6	of such Act (21 U.S.C. 623);
7	"(B) a retail dealer, poultry producer, or person
8	exempt from inspection under the Poultry Products
9	Inspection Act (21 U.S.C. 451 et seq.) pursuant to
10	section 15 of such Act (21 U.S.C. 464); and
11	"(4) an entity seeking to establish and operate
12	an establishment that would meet the criteria speci-
13	fied in paragraph (1), (2), or (3).
14	"(b) Grants.—The Secretary shall establish a grant
15	program to provide competitive grants to eligible entities
16	to expand processing capacity, create jobs, support health
17	and safety, and enhance the resilience of the farm and
18	food sector.
19	"(c) USE OF FUNDS.—An entity selected to receive
20	a grant under this section may use the funds received
21	through such grant for activities including—
22	"(1) the cost of developing and issuing (other
23	than the cost of labor), directly incurred or incurred
24	by a consultant, a Hazard Analysis and Critical
25	Control Points plan for the eligible entity;

1	"(2) the actual cost of any facilities, equipment,
2	processes, and operations necessary for the estab-
3	lishment to comply with the Federal Meat Inspection
4	Act (21 U.S.C. 601 et seq.) or Poultry Products In-
5	spection Act (21 U.S.C. 451 et seq.);
6	"(3) cold storage, equipment, or transportation
7	services;
8	"(4) constructing or acquiring humane handling
9	infrastructure, including holding space for livestock
10	holding prior to slaughter, shade structures, and
11	knock box structures;
12	"(5) purchasing software and computer equip-
13	ment for record keeping, production data, Hazard
14	Analysis and Critical Control Points record review;
15	"(6) the costs of staff time and training for im-
16	plementing and monitoring health and safety proce-
17	dures;
18	"(7) the development of a feasibility study or
19	business plan for those interested in expanding or
20	starting a new small establishment; and
21	"(8) other costs associated with expanding or
22	establishing a small establishment or very small es-
23	tablishment, as determined by the Secretary.
24	"(d) Applications.—

1	"(1) In General.—An eligible entity seeking a
2	grant under this section shall submit to the Sec-
3	retary an application in accordance with an applica-
4	tion process established by the Secretary.
5	"(2) SIMPLIFIED PROCESS.—In establishing the
6	application process under paragraph (1), the Sec-
7	retary shall establish a simplified, separate applica-
8	tion of up to \$100,000.
9	"(3) REQUIREMENTS.—The Secretary shall en-
10	sure that the application required under paragraph
11	(2) is—
12	"(A) as simple as is practicable;
13	"(B) accessible online; and
14	"(C) available through local staff of the
15	Department of Agriculture.
16	"(e) Maximum Amount.—The amount of a grant
17	under this section shall be not more than \$500,000.
18	"(f) Administration.—The administration of this
19	section, including the promulgation of regulations to carry
20	out this section, shall be without regard to—
21	"(1) the notice and comment provisions of sec-
22	tion 553 of title 5, United States Code; and
23	"(2) chapter 35 of title 44, United States Code.
24	"(g) Process.—

1	"(1) Outreach.—During the period beginning
2	on the date on which the Secretary begins to accept
3	applications, the Secretary shall perform outreach to
4	States and eligible entities relating to grants under
5	this section.
6	"(2) Reapplication.—In the case of a denial
7	of an application under this section, the eligible enti-
8	ty submitting such application may submit a revised
9	application, as specified by the Secretary in regula-
10	tions.
11	"(3) Priority.—In reviewing applications sub-
12	mitted under paragraph (1), the Secretary shall give
13	priority to proposals that would—
14	"(A) increase farmer and rancher access to
15	animal slaughter options within a 200 mile ra-
16	dius;
17	"(B) support a small or very small plant
18	with less than 150 employees; or
19	"(C) support minority-owned businesses
20	that are defined as for-profit businesses where
21	not less than 51 percent of such business is
22	owned by 1 or more Black American, Native
23	American, Hispanic American, or Asian Amer-
24	ican individuals.

1	"(h) Federal Share.—Funds provided under a
2	grant under this section shall not exceed 50 percent of
3	the costs referred to in subsection (c), as determined by
4	the Secretary.
5	"(i) Funding.—
6	"(1) Mandatory funding.—Of the funds of
7	the Commodity Credit Corporation, the Secretary
8	shall make available to carry out this section
9	\$10,000,000 for each of fiscal years 2022 through
10	2030.
11	"(2) Authorization of appropriations.—
12	There are authorized to be appropriated to carry out
13	this section \$15,000,000 for each of fiscal years
14	2022 through 2030.".
15	SEC. 503. CONSERVATION OF PRIVATE GRAZING LAND.
16	(a) Purpose.—Section 1240M(a) of the Food Secu-
17	rity Act of 1985 (16 U.S.C. 3839bb(a)) is amended—
18	(1) in paragraph (6), by inserting "conserving
19	water and" before "improving";
20	(2) in paragraph (7), by striking "; and" and
21	inserting a semicolon;
22	(3) in paragraph (8), by striking the period at
23	the end and inserting "; and; and
24	(4) by adding at the end the following:

1	"(9) conserving and improving soil health and
2	improving grazing system resilience in the face of
3	climate change through advanced grazing manage-
4	ment practices; and
5	"(10) providing support for producers
6	transitioning from confinement and feedlot systems
7	or continuous grazing to managed grazing-based sys-
8	tems, including support for pasture development and
9	management.".
10	(b) Definitions.—Section 1240M(b)(2) of the Food
11	Security Act of 1985 (16 U.S.C. 3839bb(b)(2)) is amend-
12	ed by striking "hay land" and inserting "perennial hay
13	land, including silvopasture".
14	(e) Private Grazing Land Conservation Assist-
15	ANCE.—Section 1240M(c) of the Food Security Act of
16	1985 (16 U.S.C. 3839bb(c)) is amended—
17	(1) in paragraph (1)—
18	(A) in the matter preceding subparagraph
19	(A), by inserting "and partnerships described in
20	paragraph (2)(B)" after "local conservation dis-
21	tricts";
22	(B) in subparagraph (B), by striking
23	"grazing land management technologies" and
24	inserting "regionally appropriate, advanced
25	grazing land management technologies to im-

1	prove soil health and maximize carbon seques-
2	tration'';
3	(C) in subparagraph (C)(iv), by inserting
4	"through integrated strategies that include ro-
5	tational and multispecies grazing, integrated
6	pest management, and other ecological prac-
7	tices" after "brush encroachment problems";
8	(D) in subparagraph (H), by striking ";
9	and" and inserting a semicolon;
10	(E) in subparagraph (I), by striking the
11	period at the end and inserting "; and"; and
12	(F) by adding at the end the following:
13	"(J) assisting producers in transitioning
14	from confinement or feedlot systems or contin-
15	uous grazing to managed grazing-based sys-
16	tems, including assistance in pasture develop-
17	ment and management."; and
18	(2) by amending paragraph (2) to read as fol-
19	lows:
20	"(2) Program elements.—
21	"(A) TECHNICAL ASSISTANCE AND EDU-
22	CATION.—Personnel of the Department trained
23	in pasture and range management shall be
24	made available under the program to deliver
25	and coordinate technical assistance and edu-

1	cation to owners and managers of private graz-
2	ing land, including owners and managers inter-
3	ested in developing new or improved pasture or
4	grazing-based systems on their land, at the re-
5	quest of the owners and managers.
6	"(B) Partnerships.—In carrying out the
7	program under this section, the Secretary shall
8	provide research, demonstration, education (in-
9	cluding conferences, workshops, field days, and
10	trainings), workforce training, planning, and
11	outreach activities through partnerships with—
12	"(i) land-grant colleges and univer-
13	sities (as defined in section 1404 of the
14	National Agricultural Research, Extension,
15	and Teaching Policy Act of 1977 (7 U.S.C.
16	3103));
17	"(ii) nongovernmental organizations;
18	and
19	"(iii) tribal organizations.
20	"(C) Grants.—
21	"(i) In general.—In carrying out
22	the program under this section, the Sec-
23	retary shall provide funds on a competitive
24	basis to partnerships to use for State or
25	local action grants to conduct grazing land

1	research, demonstration, education, work-
2	force training, planning, and outreach
3	projects.
4	"(ii) Duration.—Grants made by
5	partnerships under this section shall be for
6	a period not to exceed 3 years.
7	"(iii) Cost sharing.—A partnership
8	that receives funding under this section
9	shall ensure that any funded project pro-
10	vides, from non-Federal sources, funds or
11	in-kind support valued at not less than 25
12	percent of the total cost of the project.
13	"(iv) Limitation on indirect
14	COSTS.—A partnership that receives fund-
15	ing under this section may not use more
16	than 15 percent of the total cost of the
17	project for the indirect costs of carrying
18	out the project.
19	"(v) Priority shall be
20	given to projects that—
21	"(I) focus on sustainable grazing
22	management systems and techniques
23	that assist producers with multiple
24	ecosystem services, including climate

1	change adaptation and mitigation;
2	and
3	"(II) involve beginning farmers
4	and ranchers, socially disadvantaged
5	farmers and ranchers, tribal pro-
6	ducers, or new graziers (including
7	State or federally registered appren-
8	ticeships).".
9	(d) Grazing Technical Assistance Self-
10	Help.—Section 1240M(d) of the Food Security Act of
11	1985 (16 U.S.C. 3839bb(d)) is amended—
12	(1) in paragraph (1)(A), by inserting "and for
13	those interested in beginning grazing" before the
14	semicolon;
15	(2) in paragraph (2), by striking "may establish
16	2" and inserting "may establish"; and
17	(3) in paragraph (3)(C)—
18	(A) in clause (ii), by striking "; and" and
19	inserting a semicolon;
20	(B) by redesignating clause (iii) as clause
21	(iv); and
22	(C) by inserting after clause (ii) the fol-
23	lowing:
24	"(iii) will improve climate change ad-
25	aptation and mitigation; and".

1	(e) Authorization of Appropriations.—Section
2	1240M(e) of the Food Security Act of 1985 (16 U.S.C.
3	3839bb(e)) is amended to read as follows:
4	"(e) Funding.—
5	"(1) Mandatory funding.—Of the funds of
6	the Commodity Credit Corporation, the Secretary
7	shall use to carry out this section \$50,000,000 for
8	each of fiscal years 2022 through 2030.
9	"(2) Grants.—Of the funds made available
10	under paragraph (1), the Secretary shall use not
11	more than 40 percent to carry out subsection
12	(e)(2)(C).
13	"(3) Authorization of appropriations.—
14	There is authorized to be appropriated to carry out
15	this section \$60,000,000 for each of fiscal years
16	2002 through 2030.".
17	SEC. 504. CONSERVATION RESERVE PROGRAM.
18	(a) Conservation Reserve.—Section 1231(d) of
19	the Food Security Act of 1985 (16 U.S.C. 3831(d)) is
20	amended—
21	(1) in paragraph (1)—
22	(A) in subparagraph (D), by striking ";
23	and" and inserting a semicolon;
24	(B) in subparagraph (E), by striking the
25	period at the end and inserting "; and"; and

1	(C) by adding at the end the following:
2	"(F) fiscal years 2024 through 2030, not
3	more than 32,000,000 acres."; and
4	(2) in paragraph (2)(A)—
5	(A) in clause (i), by striking "; and" and
6	inserting a semicolon;
7	(B) in clause (ii)(III), by striking the pe-
8	riod and inserting "; and; and
9	(C) by adding at the end the following:
10	"(iii) the Secretary shall enroll and
11	maintain in the conservation reserve not
12	fewer than 7,000,000 acres of land de-
13	scribed in subsection (b)(3) by September
14	30, 2030, of which 5,000,000 acres shall
15	be reserved for the pilot program estab-
16	lished under section 1231C(c).".
17	(b) Pilot Programs.—Section 1231C of the Food
18	Security Act of 1985 (16 U.S.C. 3831c) is amended by
19	adding at the end the following:
20	"(c) Grasslands 30.—
21	"(1) In general.—
22	"(A) Enrollment.—The Secretary shall
23	establish a pilot program to enroll land in the
24	conservation reserve program through a 30-year
25	conservation reserve contract (referred to in

1	this subsection as a 'Grassland 30 contract') in
2	accordance with this subsection.
3	"(B) Inclusion of Acreage Limita-
4	TION.—For purposes of applying the limitations
5	in section 1231(d)(1), the Secretary shall in-
6	clude acres of land enrolled under this sub-
7	section.
8	"(2) Eligible land for enroll-
9	ment through a Grassland 30 contract—
10	"(A) is land that is eligible to be enrolled
11	in the conservation reserve program under the
12	grasslands initiative described in section
13	1231(d)(2); and
14	"(B) shall not be limited to land that is
15	subject to an expired covered contract.
16	"(3) Expired conservation contract elec-
17	TION.—
18	"(A) DEFINITION OF COVERED CON-
19	TRACT.—In this paragraph, the term 'covered
20	contract' means a contract entered into under
21	this subchapter that—
22	"(i) expires on or after the date of en-
23	actment of this subsection; and
24	"(ii) covers land enrolled in the con-
25	servation reserve program under the grass-

1	lands initiative described in section
2	1231(d)(2).
3	"(B) Election.—On the expiration of a
4	covered contract, an owner or operator party to
5	the covered contract shall elect—
6	"(i) not to reenroll the land under the
7	contract;
8	"(ii) to offer to reenroll the land
9	under the contract if the land remains eli-
10	gible under the terms in effect as of the
11	date of expiration; or
12	"(iii) not to reenroll the land under
13	the contract and to enroll that land
14	through a Grassland 30 contract under
15	this subsection.
16	"(4) TERM.—The term of a Grassland 30 con-
17	tract shall be 30 years.
18	"(5) AGREEMENTS.—To be eligible to enroll
19	land in the conservation reserve program through a
20	Grassland 30 contract, the owner of the land shall
21	enter into an agreement with the Secretary—
22	"(A) to implement a conservation reserve
23	plan developed for the land;

1	"(B) to comply with the terms and condi-
2	tions of the contract and any related agree-
3	ments; and
4	"(C) to temporarily suspend the base his-
5	tory for the land covered by the contract.
6	"(6) Terms and conditions of grassland
7	30 CONTRACTS.—
8	"(A) In general.—A Grassland 30 con-
9	tract shall include terms and conditions that
10	promote sustainable grazing systems, protect
11	and enhance soil carbon levels, and are compat-
12	ible with wildlife habitat conservation, as deter-
13	mined by the Secretary, and may include any
14	additional provision that the Secretary deter-
15	mines is appropriate to carry out this sub-
16	section or facilitate the practical administration
17	of this subsection.
18	"(B) VIOLATION.—On the violation of a
19	term or condition of a Grassland 30 contract,
20	the Secretary may require the owner to refund
21	all or part of any payments received by the
22	owner under the conservation reserve program,
23	with interest on the payments, as determined
24	appropriate by the Secretary.

1	"(C) Compatible uses.—Land subject to
2	a Grassland 30 contract may be used for com-
3	patible economic uses, including hunting and
4	fishing, if the use—
5	"(i) is specifically permitted by the
6	conservation reserve plan developed for the
7	land; and
8	"(ii) is consistent with the long-term
9	protection and enhancement of the con-
10	servation resources for which the contract
11	was established.
12	"(7) Compensation.—
13	"(A) Amount of payments.—The Sec-
14	retary shall provide payment under this sub-
15	section to an owner of land enrolled through a
16	Grassland 30 contract using 30 annual pay-
17	ments in an amount equal to the amount that
18	would be used if the land were to be enrolled
19	in the conservation reserve program under sec-
20	tion $1231(d)(2)$.
21	"(B) FORM OF PAYMENT.—Compensation
22	for a Grassland 30 contract shall be provided
23	by the Secretary in the form of a cash payment
24	in an amount determined under subparagraph
25	(A).

1	"(C) Timing.—The Secretary shall provide
2	any annual payment obligation under subpara-
3	graph (A) as early as practicable in each fiscal
4	year.
5	"(D) PAYMENTS TO OTHERS.—The Sec-
6	retary shall make a payment, in accordance
7	with regulations prescribed by the Secretary, in
8	a manner as the Secretary determines is fair
9	and reasonable under the circumstances, if an
10	owner who is entitled to a payment under this
11	section—
12	"(i) dies;
13	"(ii) becomes incompetent;
14	"(iii) is succeeded by another person
15	or entity who renders or completes the re-
16	quired performance; or
17	"(iv) is otherwise unable to receive the
18	payment.
19	"(8) Technical assistance.—
20	"(A) In General.—The Secretary shall
21	assist owners in complying with the terms and
22	conditions of a Grassland 30 contract.
23	"(B) Contracts or agreements.—The
24	Secretary may enter into 1 or more contracts
25	with private entities or agreements with a

1	State, nongovernmental organization, or Indian
2	Tribe to carry out necessary maintenance of a
3	Grassland 30 contract if the Secretary deter-
4	mines that the contract or agreement will ad-
5	vance the purposes of the conservation reserve
6	program.
7	"(9) Administration.—
8	"(A) Conservation reserve plan.—
9	The Secretary shall develop a conservation re-
10	serve plan for any land subject to a Grassland
11	30 contract, which shall include practices and
12	activities necessary to maintain, protect, and
13	enhance the conservation value of the enrolled
14	land, including the protection and enhancement
15	of soil carbon levels.
16	"(B) Delegation of contract adminis-
17	TRATION.—
18	"(i) Federal, state, tribal, or
19	LOCAL GOVERNMENT AGENCIES.—The Sec-
20	retary may delegate any of the manage-
21	ment, monitoring, and enforcement respon-
22	sibilities of the Secretary under this sub-
23	section to other Federal, State, Tribal, or
24	local government agencies that have the
25	appropriate authority, expertise, and re-

1	sources necessary to carry out those dele-
2	gated responsibilities.
3	"(ii) Conservation organiza-
4	TIONS.—The Secretary may delegate any
5	management responsibilities of the Sec-
6	retary under this subsection to conserva-
7	tion organizations if the Secretary deter-
8	mines the conservation organization has
9	similar expertise and resources.".
10	SEC. 505. ALTERNATIVE MANURE MANAGEMENT PROGRAM.
11	Chapter 5 of subtitle D of title XII of the Food Secu-
12	rity Act of 1985 (16 U.S.C. 3839bb et seq.) is further
13	amended by adding at the end the following:
14	"SEC. 1240T. ALTERNATIVE MANURE MANAGEMENT PRO-
15	GRAM.
16	"(a) Definitions.—In this section:
17	"(1) Pasture-based management.—The
18	term 'pasture-based management' means a dairy or
19	livestock production system in which the animals
20	spend all or a substantial portion of their time graz-
21	ing on fields in which some or all of the manure is
22	deposited and left in the field and decomposes
23	aerobically.
24	"(2) Non-digester dairy or livestock
25	METHANE MANAGEMENT METHOD —The term 'non-

1	digester dairy or livestock methane management
2	method' means a method that may be used by opera-
3	tors of dairy or livestock operations to transition
4	from wet manure handling and storage, where an-
5	aerobic conditions are present, to dry manure han-
6	dling and storage, including open solar drying or
7	composting of manure onsite, conversion of dairy
8	and livestock operations to pasture-based manage-
9	ment, solid separation technologies, scrape conver-
10	sion, and other strategies to mitigate methane emis-
11	sions from manure management, as determined by
12	the Secretary.
13	"(3) Onsite open solar drying or
14	COMPOSTING OF MANURE.—The term 'onsite open
15	solar drying or composting of manure' means the
16	collection, storage, and drying of dairy or livestock
17	manure in a nonliquid environment on a farm or
18	ranch.
19	"(4) Scrape conversion.—The term 'scrape
20	conversion' means the conversion of flush water la-
21	goon systems to solid-scrape or dry manure manage-
22	ment practices, including vacuum technologies for
23	manure management.
24	"(5) Solid separation technologies.—The
25	term 'solid separation technologies' means tech-

1	nologies designed to separate liquid components of
2	manure from mineral and organic solid components,
3	for the purposes of reducing methane emissions.
4	"(6) ELIGIBLE PRODUCER.—The term 'eligible
5	producer' means a dairy or livestock producer whose
6	baseline manure management practices prior to en-
7	rollment in the program include the anaerobic de-
8	composition of volatile solids stored in a lagoon or
9	other predominantly liquid anaerobic environment.
10	"(b) Establishment.—The Secretary shall estab-
11	lish an alternative manure management program to sup-
12	port non-digester dairy and livestock methane manage-
13	ment strategies to effectively reduce greenhouse gas emis-
14	sions and to maximize environmental benefits.
15	"(c) Payments.—During the 2022 through 2030 fis-
16	cal years, the Secretary shall provide payments to eligible
17	producers that enter into contracts with the Secretary
18	under the program.
19	"(d) Practices.—Each eligible producer requesting
20	funding for a project under the program shall include at
21	least one of the following project components that reduce
22	baseline methane emissions on the operation of the pro-
23	ducer:
24	"(1) Conversion of dairy and livestock oper-
25	ations to pasture-based management that eliminates

1	or reduces the quantity of manure stored in anaer-
2	obic conditions, including—
3	"(A) conversion of a non-pasture dairy or
4	livestock operation to pasture-based manage-
5	ment;
6	"(B) increasing the amount of time live-
7	stock spend at pasture at an existing pasture
8	operation; or
9	"(C) improving pasture-based manage-
10	ment, including transitioning to managed rota-
11	tional grazing.
12	"(2) Alternative manure treatment and storage
13	practices, including—
14	"(A) installation of a compost bedded pack
15	barn that composts manure;
16	"(B) installation of slatted floor pit storage
17	manure collection that must be cleaned out at
18	least monthly; or
19	"(C) other similar practices, as determined
20	by the Secretary.
21	"(3) Conversion to a solid separation system in
22	which manure solids are separated prior to entry
23	into a wet, anaerobic environment at a dairy or live-
24	stock operation, or installation of a new solid separa-
25	tion system with significantly higher separation effi-

1	ciency than the existing solid separation system, in
2	conjunction with one or more of the following prac-
3	tices:
4	"(A) Open solar drying or composting of
5	manure onsite.
6	"(B) Solar drying in an enclosed environ-
7	ment.
8	"(C) Forced evaporation with natural-gas
9	fueled dryers.
10	"(D) Storage of manure in unconfined
11	piles or stacks.
12	"(E) Composting in an enclosed vessel,
13	with forced aeration and continuous mixing.
14	"(F) Composting in piles with forced aer-
15	ation but no mixing.
16	"(G) Composting in intensive windrows
17	with regular turning for mixing and aeration.
18	"(H) Composting in passive windrows with
19	infrequent turning for mixing and aeration.
20	"(4) Scrape conversion in conjunction with one
21	of the practices listed in paragraph (3).
22	"(e) Term.—A contract under the program shall
23	have a term that does not exceed 3 years.
24	"(f) Payments.—

1	"(1) Availability of payments.—Payments
2	provided to an eligible producer under this section
3	may be used to implement one or more practices de-
4	scribed in subsection (d).
5	"(2) Payment amounts.—The Secretary may
6	provide a payment to an eligible producer under the
7	program for an amount that is up to 100 percent of
8	the costs associated with planning, design, materials,
9	equipment, installation, labor, management, mainte-
10	nance, and training related to implementing a prac-
11	tice described in subsection (d).
12	"(3) Limitation on payments.—A person or
13	legal entity (including a joint venture and a general
14	partnership) may not receive, directly or indirectly,
15	payments under the program that exceed \$750,000
16	during any 5-year period.
17	"(4) ADVANCED PAYMENTS.—The Secretary
18	shall provide at least 50 percent of the amount of
19	total payments to an eligible producer in advance for
20	all costs related to purchasing materials and equip-
21	ment or contracting.
22	"(g) Modification or Termination of Con-
23	TRACTS.—
24	"(1) Voluntary modification or termi-
25	NATION.—The Secretary may modify or terminate a

1	contract entered into with an eligible producer under
2	the program if—
3	"(A) the producer agrees to the modifica-
4	tion or termination; and
5	"(B) the Secretary determines that the
6	modification or termination is in the public in-
7	terest.
8	"(2) Involuntary termination.—The Sec-
9	retary may terminate a contract under the program
10	if the Secretary determines that the eligible producer
11	violated the contract.
12	"(h) CLUSTER APPLICATIONS.—The Secretary shall
13	establish procedures under which—
14	"(1) groups of eligible producers may submit a
15	joint application in order to facilitate centralized
16	composting facilities; and
17	"(2) the Secretary will apportion payments to
18	each eligible producer associated with such a joint
19	application.
20	"(i) EVALUATION OF APPLICATIONS.—
21	"(1) EVALUATION CRITERIA.—The Secretary
22	shall develop criteria for evaluating applications that
	S of the second
23	will ensure that the purposes of the program are ful-

1	that will maximize greenhouse gas emissions reduc-
2	tions and overall environmental benefits.
3	"(2) Grouping of Applications.—The Sec-
4	retary may group and evaluate applications relative
5	to other applications for similar farming operations.
6	"(j) Duties of Producers.—To receive payments
7	under the program, an eligible producer shall agree—
8	"(1) to implement an alternative manure man-
9	agement program plan that describes the greenhouse
10	gas emissions reductions and other environmental
11	benefits to be achieved through 1 or more practices
12	that are approved by the Secretary;
13	"(2) to supply information as required by the
14	Secretary to determine compliance with the program
15	plan and requirements of the program; and
16	"(3) to comply with such additional provisions
17	as the Secretary determines are necessary to carry
18	out the program plan.
19	"(k) Duties of the Secretary.—The Secretary
20	shall—
21	"(1) determine and publish factors for esti-
22	mating the emissions reductions for each program
23	practice to aid eligible producers in development of
24	applications and program plans; and

1	"(2) assist an eligible producer in achieving the
2	greenhouse gas emissions reduction and other envi-
3	ronmental goals of the program plan by—
4	"(A) providing payments for developing
5	and implementing 1 or more practices, as ap-
6	propriate; and
7	"(B) providing the producer with informa-
8	tion, technical assistance, and training to aid in
9	implementation of the plan.
10	"(l) Funding.—The Secretary shall use the funds,
11	facilities, and authorities of the Commodity Credit Cor-
12	poration to carry out the program (including the provision
13	of technical assistance) using, to the maximum extent
14	practicable, \$1,500,000,000 for the period of fiscal years
15	2022 through 2030.".
16	TITLE VI—ON-FARM
17	RENEWABLE ENERGY
18	SEC. 601. RURAL ENERGY FOR AMERICA PROGRAM.
19	Section 9007 of the Farm Security and Rural Invest-
20	ment Act of 2002 (7 U.S.C. 8107) is amended—
21	(1) in subsection (a)—
22	(A) in the matter preceding paragraph (1),
23	by striking "and renewable energy develop-
24	ment" and inserting ", renewable energy devel-

1	opment, and the reduction of carbon dioxide
2	and carbon dioxide equivalent emissions"; and
3	(B) in paragraph (2), by striking "and re-
4	newable energy systems" and inserting ", re-
5	newable energy systems, and carbon dioxide and
6	carbon dioxide equivalent gas emissions reduc-
7	tions";
8	(2) in subsection (b)—
9	(A) in paragraph (2)—
10	(i) in subparagraph (D), by striking
11	"and" at the end;
12	(ii) by redesignating subparagraph
13	(E) as subparagraph (G); and
14	(iii) by inserting after subparagraph
15	(D) the following:
16	"(E) a nonprofit corporation;
17	"(F) an agricultural cooperative or pro-
18	ducer group; and";
19	(B) in paragraph (3)(D), by inserting be-
20	fore the semicolon at the end the following: ",
21	including carbon dioxide and carbon dioxide
22	equivalent emissions reductions"; and
23	(C) in paragraph (4)—
24	(i) in the matter preceding subpara-
25	graph (A), by inserting ", agricultural

1	processors," after "agricultural pro-
2	ducers'';
3	(ii) in subparagraph (A), by striking
4	"and" at the end;
5	(iii) in subparagraph (B), by striking
6	the period at the end and inserting ";
7	and"; and
8	(iv) by adding at the end the fol-
9	lowing:
10	"(C) assisting in the development of feasi-
11	bility studies and plans for implementing rec-
12	ommendations provided under subparagraph
13	(B).";
14	(3) in subsection (c)—
15	(A) in paragraph (1)(A)(i), by inserting ",
16	agricultural processors," after "agricultural
17	producers";
18	(B) in paragraph (2)—
19	(i) by redesignating subparagraphs
20	(F) and (G) as subparagraphs (G) and
21	(H), respectively; and
22	(ii) by inserting after subparagraph
23	(E) the following:
24	"(F) carbon accounting assessments devel-
25	oped under subsection (d);";

1	(C) in paragraph (3)—
2	(i) by amending subparagraph (A) to
3	read as follows:
4	"(A) Grants.—Except as provided in sub-
5	paragraph (F), the amount of a grant under
6	this subsection shall not exceed 50 percent of
7	the cost of the activity carried out using funds
8	from the grant.";
9	(ii) in subparagraph (D), by striking
10	"subsection (f)" and inserting "subsection
11	(h)";
12	(iii) by adding at the end the fol-
13	lowing:
14	"(E) LOAN GUARANTEE.—The portion of a
15	loan that the Secretary may guarantee under
16	this section shall be—
17	"(i) for loans of \$1,000,000 or more,
18	80 percent of the principal amount of the
19	loan; and
20	"(ii) for loans of less than
21	\$1,000,000, 90 percent of the principal
22	amount of the loan.
23	"(F) Underserved producers.—The
24	amount of a grant under this subsection to an
25	agricultural producer who is a beginning farmer

1	or rancher, a socially disadvantaged farmer or
2	rancher, or a veteran farmer or rancher (as
3	those terms are defined in section 2501(a) of
4	the Food, Agriculture, Conservation and Trade
5	Act of 1990 (7 U.S.C. 2279(a))) shall not ex-
6	ceed 75 percent of the cost of the activity fund-
7	ed by the grant.";
8	(D) in paragraph (4), by adding at the end
9	the following:
10	"(F) Pre-approved technologies.—In
11	order to streamline the adoption of renewable
12	energy systems and the adoption of energy effi-
13	ciency improvements, the Secretary shall—
14	"(i) beginning with fiscal year 2022,
15	develop a pre-approved technologies and
16	products list and streamlined application
17	process for projects utilizing pre-approved
18	products; and
19	"(ii) update such list every 2 fiscal
20	years."; and
21	(E) by adding at the end the following:
22	"(5) Priority.—In making grants or loan
23	guarantees under this subsection, priority shall be
24	provided to proposed projects that utilize tech-
25	nologies—

1	"(A) with the lowest carbon footprint; or
2	"(B) that the Secretary determines would
3	result in the largest net decreases of carbon di-
4	oxide and carbon dioxide equivalent emissions
5	as determined through the carbon accounting
6	assessments under subsection (d).";
7	(4) in subsection (d)—
8	(A) in the subsection heading, by inserting
9	"AND TECHNICAL ASSISTANCE" after "OUT-
10	REACH";
11	(B) by striking "The Secretary shall" and
12	inserting "Using funds made available under
13	subsection (h)(4), the Secretary shall"; and
14	(C) by inserting "and technical assistance"
15	after "outreach";
16	(5) by redesignating subsections (d), (e), and
17	(f) as subsections (f), (g), and (h), respectively;
18	(6) by inserting after subsection (c) the fol-
19	lowing:
20	"(d) Carbon Accounting.—
21	"(1) In general.—Not later than 2 years
22	after the date of the enactment of this subsection,
23	the Secretary shall work with the National Renew-
24	able Energy Laboratory established pursuant to sec-
25	tion 10 of the Solar Energy Research, Development,

1	and Demonstration Act of 1974 to develop carbon
2	accounting estimates for renewable energy systems
3	and energy efficiency upgrades (including a pre-ap-
4	proved technologies list and reserve fund tech-
5	nologies), supported through assistance provided
6	under this section.
7	"(2) Program guidance.—The results of the
8	carbon accounting assessments shall be used to
9	guide program actions as much as possible in order
10	to achieve the purpose specified in subsection (a).
11	"(e) Demonstration Practice.—
12	"(1) In General.—The Secretary shall hold
13	regional demonstration projects that incentivize agri-
14	cultural producers to reduce the carbon footprint or
15	overall carbon equivalent emissions of such pro-
16	ducers to the largest extent possible through the use
17	of both energy efficiency improvements and renew-
18	able energy systems.
19	"(2) Extension.—The Secretary shall promote
20	the results of the regional demonstration projects
21	carried out under paragraph (1)."; and
22	(7) in subsection (h) (as redesignated by para-
23	graph (5))—

1	(A) in paragraph (1), by striking subpara-
2	graphs (A) through (E) and inserting the fol-
3	lowing:
4	"(A) \$50,000,000 for each of fiscal years
5	2014 through 2021;
6	"(B) \$100,000,000 for fiscal year 2022;
7	"(C) \$200,000,000 for fiscal year 2023;
8	"(D) \$300,000,000 for fiscal year 2024;
9	and
10	"(E) $$400,000,000$ for fiscal year 2025
11	and each fiscal year thereafter.";
12	(B) in paragraph (2)(B), by striking "be-
13	come available" and inserting "be used"; and
14	(C) by adding at the end the following:
15	"(4) Administrative expenses.—Not more
16	than 8 percent of the amount made available to
17	carry out this section for a fiscal year may be used
18	for administrative expenses incurred in carrying out
19	this section.
20	"(5) Reservation of funds.—Of the funds
21	made available to carry out this section for a fiscal
22	year, the Secretary may reserve—
23	"(A) not more than 10 percent for grants
24	under subsection (c) to support the adoption of

1	underutilized but proven, commercial tech-
2	nologies; and
3	"(B) not more than 5 percent to carry out
4	subsection (e) to hold regional demonstration
5	projects and promote the results of such
6	projects.".
7	SEC. 602. STUDY ON DUAL-USE RENEWABLE ENERGY SYS-
8	TEMS.
9	(a) In General.—The Secretary of Agriculture shall
10	conduct a study on dual-use renewable energy systems,
11	which shall include—
12	(1) an assessment on the compatibility of dif-
13	ferent species of livestock with different dual-use re-
14	newable energy system designs, including—
15	(A) the optimal height of and distance be-
16	tween solar panels for—
17	(i) livestock grazing; and
18	(ii) shade for livestock;
19	(B) manure management considerations;
20	(C) fencing requirements; and
21	(D) other animal handling considerations;
22	(2) an assessment of the compatibility of dif-
23	ferent crop types with different dual-use renewable
24	energy system designs, including—

1	(A) the optimal height of and distance be-
2	tween solar panels for—
3	(i) plant shading; and
4	(ii) farm equipment use;
5	(B) the impact on crop yield; and
6	(C) market opportunities to sell crops at a
7	premium price;
8	(3) a risk-benefit analysis of dual-use renewable
9	energy systems in different regions of the United
10	States, including a comparison between the total
11	greenhouse gas impact of dual-use renewable energy
12	systems and renewable energy systems that displace
13	agricultural production; and
14	(4) a 5-year plan for how the research and ex-
15	tension activities of the Department of Agriculture
16	could be used to better support dual-use renewable
17	energy systems that do not displace agricultural pro-
18	duction.
19	(b) Definition of Dual-Use Renewable Energy
20	Systems.—In this section, the term "dual-use renewable
21	energy systems" means renewable energy production and
22	agricultural production, including crop or animal produc-
23	tion, occurring together on the same piece of land.
24	(c) Report.—Not later than 1 year after the date
25	of the enactment of this Act, the Secretary of Agriculture

1	shall submit to the Committee on Agriculture of the House
2	of Representatives and the Committee on Agriculture, Nu-
3	trition, and Forestry of the Senate a written report con-
4	taining the results of the study required by subsection (a).
5	SEC. 603. AGSTAR PROGRAM.
6	(a) In General.—The Secretary of Agriculture (in
7	this section referred to as the "Secretary") shall maintain
8	a program, to be known as the AgSTAR program, that—
9	(1) supports anaerobic digestion in the agricul-
10	tural sector to reduce methane emissions from live-
11	stock waste;
12	(2) conducts outreach, education, and training
13	on anaerobic digestion of livestock waste;
14	(3) provides technical and regulatory assistance
15	on anaerobic digestion of livestock waste to stake-
16	holders, including farmers and ranchers, on issues
17	including—
18	(A) permitting;
19	(B) codigestion of multiple organic wastes
20	in one digester; and
21	(C) interconnection to physically link a di-
22	gester to the electrical power grid;
23	(4) promotes centralized, multi-farm digesters
24	that use livestock waste from more than 1 farm or
25	ranch:

1	(5) collects and reports data on anaerobic diges-
2	tion of livestock waste; and
3	(6) maintains a database of on-farm anaerobic
4	digester projects in the United States.
5	(b) Transition.—The Administrator of the Environ-
6	mental Protection Agency shall take such steps as may
7	be appropriate to provide for an orderly transition of the
8	activities carried out under the AgSTAR program of the
9	Environmental Protection Agency to the AgSTAR pro-
10	gram under this section.
11	(c) Administration.—The Secretary shall carry out
12	the program through the Natural Resources Conservation
13	Service, in coordination with the Administrator of the En-
14	vironmental Protection Agency and other Federal agencies
15	as necessary, and in partnership with the Regional Cli-
16	mate Hubs, cooperative extension services, and other
17	agencies of the Department of Agriculture.
18	(d) Limitations on Authorization of Appro-
19	PRIATIONS.—To carry out the AgSTAR program under
20	this section, there are authorized to be appropriated to
21	the Secretary not more than \$5,000,000 for each fiscal
22	year.

1	TITLE VII—FOOD LOSS AND
2	WASTE
3	Subtitle A—Food Date Labeling
4	SEC. 701. DEFINITIONS.
5	In this title:
6	(1) Administering secretaries.—The term
7	"administering Secretaries" means—
8	(A) the Secretary of Agriculture with re-
9	spect to any product that is under the Sec-
10	retary of Agriculture's jurisdiction and is—
11	(i) a poultry product, as defined in
12	section 4 of the Poultry Products Inspec-
13	tion Act (21 U.S.C. 453);
14	(ii) a meat food product, as defined in
15	section 1 of the Federal Meat Inspection
16	Act (21 U.S.C. 601); or
17	(iii) an egg product, as defined in sec-
18	tion 4 of the Egg Products Inspection Act
19	(21 U.S.C. 1033); and
20	(B) the Secretary of Health and Human
21	Services with respect to any product that is
22	under the Secretary of Health and Human
23	Services' jurisdiction and is a food (as defined
24	in section 201 of the Federal Food, Drug, and
25	Cosmetic Act (21 U.S.C. 321)).

1	(2) DISCARD DATE.—The term "discard date"
2	means a date voluntarily printed on food packaging,
3	which signifies the end of the estimated period of
4	shelf life under any stated storage conditions, after
5	which the food labeler advises the product not be
6	consumed.
7	(3) FOOD LABELER.—The term "food labeler"
8	means the producer, manufacturer, distributor, or
9	retailer that places a date label on food packaging
10	of a product.
11	(4) QUALITY DATE.—The term "quality date"
12	means a date voluntarily printed on food packaging
13	that is intended to communicate to consumers the
14	date after which—
15	(A) the quality of the product may begin
16	to deteriorate; but
17	(B) the product remains apparently whole-
18	some food (as defined in subsection $(b)(2)$ of
19	section 22 of the Child Nutrition Act of 1966
20	(42 U.S.C. 1791(b)(2)); also known as the Bill
21	Emerson Good Samaritan Food Donation Act).
22	SEC. 702. QUALITY DATES AND DISCARD DATES.
23	(a) Quality Dates.—
24	(1) In general.—If a food labeler includes a
25	quality date on food packaging, the label shall use

1	the uniform quality date label phrase under para-
2	graph (2).
3	(2) Uniform Phrase.—The uniform quality
4	date label phrase under this paragraph shall be
5	"BEST If Used By" or, if permissible under sub-
6	section (c)(3), the standard abbreviation of "BB",
7	unless and until the administering Secretaries, act-
8	ing jointly, specify through rulemaking another uni-
9	form phrase to be used for purposes of complying
10	with paragraph (1).
11	(3) OPTION OF THE LABELER.—The decisions
12	on whether to include a quality date on food pack-
13	aging and which foods should be so labeled shall be
14	at the discretion of the food labeler.
15	(b) DISCARD DATES.—
16	(1) In general.—If a food labeler includes a
17	discard date on food packaging, the label shall use
18	the uniform discard date label phrase under para-
19	graph (2).
20	(2) Uniform phrase.—The uniform discard
21	date label phrase under this paragraph shall be
22	"USE By" or, if permissible under subsection
23	(e)(3), the standard abbreviation of "UB", unless
24	and until the administering Secretaries, acting joint-
25	ly, specify through rulemaking another uniform

1	phrase to be used for purposes of complying with
2	paragraph (1).
3	(3) OPTION OF THE LABELER.—The decisions
4	on whether to include a discard date on food pack-
5	aging and which foods should be so labeled shall be
6	at the discretion of the food labeler.
7	(c) QUALITY DATE AND DISCARD DATE LABEL-
8	ING.—
9	(1) In general.—The quality date or discard
10	date, as applicable, and immediately adjacent uni-
11	form quality date label phrase or discard date label
12	phrase—
13	(A) shall be—
14	(i) in single easy-to-read type style;
15	and
16	(ii) located in a conspicuous place on
17	the package of the food; and
18	(B) may be on the label or, at the discre-
19	tion of the food labeler, elsewhere on the pack-
20	age.
21	(2) Date format.—Each quality date and dis-
22	card date shall be stated in terms of day and month
23	and, as appropriate, year.
24	(3) Abbreviations.—A food labeler may use a
25	standard abbreviation of "BB" and "UB" for the

1	quality date and discard date, respectively, only if
2	the food packaging is too small to include the uni-
3	form phrase described in subsection $(a)(2)$ or $(b)(2)$,
4	as applicable.
5	(4) Freeze by.—A food labeler may add "or
6	Freeze By" following a quality date or discard date
7	uniform phrase.
8	(d) Infant Formula.—This Act and the amend-
9	ments made by this Act—
10	(1) do not apply with respect to infant formula
11	(as defined in section 201(z) of the Federal Food,
12	Drug, and Cosmetic Act (21 U.S.C. 321(z))); and
13	(2) shall not be construed to affect the require-
14	ments pertaining to infant formula under section
15	412 of the Federal Food, Drug, and Cosmetic Act
16	(21 U.S.C. 350a) and other applicable provisions of
17	law.
18	(e) Education.—Not later than 1 year after the
19	date of enactment of this Act, the administering Secre-
20	taries, acting jointly, shall provide consumer education
21	and outreach on the meaning of quality date and discard
22	date food labels.
23	(f) Rule of Construction; Preemption.—
24	(1) Rule of Construction.—Nothing in this
25	Act or the amendments made by this Act shall be

1	construed to prohibit any State or political subdivi-
2	sion of a State from establishing or continuing in ef-
3	fect any requirement that prohibits the sale or dona-
4	tion of foods based on passage of the discard date.
5	(2) Preemption.—No State or political sub-
6	division of a State may establish or continue in ef-
7	fect any requirement that—
8	(A) relates to the inclusion in food labeling
9	of a quality date or a discard date that is dif-
10	ferent from or in addition to, or that is other-
11	wise not identical with, the requirements of this
12	Act and the amendments made by this Act; or
13	(B) prohibits the sale or donation of foods
14	based on passage of the quality date.
15	(3) Enforcement.—The administering Secre-
16	taries, acting jointly and in coordination with the
17	Federal Trade Commission, shall ensure that the
18	uniform quality date label phrase and uniform dis-
19	card date label phrase are standardized across all
20	food products.
21	(4) Savings.—Notwithstanding paragraph (2),
22	nothing in this Act, nor any amendment made by
23	this Act, nor any standard or requirement imposed
24	pursuant to this Act, shall be construed to preempt,
25	displace, or supplant any State or Federal common

1	law rights or any State or Federal statute creating
2	a remedy for civil relief, including those for civil
3	damage, or a penalty for criminal conduct.
4	(g) Time Temperature Indicator Labels.—
5	Nothing in this Act or the amendments made by this Act
6	shall be construed to prohibit or restrict the use of time-
7	temperature indicator labels or similar technology that is
8	in addition to or in lieu of any uniform quality date label
9	phrase under subsection (a)(2) or uniform discard date
10	label phrase under subsection (b)(2).
11	SEC. 703. MISBRANDING.
12	(a) FDA VIOLATIONS.—Section 403 of the Federal
13	Food, Drug, and Cosmetic Act (21 U.S.C. 343) is amend-
14	ed by adding at the end the following:
15	"(z) If it is food and its labeling is in violation of
16	section 702 of the Agriculture Resilience Act.".
17	(b) POULTRY PRODUCTS.—Section 4(h) of the Poul-
18	try Products Inspection Act (21 U.S.C. 453(h)) is amend-
19	ed—
20	(1) in paragraph (11), by striking "or" at the
21	end;
22	(2) in paragraph (12), by striking the period at
23	the end and inserting "; or"; and
24	(3) by adding at the end the following:

1	"(13) if its labeling is in violation of section
2	702 of the Agriculture Resilience Act.".
3	(c) MEAT PRODUCTS.—Section 1(n) of the Federal
4	Meat Inspection Act (21 U.S.C. 601(n)) is amended—
5	(1) in paragraph (11), by striking "or" at the
6	end;
7	(2) in paragraph (12), by striking the period at
8	the end and inserting "; or"; and
9	(3) by adding at the end the following:
10	"(13) if its labeling is in violation of section
11	702 of the Agriculture Resilience Act.".
12	(d) Egg Products.—Section 7(b) of the Egg Prod-
13	ucts Inspection Act (21 U.S.C. 1036(b)) is amended in
14	the first sentence by adding before the period at the end
15	"or if its labeling is in violation of section 702 of the Agri-
16	culture Resilience Act".
17	SEC. 704. REGULATIONS.
18	Not later than 2 years after the date of enactment
19	of this Act, the Secretaries, acting jointly, shall promul-
20	gate final regulations for carrying out the provisions of
21	this Act and the amendments made by this Act.
22	SEC. 705. DELAYED APPLICABILITY.
23	This Act and the amendments made by this Act shall
24	apply only with respect to food products that are labeled

1	on or after the date that is 2 years after the date of pro-
2	mulgation of final regulations under section 704.
3	Subtitle B—Other Provisions
4	SEC. 711. COMPOSTING AS CONSERVATION PRACTICE.
5	(a) Definitions.—Section 1201(a) of the Food Se-
6	curity Act of 1985 (16 U.S.C. 3801(a)) is amended—
7	(1) by redesignating paragraphs (3) through
8	(27) as paragraphs (4) through (28), respectively;
9	and
10	(2) by inserting after paragraph (2) the fol-
11	lowing:
12	"(3) Compositing practice.—The term
13	'composting practice' means—
14	"(A) an activity (including an activity that
15	does not require the use of a composting facil-
16	ity) to produce compost from organic waste
17	that is—
18	"(i) generated on a farm; or
19	"(ii) brought to a farm from the near-
20	by community; and
21	"(B) the use of compost on a farm to im-
22	prove water retention and soil health, subject to
23	the condition that such a use shall be in compli-
24	ance with applicable Federal, State, and local
25	laws.''.

1	(b) Conservation Stewardship Program.—Sec-
2	tion 1240I(2)(B)(i) of the Food Security Act of 1985 (16
3	U.S.C. 3839aa-21(2)(B)(i)) is amended by inserting "and
4	composting practices" after "agriculture drainage man-
5	agement systems".
6	(c) Environmental Quality Incentives Pro-
7	GRAM.—Section 1240A(6)(A)(ii) of the Food Security Act
8	of 1985 (16 U.S.C. 3839aa–1(6)(A)(ii)) is amended by in-
9	serting ", including composting practices" before the semi-
10	colon at the end.
11	(d) Delivery of Technical Assistance.—Section
12	1242(h) of the Food Security Act of 1985 (16 U.S.C.
13	3842(h)) is amended by adding at the end the following:
14	"(5) Development of composting practice
15	STANDARD.—In addition to conducting a review of
16	any composting facilities practice standard under
17	this subsection, the Secretary shall develop and im-
18	plement a composting practice standard.".
19	SEC. 712. AMENDMENTS TO FEDERAL FOOD DONATION
20	ACT.
21	(a) Purpose.—Section 2 of the Federal Food Dona-
22	tion Act of 2008 (Public Law 110–247; 42 U.S.C. 1792
23	note) is amended by striking "encourage" and inserting
24	"require".

1	(b) Definitions.—Section 3 of the Federal Food
2	Donation Act of 2008 (Public Law 110–247; 42 U.S.C.
3	1792 note) is amended—
4	(1) by redesignating paragraphs (3) and (4) as
5	paragraphs (4) and (5), respectively; and
6	(2) by inserting after paragraph (2) the fol-
7	lowing:
8	"(3) Executive agency.—The term 'executive
9	agency' has the meaning given the term in section
10	133 of title 41, United States Code.".
11	(c) Report on Food Waste by Certain Federal
12	CONTRACTORS.—Section 4 of the Federal Food Donation
13	Act of 2008 (Public Law 110–247; 42 U.S.C. 1792) is
14	amended—
15	(1) by amending subsection (a) to read as fol-
16	lows:
17	"(a) In General.—
18	"(1) Requirement.—Not later than 180 days
19	after the date of enactment of the Act, the Federal
20	Acquisition Regulation issued in accordance with
21	section 1121 of title 41, United States Code, shall
22	be revised to provide that, except as provided in
23	paragraph (2), all contracts of more than \$10,000
24	for the provision, service, or sale of food in the
25	United States, or for the lease or rental of Federal

1	property to a private entity for events at which food
2	is provided in the United States, shall include a
3	clause that—
4	"(A) requires the donation of excess, ap-
5	parently wholesome food to nonprofit organiza-
6	tions that provide assistance to food-insecure
7	people in the United States;
8	"(B) states the terms and conditions de-
9	scribed in subsection (b); and
10	"(C) requires the annual submission, in a
11	form and manner specified by the executive
12	agency awarding the contract, of the report de-
13	scribed in subsection (d).
14	"(2) Exception.—Paragraph (1) shall not
15	apply to a contract with an executive agency that
16	has issued a regulation in effect on the date of en-
17	actment of the Act that prohibits a donation de-
18	scribed in paragraph (1)(A)."; and
19	(2) by adding at the end the following new sub-
20	sections:
21	"(c) Application to Congress.—
22	"(1) Contracts.—This Act shall apply to the
23	House of Representatives and to contracts entered
24	into by the House of Representatives, and to the
25	Senate and to contracts entered into by the Senate,

1	in the same manner and to the same extent as this
2	Act applies to an executive agency and to contracts
3	entered into by an executive agency.
4	"(2) Administration.—For purposes of car-
5	rying out paragraph (1)—
6	"(A) the Chief Administrative Officer of
7	the House of Representatives shall be consid-
8	ered to be the head of the House of Representa-
9	tives; and
10	"(B) the Secretary of the Senate shall be
11	considered to be the head of the Senate.
12	"(d) Data; Reports.—
13	"(1) Report described.—The report de-
14	scribed in this subsection, with respect to a contract
15	described in subsection (a) entered into by a con-
16	tractor and an executive agency, is a report from the
17	contractor to the executive agency that describes, for
18	each month of performance of the contract during
19	the year covered by the report, the weight of appar-
20	ently wholesome food that was, pursuant to the con-
21	tract, disposed of in each of the following manners:
22	"(A) Donation.—Donation by the con-
23	tractor pursuant to this Act (organized by the
24	name of the organization receiving such food).

1	"(B) Composting.—Composting or other
2	recycling by the contractor.
3	"(C) DISCARDING.—Discarding by the
4	contractor (organized by the reason such food
5	was so discarded).
6	"(2) Reports to omb.—Not later than 30
7	days after the date that an executive agency receives
8	a report pursuant to paragraph (1)(C), the agency
9	shall submit a copy of the report to the Director of
10	the Office of Management and Budget.
11	"(3) Reports to congress.—The Director of
12	the Office of Management and Budget shall submit
13	to Congress an annual report aggregating the infor-
14	mation in the reports received pursuant to para-
15	graph (2) during the year covered by the report.".
16	(d) Authorization of Appropriations.—The
17	Federal Food Donation Act of 2008 (42 U.S.C. 1792) is
18	amended by adding at the end the following:
19	"SEC. 5. AUTHORIZATION OF APPROPRIATIONS.
20	"There is authorized to be appropriated to the Sec-
21	retary of Agriculture to carry out this Act \$10,000,000
22	for fiscal year 2022 and each fiscal year thereafter.".

1	SEC. 713. GRANTS FOR COMPOSTING AND ANAEROBIC DI-
2	GESTION FOOD WASTE-TO-ENERGY
3	PROJECTS.
4	(a) In General.—Subtitle G of the Solid Waste Dis-
5	posal Act (42 U.S.C. 6971 et seq.) is amended by adding
6	at the end the following:
7	"SEC. 7011. GRANTS FOR COMPOSTING AND ANAEROBIC DI-
8	GESTION FOOD WASTE-TO-ENERGY
9	PROJECTS.
10	"(a) Grants.—The Administrator shall establish a
11	grant program to award grants to States eligible to receive
12	the grants under subsection (b)(1) to construct large-scale
13	composting or anaerobic digestion food waste-to-energy
14	projects.
15	"(b) Eligible States.—
16	"(1) Eligibility.—In order to be eligible to
17	receive a grant under this section, a State shall—
18	"(A) have in effect a plan to limit the
19	quantity of food waste that may be disposed of
20	in landfills in the State; and
21	"(B) provide to the Administrator—
22	"(i) a written commitment that the
23	State has read and agrees to comply with
24	the Food Recovery Hierarchy of the Envi-
25	ronmental Protection Agency, particularly
26	as applied to apparently wholesome food

1	(as defined in section 22(b) of the Child
2	Nutrition Act of 1966 (42 U.S.C.
3	1791(b))) that may be provided to or re-
4	ceived by the State; and
5	"(ii) a written end-product recycling
6	plan that provides for the beneficial use of
7	the material resulting from any anaerobic
8	digestion food waste-to-energy operation
9	with respect to which the loan or grant is
10	made, in a manner that meets all applica-
11	ble Federal, State, and local laws that pro-
12	tect human health and the environment.
13	"(2) Limitation.—A grant under subsection
14	(a) may not be used for an anaerobic digester that
15	uses solely manure as undigested biomass.
16	"(3) Preference.—The Administrator shall
17	give preference to grants under subsection (a) for
18	anaerobic digesters that use primarily nonedible
19	food, crop waste, or nonedible food and crop waste
20	as undigested biomass.
21	"(c) Authorization of Appropriations.—There
22	is authorized to be appropriated to carry out this section
23	\$100,000,000 for each fiscal year.
24	"(d) State Defined.—In this section, the term
25	'State' means each State of the United States, the District

1	of Columbia, each territory or possession of the United
2	States, and each federally recognized Indian Tribe.".
3	(b) CLERICAL AMENDMENT.—The table of contents
4	for the Solid Waste Disposal Act (42 U.S.C. 6901 et seq.)
5	is amended by inserting after the item relating to section
6	7010 the following:
	"Sec. 7011. Grants for composting and anaerobic digestion food waste-to-energy projects.".
7	SEC. 714. SCHOOL FOOD WASTE REDUCTION GRANT PRO-
8	GRAM.
9	(a) IN GENERAL.—Section 18 of the Richard B. Rus-
10	sell National School Lunch Act (42 U.S.C. 1769) is
11	amended by inserting before subsection (b) the following:
12	"(a) School Food Waste Reduction Grant Pro-
13	GRAM.—
14	"(1) Grant program established.—
15	"(A) IN GENERAL.—The Secretary shall
16	carry out a program to make grants, on a com-
17	petitive basis, to eligible local educational agen-
18	cies to carry out food waste measurement and
19	reporting, prevention, education, and reduction
20	projects.
21	"(B) Regional Balance.—In awarding
22	grants under this subsection, the Secretary
23	shall, to the maximum extent practicable, en-
24	sure that—

1	"(i) a grant is awarded to an eligible
2	local educational agency in each region
3	served by the Administrator of the Food
4	and Nutrition Service; and
5	"(ii) equitable treatment of rural,
6	urban, and tribal communities.
7	"(2) Application.—To be eligible to receive a
8	grant under this subsection, an eligible local edu-
9	cational agency shall submit an application to the
10	Secretary at such time, in such manner, and con-
11	taining such information as the Secretary may re-
12	quire.
13	"(3) Priority.—In making grants under this
14	subsection the Secretary shall give priority to an eli-
15	gible local educational agency that demonstrates in
16	the application under paragraph (2) that such eligi-
17	ble local educational agency will use the grant to—
18	"(A) carry out experiential education ac-
19	tivities that encourage children enrolled in such
20	eligible local educational agency to participate
21	in food waste measurement and education;
22	"(B) prioritize the best use of food in ac-
23	cordance with the Food Recovery Hierarchy
24	published by the Administrator of the Environ-
25	mental Protection Agency;

1	"(C) with respect to food waste prevention
2	and reduction, collaborate with other eligible
3	local educational agencies, tribes, nongovern-
4	mental and community-based organizations,
5	and other community partners;
6	"(D) evaluate the activities described in
7	subparagraphs (A) through (C) and make eval-
8	uation plans; and
9	"(E) establish a food waste measurement,
10	prevention, and reduction project with long-
11	term sustainability.
12	"(4) Federal share.—
13	"(A) IN GENERAL.—The Federal share of
14	a food waste measurement, prevention, and re-
15	duction project funded through a grant awarded
16	under this subsection shall not exceed 75 per-
17	cent of the total cost of such food waste reduc-
18	tion project.
19	"(B) Federal matching.—As a condi-
20	tion of receiving a grant under this subsection,
21	an eligible local educational agency shall provide
22	matching funds in the form of cash or in-kind
23	contributions, including facilities, equipment, or
24	services provided by State and local govern-

1	ments, nonprofit organizations, and private
2	sources.
3	"(5) USE OF FUNDS.—An eligible local edu-
4	cational agency that receives a grant under this sec-
5	tion shall use funds under such grant to carry out
6	at least one of the following:
7	"(A) Planning a food waste measurement,
8	prevention, and reduction project.
9	"(B) Carrying out activities under such a
10	project.
11	"(C) Providing training to support such a
12	project.
13	"(D) Purchasing equipment to support
14	such a project.
15	"(E) Offering food waste education to stu-
16	dents enrolled in such eligible local educational
17	agency.
18	"(6) Evaluation.—
19	"(A) AGREEMENT.—As a condition of re-
20	ceiving a grant under this subsection, each eli-
21	gible local educational agency shall agree to co-
22	operate in an evaluation by the Secretary of the
23	project carried out using grant funds.
24	"(B) Periodic evaluation.—Not later
25	than 2 years after the date of the enactment of

1	this paragraph and every 2 years thereafter, the
2	Secretary shall carry out an evaluation of the
3	grants made under this section that includes—
4	"(i) the amount of Federal funds used
5	to carry out such grants; and
6	"(ii) an evaluation of the outcomes of
7	the projects carried out pursuant to such
8	grants.
9	"(7) Definition of eligible local edu-
10	CATIONAL AGENCY.—In this subsection, the term 'el-
11	igible local educational agency' means a local edu-
12	cational agency that participates in the school lunch
13	program under this Act or the school breakfast pro-
14	gram established under section 4 of the Child Nutri-
15	tion Act of 1966 (42 U.S.C. 1773).".
16	(b) Technical Assistance.—Section 21(b) of the
17	Richard B. Russell National School Lunch Act (42 U.S.C.
18	1769b-1(b)) is amended—
19	(1) in paragraph (2), by striking "and" at the
20	end;
21	(2) in paragraph (3), by striking the period at
22	the end and inserting "; and"; and
23	(3) by adding at the end the following:
24	"(4) food waste measurement, prevention, and
25	reduction.".