

116TH CONGRESS 2D SESSION

H. R. 5861

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

IN THE HOUSE OF REPRESENTATIVES

February 12, 2020

Ms. PINGREE introduced the following bill; which was referred to the Committee on Agriculture, and in addition to the Committees on Ways and Means, Education and Labor, Energy and Commerce, Oversight and Reform, and House Administration, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

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.

- 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. Grants for reimbursement of compliance costs for very small processors of meat food products and poultry products.
- 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.
- 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.

1 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, agro-forestry, advanced
- 19 grazing management and crop-livestock integration,

- other agro-ecological systems, on-farm and food system energy efficiency and renewable energy production, farmland preservation and viability, food waste reduction, and related topics to accelerate progress toward net zero emissions by not later than 2040.
 - (2) Soil Health.—To help achieve the goal specified in subsection (a)—
 - (A) the United States should immediately become a member of the 4 per 1000 Initiative's forum and consortium, hosted by the Consultative Group for International Agricultural Research (commonly referred to as the "CGIAR"), with the aim of increasing total soil carbon stocks by 0.4 percent annually to reduce carbon in the atmosphere, restore soil health and productivity, and thereby improve food security;
 - (B) the agricultural sector should expand adoption of soil health practices (including diverse crop rotations, cover cropping, conservation tillage, perennialization of highly erodible land, agroforestry, composting, biologically based nutrient management, and advanced grazing management including silvopasture) sufficiently to restore at least a quarter of the soil carbon that has been lost in the last 300

years by not later than 2030 and at least half of lost soil carbon by not later than 2040; and

- (C) cover crop acres in the United States should increase to at least 25 percent of crop acres by not later than 2030 and at least 50 percent by not later than 2040, with at least 50 percent of cropland acres covered by crops, cover crops, or residue year-round by not later than 2030 rising to at least 75 percent by not later than 2040.
- (3) FARMLAND PRESERVATION.—To help achieve the goal specified in subsection (a), the rate of conversion in the United States of agricultural land to development, as well as the rate of grassland conversion to cropping, should be reduced by at least 80 percent by not later than 2030 and eliminated by not later than 2040.
- (4) Pasture-based Livestock.—To help achieve the goal specified in subsection (a), the livestock sector in the United States should—
- (A) establish advanced grazing management, including management-intensive rotational grazing, on at least 50 percent of all grazing lands by not later than 2030 and 100

percent of all grazing land by not later than 2040;

- (B) reduce greenhouse gas emissions related to feeding of ruminants by at least a third by not later than 2030 and by at least 50 percent by not later than 2040 by reducing nongrazing feeding of ruminants, growing feed grains and forages with soil health and nutrient management practices that minimize net greenhouse gas emissions from cropland, and designing livestock feed mixtures and supplements to mitigate enteric methane emissions;
- (C) re-integrate livestock and crop production systems at farm, local and regional levels to facilitate environmentally sound management and field application of manure and reduce the need for long-term manure storage by increasing acreage on individual farms under crop-livestock integrated management by at least 50 percent over 2017 levels by not later than 2030 and by 100 percent over 2017 levels by not later than 2040; and
- (D) immediately cease building any new or expanded waste lagoons for confined animal feeding operations and convert at least one

1	third of wet manure handling and storage to al-
2	ternative manure management (as described in
3	section 1240T of the Food Security Act of
4	1985 (as added by this Act)) by not later than
5	2030 and at least two thirds by not later than
6	2040.
7	(5) On-farm renewable energy.—To help
8	achieve the goal specified in subsection (a), the agri-
9	culture sector in the United States should—
10	(A) implement energy audits and energy
11	efficiency improvements on at least 50 percent
12	of farms by not later than 2030 and 100 per-
13	cent of farms by not later than 2040;
14	(B) expand on-farm clean renewable en-
15	ergy production to at least double 2017 levels
16	by not later than 2030 and at least triple by
17	not later than 2040; and
18	(C) install and manage on-farm renewable
19	energy infrastructure in a way that does not
20	adversely impact farmland, soil, and water re-
21	sources, or food production.

(6) FOOD LOSS AND WASTE.—Consistent with the Food Waste Challenge launched by the Department of Agriculture and the Environmental Protection Agency in June 2013 and the national food loss

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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; and
6	(B) at least a 75 percent reduction in food
7	loss and waste by not later than 2040.
8	SEC. 102. ACTION PLAN.
9	(a) Plan Development.—The Secretary shall de-
10	velop a plan for actions to achieve, in combination with
11	the other Federal agencies, the national goals declared by
12	section 101. The plan shall include actions that will make
13	significant and rapid progress toward meeting such goals
14	(b) Actions To Meet Goals.—
15	(1) In general.—Actions selected by the Sec-
16	retary to include in a plan developed under sub-
17	section (a) may include issuing regulations, pro-
18	viding incentives, carrying out research and develop-
19	ment programs, and any other action the Secretary
20	determines appropriate to achieve the goals declared
21	by section 101.
22	(2) Selection.—In selecting actions to include
23	in a plan developed under subsection (a), the Sec-
24	retary shall select actions designed to—

1	(A) fully implement the provisions of this
2	Act (and the amendments made by this Act);
3	(B) provide benefits for farmers and
4	ranchers, rural communities, small businesses,
5	and consumers;
6	(C) improve public health, resilience, and
7	environmental outcomes, especially for rural
8	and low-income households, communities of
9	color, Tribal and indigenous communities, and
10	communities that are disproportionately vulner-
11	able to the impacts of climate change, air and
12	water pollution, and other resource degradation;
13	and
14	(D) prioritize investments that reduce
15	emissions of greenhouse gases and sequester
16	carbon while simultaneously helping to solve
17	other pressing agro-environmental resource con-
18	cerns, increase farming and ranching opportuni-
19	ties, create quality jobs, improve farmworker
20	working conditions and living standards, and
21	make communities more resilient to the effects
22	of climate change.
23	(c) Plan Implementation.—
24	(1) Public comment.—Not later than 12
25	months after the date of enactment of this Act, the

- 1 Secretary shall make the proposed plan developed 2 under subsection (a) available for public comment.
 - (2) Submission.—Not later than 18 months after the date of enactment of this Act, the Secretary shall make public and submit to Congress a plan developed under subsection (a) that incorporates revisions to the proposed plan, as appropriate, to address the recommendations provided by the public pursuant to paragraph (1).
 - (3) Implementation.—Beginning not later than 18 months after the date of enactment of this Act, the Secretary shall implement the plan developed under subsection (a) and submitted to Congress under paragraph (2).
 - (4) Revisions.—Beginning 24 months after the date on which the Secretary submits to Congress the plan under paragraph (2) and not less frequently than once every 24 months thereafter, the Secretary shall review and revise the plan to ensure it is sufficient to achieve the national goals declared by section 101. The Secretary shall include the conclusion of each such review and any revised plan resulting from such review in the next annual report required under paragraph (5).

1	(5) Annual Report.—The Secretary shall
2	issue an annual public report on the plan (including
3	any revisions to such plan), actions taken pursuant
4	to such plan, and the effects of such actions, during
5	the preceding calendar year.
6	TITLE II—RESEARCH
7	SEC. 201. RESEARCH, EXTENSION, AND EDUCATION PUR-
8	POSE.
9	Section 1402 of the National Agricultural Research,
10	Extension, and Teaching Policy Act of 1977 (7 U.S.C.
11	3101) is amended—
12	(1) by redesignating paragraphs (8) and (9) as
13	paragraphs (9) and (10), respectively; and
14	(2) by inserting after paragraph (7) the fol-
15	lowing:
16	"(8) accelerate the ability of agriculture and the
17	food system of the United States to first achieve net
18	zero carbon emissions and then go further to be car-
19	bon positive by removing additional carbon dioxide
20	from the atmosphere;".
21	SEC. 202. REGIONAL HUBS FOR RISK ADAPTATION AND
22	MITIGATION TO CLIMATE CHANGE.
23	Title IV of the Agricultural Research, Extension, and
24	Education Reform Act of 1998 is amended by inserting

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

1	"(A) Within the Department of Agri-
2	culture, the following agencies:
3	"(i) The Natural Resource Conserva-
4	tion Service.
5	"(ii) The Farm Service Agency.
6	"(iii) The Risk Management Agency.
7	"(iv) The Animal and Plant Health
8	Inspection Service.
9	"(v) The National Institute for Food
10	and Agriculture.
11	"(B) The Department of the Interior.
12	"(C) The Department of Energy.
13	"(D) The Environmental Protection Agen-
14	cy.
15	"(E) The United States Geological Survey.
16	"(F) National Oceanic and Atmospheric
17	Administration.
18	"(G) National Aeronautics and Space Ad-
19	ministration.
20	"(H) Other Federal agencies as the Sec-
21	retary determines appropriate.
22	"(2) Partners.—The regional hubs estab-
23	lished under subsection (a) shall work in close part-
24	nership with other stakeholders and partners, includ-
25	ing—

1	"(A) colleges and universities;
2	"(B) cooperative extension services (as de-
3	fined in section 1404 of the Food and Agri-
4	culture Act of 1977 (7 U.S.C. 3103));
5	"(C) State agricultural experiment stations
6	(as defined in such section);
7	"(D) private entities;
8	"(E) State, local and regional govern-
9	ments;
10	"(F) Tribes;
11	"(G) agriculture and commodity organiza-
12	tions;
13	"(H) nonprofit and community-based orga-
14	nizations; and
15	"(I) other partners, as determined by the
16	Secretary.
17	"(d) Responsibilities.—A regional hub established
18	under this section shall—
19	"(1) offer tools, strategies management options,
20	and technical support to farmers, ranchers, and for-
21	est landowners to help such farmers, ranchers, and
22	landowners mitigate and adapt to climate change;
23	"(2) direct farmers, ranchers, and forest land-
24	owners to Federal agencies that can provide pro-
25	gram support to enable such farmers, ranchers, and

- 1 forest landowners to implement science-informed 2 management practices that address climate change;
- 3 "(3) determine how climate and weather projec-4 tions will impact the agricultural and forestry sec-5 tors;
 - "(4) provide periodic regional assessments of risk and vulnerability in the agricultural and forestry sectors to help farmers, ranchers, and forest landowners better understand the potential direct and indirect impacts of climate change and to inform the United States Global Change Research Program;
 - "(5) provide to farmers, ranchers, forest landowners, and rural communities outreach, education,
 and extension on science-based risk management
 through partnerships with the land-grant colleges
 and universities (as defined in section 1404 of the
 Food and Agriculture Act of 1977 (7 U.S.C. 3103)),
 cooperative extension services, and other entities;
 - "(6) work with any cooperative extension services (as defined in section 1404 of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (7 U.S.C. 3103)), conservation districts, and non-governmental organizations involved in farmer outreach in the region served by such hub to

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1	assist producers in developing business plans and
2	conservation plans that take into account emerging
3	climate risk science with respect to crop, production,
4	and conservation system changes that will help pro-
5	ducers adapt to a changing climate; and
6	"(7) establish, working in partnership with pro-
7	grams and projects carried out under subtitle B of
8	title XVI of the Food, Agriculture, Conservation,
9	and Trade Act of 1990 (7 U.S.C. 5801 et seq.), ad-
10	ditional partnerships with farmers and non-profit
11	and community-based organizations to conduct ap-
12	plied on-farm research on climate change.
13	"(e) Priorities.—A regional hub established under
14	this section shall prioritize research and data collection ac-
15	tivities in the following areas:
16	"(1) Improved measurement and monitoring
17	of—
18	"(A) soil organic carbon sequestration; and
19	"(B) total net greenhouse gas impacts of
20	different farming systems and practices.
21	"(2) Lifecycle analysis for total net greenhouse
22	gas emissions related to—
23	"(A) alternative cropping systems;
24	"(B) alternative livestock production sys-
25	tems:

1	"(C) integrated cropping-livestock systems;
2	"(D) alternative biofuel crop production
3	systems and biofuel end uses;
4	"(E) alternative agroforestry practices and
5	systems; and
6	"(F) alternative forestry management sys-
7	tems.
8	"(3) Research and education on—
9	"(A) optimal soil health practices;
10	"(B) advanced biological nutrient manage-
11	ment based on optimal soil health practices;
12	"(C) enhanced synergies between crop
13	roots and soil biota;
14	"(D) linkages between soil, plant, animal,
15	and human health;
16	"(E) adaption and mitigation needs of
17	stakeholders;
18	"(F) new crops or new varieties to help
19	producers be profitable while adapting to a
20	changing climate;
21	"(G) social and economic barriers to stake-
22	holder adoption of new practices that improve
23	adaptation, mitigation, and soil sequestration;
24	and

1	"(H) evaluation and assessment of climate-
2	related decision tools of the Department of Ag-
3	riculture.
4	"(4) Grazing-based livestock management sys-
5	tems to optimize net greenhouse gas footprint in-
6	cluding—
7	"(A) grazing land carbon sequestration;
8	and
9	"(B) mitigation of enteric methane.
10	"(f) Stakeholder Input.—Each regional hub es-
11	tablished under this section shall solicit input from stake-
12	holders on pressing needs, important issues, and outreach
13	strategies through a variety of mechanisms including re-
14	gional stakeholder committees and may partner with
15	stakeholders in conducting research and developing tools.
16	"(g) Risk Management.—
17	"(1) In general.—The Secretary shall appoint
18	a team of individuals representing the regional hubs,
19	regional hub partners, and the Risk Management
20	Agency to develop recommendations to better ac-
21	count for—
22	"(A) climate risk in actuarial tables; and
23	"(B) soil health and other risk-reducing
24	conservation activities in the Federal crop in-

1	surance program under the Federal Crop Insur-
2	ance Act (7 U.S.C. 1508 et seq.).
3	"(2) Submission of Recommendations.—
4	The team appointed under paragraph (1) shall sub-
5	mit to the Secretary on an iterative basis, but not
6	less frequently than once every two years, the team's
7	recommendations developed pursuant to such para-
8	graph.
9	"(h) AUTHORIZATION OF APPROPRIATIONS.—There
10	is authorized to be appropriated to carry out this section
11	\$50,000,000 for each fiscal years 2021 through 2030.".
12	SEC. 203. SUSTAINABLE AGRICULTURE RESEARCH AND
13	EDUCATION RESILIENCE INITIATIVE.
14	(a) Sustainable Agriculture Research and
15	Education.—Section 1619 of the Food, Agriculture,
16	Conservation, and Trade Act of 1990 (7 U.S.C. 5801) is
17	amended—
18	(1) in subsection (a)—
19	(A) in paragraph (5), by striking "and" at
20	the end;
21	(D) in nonequal (C) by striking the ne
21	(B) in paragraph (6), by striking the pe-
22	riod at the end and inserting "; and"; and

1	"(7) increase resilience in the context of a
2	changing climate and related economic, social, and
3	environmental shocks."; and
4	(2) in subsection (b)—
5	(A) in paragraph (2)—
6	(i) by striking "management" and in-
7	serting "systems and practices"; and
8	(ii) by inserting "resilience," after
9	"profitability,"; and
10	(B) by amending paragraph (3) to read as
11	follows:
12	"(3) The term 'resilience' means, with respect
13	to an agricultural management system, the ability of
14	such system to absorb and recover from climate and
15	other disturbances, such that the system thrives in
16	the face of severe shocks.".
17	(b) Eligibility of Tribal Colleges To Enter
18	Into Research and Extension Project Agree-
19	MENTS.—Section 1621(b) of the Food, Agriculture, Con-
20	servation, and Trade Act of 1990 (7 U.S.C. 5811(b)) is
21	amended by striking "or Federal or State" inserting
22	"1994 Institutions (as defined in section 532 of the Eq-
23	uity in Educational Land-Grant Status Act of 1994 (7
24	U.S.C. 301 note; Public Law 103–382)), or Federal,
25	State, or Tribal".

1	(c) AGRICULTURAL AND FOOD SYSTEM RESILIENCE
2	Initiative.—
3	(1) In general.—Section 1627 of the Food,
4	Agriculture, Conservation, and Trade Act of 1990 (7
5	U.S.C. 5821) is amended—
6	(A) in subsection (a)—
7	(i) in the matter preceding paragraph
8	(1)—
9	(I) by striking the first sentence
10	and inserting the following: "In close
11	conjunction with programs and
12	projects established under sections
13	1621 and 1623, the Secretary shall
14	establish a research, education, exten-
15	sion, and outreach initiative, which
16	may include farmer and rancher re-
17	search and demonstration grants, and
18	use an interdisciplinary approach
19	wherever appropriate, to increase the
20	resilience of agriculture and the food
21	system in the context of a changing
22	climate and related economic, social,
23	and environmental shocks."; and

1	(II) in the second sentence, by
2	striking "program" and inserting
3	"initiative";
4	(ii) by striking paragraph (3);
5	(iii) by redesignating paragraphs (1),
6	(2), (4), and (5) as paragraphs (3), (4),
7	(5), and (6), respectively;
8	(iv) by inserting before paragraph (3)
9	(as so redesignated), the following:
10	"(1) to equip farmers to prepare for, adapt, and
11	transform their farming systems when confronted by
12	shocks and stresses to their agricultural production
13	and livelihoods;
14	"(2) to support local and regional food systems
15	that support resilience and enhance local access and
16	control over productive resources;";
17	(v) in paragraph (3) (as redesignated
18	by clause (iii))—
19	(I) by inserting "climate and"
20	after "adverse";
21	(II) by inserting "soil quality
22	and" after "enhance"; and
23	(III) by inserting "reduce de-
24	pendency on fossil fuels," after "in-
25	puts,";

1	(vi) in paragraph (4) (as redesignated
2	by clause (iii)), by inserting "increase resil-
3	ience" after "practices to"; and
4	(vii) in paragraph (6) (as redesignated
5	by clause (iii)), by striking "integrated"
6	and all that follows through "programs"
7	and inserting "policies and programs to
8	improve food and agricultural system resil-
9	ience";
10	(B) by striking subsections (b), (c), and
11	(d); and
12	(C) by inserting after subsection (a) the
13	following:
14	"(b) Funding.—
15	"(1) Mandatory funding.—Of the funds of
16	the Commodity Credit Corporation, the Secretary
17	shall make available to carry out this section
18	\$50,000,000 for fiscal year 2021 and each fiscal
19	year thereafter.
20	"(2) DISCRETIONARY FUNDING.—There are au-
21	thorized to be appropriated to carry out this section
22	through the National Institute of Food and Agri-
23	culture \$20,000,000 for each of fiscal years 2013
24	through 2023.".

1	(2) Conforming amendment.—The chapter
2	heading of chapter 2 of subtitle B of title XVI of the
3	Food, Agriculture, Conservation, and Trade Act of
4	1990 (7 U.S.C. 5821) is amended to read as follows:
5	"AGRICULTURAL AND FOOD SYSTEM
6	RESILIENCE INITIATIVE".
7	SEC. 204. SUSTAINABLE AGRICULTURE TECHNOLOGY DE-
8	VELOPMENT AND TRANSFER PROGRAM.
9	(a) Technical Guides and Books.—Section 1628
10	of the Food, Agriculture, Conservation, and Trade Act of
11	1990 (7 U.S.C. 5831) is amended—
12	(1) in subsection (d)—
13	(A) by redesignating paragraphs (3) and
14	(4) as paragraphs (4) and (5), respectively; and
15	(B) by inserting after paragraph (2) the
16	following:
17	"(3) adapting to and mitigating the effects of
18	climate change;"; and
19	(2) in subsection (e), by striking "Soil Con-
20	servation" and inserting "Natural Resources Con-
21	servation".
22	(b) National Training Program.—Section 1629
23	of the Food, Agriculture, Conservation, and Trade Act of
24	1990 (7 U.S.C. 5832) is amended—
25	(1) in subsection (g)—

1	(A) in paragraph (5), by striking "Soil
2	Conservation Service and the Agricultural Sta-
3	bilization and Conservation Service" and insert-
4	ing "Natural Resources Conservation Service
5	and the Farm Service Agency';
6	(B) by redesignating paragraphs (10) and
7	(11) as paragraphs (11) and (12), respectively;
8	and
9	(C) by inserting after paragraph (9) the
10	following;
11	"(10) develop and provide information con-
12	cerning climate change adaptation and mitigation
13	developed under this subtitle and other research and
14	education programs of the Department;";
15	(2) in subsection (h), by striking "Soil Con-
16	servation Service" and inserting "Natural Resources
17	Conservation Service"; and
18	(3) in subsection (i), by striking "2023" and in-
19	serting the following: "2020, and \$30,000,000 for
20	each of fiscal years 2021 through 2030".
21	SEC. 205. LONG-TERM AGROECOLOGICAL NETWORK.
22	Title IV of the Agricultural Research, Extension, and
23	Education Reform Act of 1998 is amended by inserting
24	after section 401 (as added by section 201), the following:

1 "SEC. 402. LONG-TERM AGROECOLOGICAL NETWORK.

2	"(a) In General.—The Secretary, acting through	
3	the Administrator of the Agricultural Research Service,	
4	shall provide for the establishment and maintenance of a	
5	network of research sites operated by the Agricultural Re-	
6	search Service for research on the sustainability of agricul-	
7	tural systems in the United States, to be known as the	
8	'Long-Term Agroecological Research Network' (in this	
9	section referred to as the 'Network') with the following	
10	goals:	
11	"(1) To understand and enhance the sustain-	
12	ability of agriculture.	
13	"(2) To integrate research projects with com-	
14	mon measurements on multiple agroecosystems	
15	(such as croplands, rangelands, and pasturelands).	
16	"(3) To develop new farming systems, practices,	
17	and technologies to address agricultural challenges	
18	and opportunities, including challenges and opportu-	
19	nities posed by climate change.	
20	"(b) ACTIVITIES DESCRIBED.—The activities of the	
21	Network shall include—	
22	"(1) research conducted for a minimum of 30	
23	years to develop novel scientific insights at regional	
24	and national scales and evaluate the applicability	
25	and adaptation to local conditions;	

1	"(2) the establishment and maintenance of mul-
2	tiple sites or research centers that capture the diver-
3	sity of agricultural production systems that function
4	as a network; and
5	"(3) the coordination of large-scale data collec-
6	tion related to the sustainability of agricultural sys-
7	tems and the provision of infrastructure to research
8	sites to allow for analyzing and disseminating such
9	data.
10	"(c) Coordination of Research.—The Secretary,
11	shall, in carrying out subsection (a)—
12	"(1) coordinate long-term agroecological re-
13	search to improve understanding within the Depart-
14	ment of Agriculture of how agroecosystems function
15	at the field, regional, and national scales;
16	"(2) designate research sites for inclusion in
17	the Network that are representative of major agri-
18	cultural regions;
19	"(3) ensure that every research site so included
20	conducts experiments with common goals and meth-
21	ods—
22	"(A) to increase agricultural productivity
23	and profitability;

1	"(B) to enhance agricultural resilience and
2	the capacity to mitigate and adapt to climate
3	change;
4	"(C) boost the provision of ecosystem serv-
5	ices from agricultural landscapes; and
6	"(D) improve opportunities for rural com-
7	munities;
8	"(4) make data collected at research sites in-
9	cluded in the Network open to researchers and the
10	public whenever practicable, and integrate data
11	across the network and partner sites; and
12	"(5) provide infrastructure to research sites in-
13	cluded in the Network for data collection, common
14	measurements, and data streams that complement
15	other national networks, such as the National Eco-
16	logical Observatory Network (NEON) and the Long-
17	Term Ecological Research (LTER) network.
18	"(d) Authorization of Appropriations.—There
19	are authorized to be appropriated to carry out this section
20	\$50,000,000 for each of fiscal years 2021 through 2030.".
21	SEC. 206. PUBLIC BREED AND CULTIVAR RESEARCH.
22	(a) In General.—The Competitive, Special, and Fa-
23	cilities Research Grant Act (7 U.S.C. 3157) is amended—
24	(1) in subsection (a), by adding at the end the
25	following:

- 1 "(3) Definitions.—In this section:
- "(A) CONVENTIONAL BREEDING.—The term 'conventional breeding' means the development of new varieties of an organism through controlled mating and selection without the use of transgenic methods, provided that information gained through gene sequencing, genomic, and metabolomics anal-yses can be used to inform mating and selection choices.
 - "(B) CULTIVAR.—The term 'cultivar' means a variety of a species of plant that has been intentionally selected for use in cultivation because of the improved characteristics of that variety of the species.
 - "(C) Public breed and cultivar' means an animal breed or crop cultivar that is the commercially available end product of a publicly funded breeding program that has been sufficiently tested to demonstrate improved characteristics and stable performance, and for which the farmers' rights to save and use, and breeders' rights to share and improve are protected."; and
- 24 (2) by adding at the end the following:

1	"(l) Public Breed and Cultivar Development
2	Funding.—
3	"(1) In general.—Of the amount of grants
4	made under subsections (b) and (c), the Secretary
5	shall ensure that not less than the following amounts
6	are used for competitive research grants that sup-
7	port the development of public breeds and cultivars:
8	"(A) \$50,000,000 for fiscal year 2021;
9	"(B) $60,000,000$ for fiscal year 2022;
10	"(C) \$70,000,000 for fiscal year 2023;
11	"(D) \$80,000,000 for fiscal year 2024;
12	"(E) $$90,000,000$ for fiscal year 2025; and
13	"(F) $$100,000,000$ for each of the fiscal
14	years 2026 through 2030.
15	"(2) Priority.—In making grants under para-
16	graph (1), the Secretary shall give priority to high-
17	potential research projects that lead to the release of
18	public breeds and cultivars that assist producers in
19	mitigating and adapting to climate change.
20	"(3) Grants.—The Secretary shall ensure
21	that—
22	"(A) the terms for any competitive grants
23	made under subsection (b) are not less than 5
24	years;

1	"(B) any such term or associated renewal
2	process facilitates the development and commer-
3	cialization of public breeds and cultivars
4	through long-term grants; and
5	"(C) when necessary, Tribal consultation
6	occurs to ensure public breed and cultivar de-
7	velopment does not infringe on Tribes' abilities
8	to maintain culturally sensitive breeds and
9	cultivars.".
10	(b) Public Breed and Cultivar Research Ac-
11	TIVITIES COORDINATOR.—Section 251 of the Department
12	of Agriculture Reorganization Act of 1994 (7 U.S.C.
13	6971) is amended—
14	(1) in subsection (e), by adding at the end the
15	following:
16	"(7) Public breed and cultivar research
17	ACTIVITIES COORDINATOR.—
18	"(A) IN GENERAL.—The Under Secretary
19	shall appoint a coordinator within the Office of
20	the Chief Scientist that reports to the Under
21	Secretary to coordinate research activities at
22	the Department relating to the breeding of pub-
23	lic breeds and cultivars (as defined in para-
24	graph (3) of subsection (a) of the Competitive,

1	Special, and Facilities Research Grant Act (7
2	U.S.C. 3157(a))).
3	"(B) Duties of Coordinator.—The co-
4	ordinator appointed under subparagraph (A)
5	shall—
6	"(i) coordinate animal and plant
7	breeding research activities funded by the
8	Department relating to the development
9	and delivery to producers of climate resil-
10	ient and regionally adapted public breeds
11	and crop cultivars;
12	"(ii)(I) carry out ongoing analysis and
13	track activities for any Federal research
14	funding supporting animal and plant
15	breeding (including any public breeds and
16	cultivars developed with Federal funds);
17	and
18	"(II) ensure that the analysis and ac-
19	tivities are made available to the public not
20	later than 60 days after the last day of
21	each fiscal year;
22	"(iii) develop a strategic plan that es-
23	tablishes targets for public breed and
24	cultivar research investments across the
25	Department to ensure that a diverse range

1	of animal and crop needs are being met in
2	a timely and transparent manner, with a
3	strong focus on delivery of resource-effi-
4	cient, stress-tolerant, regionally adapted
5	animal breeds and crop cultivars that help
6	build agricultural resilience to climate
7	change and support on-farm carbon se-
8	questration and greenhouse gas mitigation,
9	nutritional quality, and other farmer-iden-
10	tified priority agronomic and market traits;
11	"(iv) convene a working group in
12	order to carry out the coordination func-
13	tions described in this subparagraph com-
14	prised of individuals who are responsible
15	for the management, administration, or
16	analysis of public breeding programs with-
17	in the Department from—
18	"(I) the National Institute of
19	Food and Agriculture;
20	"(II) the Agricultural Research
21	Service; and
22	"(III) the Economic Research
23	Service;

1	"(v) in order to maximize delivery of
2	public breeds and cultivars, promote col-
3	laboration among—
4	"(I) the coordinator;
5	"(II) the working group convened
6	under clause (iv);
7	"(III) the advisory council estab-
8	lished under section 1634 of the
9	Food, Agriculture, Conservation, and
10	Trade Act of 1990 (7 U.S.C. 5843);
11	"(IV) genetic resource conserva-
12	tion centers;
13	"(V) land-grant colleges and uni-
14	versities (as defined in section 1404 of
15	the National Agricultural Research,
16	Extension, and Teaching Policy Act of
17	1977 (7 U.S.C. 3103));
18	"(VI) Hispanic-serving institu-
19	tions (as defined in section 502(a) of
20	the Higher Education Act of 1965 (20
21	U.S.C. 1101a(a));
22	"(VII) Native American-serving
23	nontribal institutions (as defined in
24	section 371(c) of the Higher Edu-

1	cation Act of 1965 (20 U.S.C.
2	1067q(e)));
3	"(VIII) Tribal organizations (as
4	defined in section 4 of the Indian
5	Self-Determination and Education As-
6	sistance Act (25 U.S.C. 5304));
7	"(IX) nongovernmental organiza-
8	tions with interest or expertise in pub-
9	lic breeding; and
10	"(X) public and private plant
11	breeders;
12	"(vi) convene regular stakeholder lis-
13	tening sessions to provide input on na-
14	tional and regional priorities for public
15	breed and cultivar research activities
16	across the Department; and
17	"(vii) evaluate and make rec-
18	ommendations to the Under Secretary on
19	training and resource needs to meet future
20	breeding challenges, including the chal-
21	lenges stemming from climate change."
22	and
23	(2) in subsection $(f)(1)(D)(i)$, by striking "(7)
24	U.S.C. 450i(b))" and inserting "(7 U.S.C.
25	3157(b))".

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

- 1 "(c) Report.—Not later than October 1 of each
- 2 year, the Secretary shall submit to Congress a report that
- 3 provides information on all public breed and cultivar re-
- 4 search funded by the Agricultural Research Service and
- 5 the National Institute for Food and Agriculture, includ-
- 6 ing—
- 7 "(1) a list of public breeds and cultivars devel-
- 8 oped and released in a commercially available form;
- 9 "(2) areas of high priority research;
- 10 "(3) identified research gaps relating to public
- 11 breed and cultivar development, including newly
- emerging needs stemming from climate change; and
- "(4) an assessment of the state of commer-
- cialization for breeds and cultivars that have been
- developed.
- 16 "(d) Funding.—Of the funds made available to the
- 17 Administrator of the Agricultural Research Service for a
- 18 fiscal year, not less than \$50,000,000 shall be made avail-
- 19 able to carry out this section.".
- 20 SEC. 207. ARS CLIMATE SCIENTIST CAREER DEVELOPMENT
- PROGRAM.
- 22 (a) In General.—The Secretary of Agriculture
- 23 shall, in accordance with section 922 of the Federal Agri-
- 24 culture Improvement and Reform Act of 1996 (7 U.S.C.
- 25 2279c), carry out an internship program within the Agri-

1	cultural Research Service for graduate students pursuing
2	a degree or conducting research related to climate change
3	and agriculture.
4	(b) Funding.—Of the funds of the Commodity Cred-
5	it Corporation, the Secretary may use not more than
6	\$10,000,000 for each of fiscal years 2021 through 2030
7	to carry out the program referred to in subsection (a).
8	SEC. 208. AGRICULTURAL CLIMATE ADAPTATION AND MITI-
9	GATION THROUGH AFRI.
10	Subsection (b)(2) of the Competitive, Special, and
11	Facilities Grant Act (7 U.S.C. 3157(b)(2)) is amended by
12	adding at the end the following:
13	"(G) AGRICULTURAL CLIMATE ADAPTA-
14	TION AND MITIGATION.—Agricultural climate
15	adaptation and mitigation, including—
16	"(i) strategies for agricultural adapta-
17	tion to climate change, including adapta-
18	tion strategies for small and medium-sized
19	dairy, livestock, crop and other commodity
20	operations;
21	"(ii) on-farm mitigation strategies and
22	solutions, including infrastructure, equip-
23	ment, and agricultural ecosystems-based
24	strategies;

1	"(iii) the economic costs, benefits, ef-
2	fectiveness, and viability of producers
3	adopting conservation practices and tech-
4	nologies designed to improve soil health,
5	including carbon sequestration in soil;
6	"(iv) the effectiveness of existing con-
7	servation practices and enhancements to
8	improve soil health, including the effective-
9	ness to sequester earbon in soil;
10	"(v) new technologies to measure and
11	verify environmentally beneficial outcomes
12	of healthy soils practices, including carbon
13	sequestration in soil; and
14	"(vi) links between human health and
15	soil health.".
16	SEC. 209. SPECIALTY CROP RESEARCH INITIATIVE.
17	Section 412 of the Agricultural Research, Extension,
18	and Education Reform Act of 1998 (7 U.S.C. 7632) is
19	amended—
20	(1) in subsection (b)—
21	(A) in the matter preceding paragraph (1),
22	by inserting ", multi-crop production systems,"
23	after "specific crops";
24	(B) in paragraph $(4)(E)$, by striking ";
25	and" at the end and inserting a semicolon;

1	(C) in paragraph (5), by striking the pe-
2	riod at the end and inserting "; and"; and
3	(D) by adding at the end the following:
4	"(6) efforts to mitigate and adapt to climate
5	change, including—
6	"(A) on-farm mitigation strategies and so-
7	lutions, including agricultural ecosystems-based
8	strategies;
9	"(B) conservation practices and tech-
10	nologies designed to improve soil health, includ-
11	ing those that sequester carbon in soil; and
12	"(C) breeding research and cultivar devel-
13	opment to help adapt to climate change."; and
14	(2) in subsection (g)(3)(A), by striking "equal
15	to not less than the amount of the grant" and in-
16	serting "in an amount that is equal to not less than
17	25 percent of the funds provided through the
18	grant".
19	SEC. 210. INTEGRATED PEST MANAGEMENT.
20	Section 406 of the Agricultural Research, Extension,
21	and Education Reform Act of 1998 (7 U.S.C. 7626) is
22	amended—
23	(1) by redesignating subsections (d), (e), and
24	(f) as subsections (f), (g), and (h), respectively; and

	11
1	(2) by inserting after subsection (c) the fol-
2	lowing:
3	"(d) Emphasis on Climate Resilience.—The Sec-
4	retary shall ensure that grants made under this section
5	are, where appropriate, consistent with the development
6	of food and agricultural systems that improve climate re-
7	silience.
8	"(e) Ecologically Based Pest Management.—
9	The Secretary shall ensure that grants made under this
10	section to support pest management prioritize ecologically
11	based approaches that are effective, affordable, and envi-
12	ronmentally sound, maintain agricultural productivity and
13	healthy communities, and improve climate resilience.".
14	SEC. 211. NATIONAL ACADEMY OF SCIENCES STUDY.
15	(a) STUDY.—The Secretary of Agriculture, in con-
16	sultation with the Secretary of Health and Human Serv-
17	ices, shall enter into an agreement with the National
18	Academy of Sciences, under which the National Academy
19	agrees to produce an analysis of current scientific findings
20	to determine the links between human health and soil
21	health by—
22	(1) reviewing existing research on the connec-
72	tions between the human microbians and soi

microbiome;

1	(2) identifying linkages between soil manage-
2	ment practices and the nutrient density of foods for
3	human consumption;
4	(3) exploring potential impact of increasing soil
5	organic matter across the agricultural and food
6	value chain;
7	(4) determining how to best leverage healthy
8	soil management practices to maximize benefits and
9	minimize adverse impacts on human health; and
10	(5) highlighting areas for future research.
11	(b) Report.—The agreement under subsection (a)
12	shall include a requirement that the National Academy of
13	Sciences, not later than 2 years after the date of the enact-
14	ment of this Act, submit to the Committee on Agriculture
15	of the House of Representatives and the Committee on
16	Agriculture, Nutrition, and Forestry of the Senate a re-
17	port on the results of the study conducted pursuant to
18	subsection (a).
19	SEC. 212. APPROPRIATE TECHNOLOGY TRANSFER TO
20	RURAL AREAS.
21	Section 310B(i)(2) of the Consolidated Farm and
22	Rural Development Act (7 U.S.C. 1932(i)(2)) is amend-
23	ed—
24	(1) in subparagraph (C), by striking "and" at
25	the end; and

1	(2) by redesignating subparagraph (D) as sub-
2	paragraph (E) and inserting after subparagraph (C)
3	the following:
4	"(D) increase resilience by adapting to and
5	mitigating the effects of climate change; and".
6	TITLE III—SOIL HEALTH
7	SEC. 301. CROP INSURANCE.
8	(a) Voluntary Good Farming Practices.—Sec-
9	tion 508(a)(3) of the Federal Crop Insurance Act (7
10	U.S.C. 1508(a)(3)) is amended—
11	(1) in subparagraph (A)(iii), by striking "prac-
12	tices" the first place it appears and all that follows
13	through the period at the end and inserting "prac-
14	tices.";
15	(2) by redesignating subparagraphs (B) and
16	(C) as subparagraphs (C) and (D), respectively; and
17	(3) by inserting after subparagraph (A) the fol-
18	lowing:
19	"(B) GOOD FARMING PRACTICES.—For
20	purposes of subparagraph (A)(iii), good farming
21	practices include the following:
22	"(i) Scientifically sound, sustainable,
23	and organic farming practices, as deter-
24	mined by the Secretary.

1	"(ii) Conservation farming practices
2	that are approved by—
3	"(I) the Natural Resources Con-
4	servation Service; or
5	"(II) an agricultural expert, as
6	determined by the Secretary.".
7	(b) Risk-Reduction-Based Discounts.—Section
8	508(d) of the Federal Crop Insurance Act (7 U.S.C.
9	1508(d)) is amended—
10	(1) by redesignating paragraph (4) as para-
11	graph (5); and
12	(2) by inserting after paragraph (3) the fol-
13	lowing:
14	"(4) Risk-reduction-based discount.—
	"(4) Risk-reduction-based discount.— "(A) In general.—Effective beginning
14	
14 15	"(A) In General.—Effective beginning
14 15 16	"(A) In General.—Effective beginning with the 2021 reinsurance year, the Corpora-
14 15 16 17	"(A) In General.—Effective beginning with the 2021 reinsurance year, the Corporation may provide a risk-reduction-based pre-
14 15 16 17	"(A) In General.—Effective beginning with the 2021 reinsurance year, the Corporation may provide a risk-reduction-based premium discount for a producer of an agricultural
114 115 116 117 118	"(A) In General.—Effective beginning with the 2021 reinsurance year, the Corporation may provide a risk-reduction-based premium discount for a producer of an agricultural commodity who uses risk-reduction farming
114 115 116 117 118 119 220	"(A) In General.—Effective beginning with the 2021 reinsurance year, the Corporation may provide a risk-reduction-based premium discount for a producer of an agricultural commodity who uses risk-reduction farming practices, as determined by the Corporation.
14 15 16 17 18 19 20 21	"(A) In General.—Effective beginning with the 2021 reinsurance year, the Corporation may provide a risk-reduction-based premium discount for a producer of an agricultural commodity who uses risk-reduction farming practices, as determined by the Corporation. "(B) Risk-reduction farming practices."
114 115 116 117 118 119 220 221	"(A) In General.—Effective beginning with the 2021 reinsurance year, the Corporation may provide a risk-reduction-based premium discount for a producer of an agricultural commodity who uses risk-reduction farming practices, as determined by the Corporation. "(B) Risk-reduction farming practices.— For purposes of subparagraph (A),

1	"(ii) Resource-conserving crop rota-
2	tions.
3	"(iii) Management-intensive rotational
4	grazing.
5	"(iv) Composting.
6	"(v) Other risk-reducing and soil
7	health promoting farming practices as de-
8	termined by the Corporation.".
9	(e) Crop Production on Native Sod Applica-
10	BILITY.—
11	(1) Amendment.—Section 508(o) of the Fed-
12	eral Crop Insurance Act (7 U.S.C. 1508(o)) is
13	amended by striking paragraph (3).
14	(2) Effective date.—The amendment made
15	by paragraph (1) shall take effect on the first day
16	of the first reinsurance year beginning at least 1
17	year after the date of the enactment of this Act.
18	SEC. 302. ENVIRONMENTAL QUALITY INCENTIVES PRO-
19	GRAM.
20	(a) Purposes.—Section 1240 of the Food Security
21	Act of 1985 (16 U.S.C. 3839aa) is amended—
22	(1) in the matter preceding paragraph (1), by
23	striking "and environmental quality" and inserting
24	"environmental quality, and climate change adapta-
25	tion and mitigation";

1	(2) in paragraph (1)—
2	(A) in subparagraph (B), by striking ";
3	and" and inserting a semicolon;
4	(B) in subparagraph (C), by striking the
5	semicolon at the end and inserting "; and; and
6	(C) by adding at the end the following:
7	"(D) greenhouse gas emissions reduction
8	and carbon sequestration;";
9	(3) in paragraph (3)(C), by inserting "reducing
10	greenhouse gas emissions and" before "conserving
11	energy"; and
12	(4) in paragraph (4), by inserting "climate
13	change and" before "increasing weather volatility".
14	(b) Definitions.—Section 1240A(6)(B) of the Food
15	Security Act of 1985 (16 U.S.C. 3839aa–1(6)(B)) is
16	amended—
17	(1) in clause (v), by striking "; and" and insert-
18	ing a semicolon;
19	(2) by redesignating clause (vi) as clause (vii);
20	and
21	(3) by inserting after clause (v) the following:
22	"(vi) greenhouse gas emissions reduc-
23	tion planning; and".
24	(c) Establishment and Administration of En-
25	VIRONMENTAL QUALITY INCENTIVES PROGRAM.—

1	(1) Establishment.—Section 1240B(a) of the
2	Food Security Act of 1985 (16 U.S.C. 3839aa–2(a))
3	is amended by striking "2023" and inserting
4	"2030".
5	(2) Payments.—Section 1240B(d)(7)(A) of the
6	Food Security Act of 1985 (16 U.S.C. 3839aa-
7	2(d)(7)(A)) is amended—
8	(A) in clause (iii), by striking "; or" and
9	inserting a semicolon;
10	(B) in clause (iv), by striking the period at
11	the end and inserting "; or"; and
12	(C) by adding at the end the following:
13	"(v) increases carbon sequestration or
14	reduces greenhouse gas emissions.".
15	(3) Allocation of Funding.—Section
16	1240B(f) of the Food Security Act of 1985 (16
17	U.S.C. 3839aa–2(f)) is amended—
18	(A) by striking "2023" each place is ap-
19	pears and inserting "2030"; and
20	(B) in paragraph (1), by striking "includ-
21	ing grazing management" and inserting "of
22	which not less than two thirds shall be targeted
23	at practices relating to grazing management".
24	(4) Payments for conservation practices
25	RELATED TO ORGANIC PRODUCTION—Section

- 1 1240B(i) of the Food Security Act of 1985 (16
- 2 U.S.C. 3839aa–2(i)) is amended by striking para-
- graph (3) and redesignating paragraphs (4) and (5)
- 4 as paragraphs (3) and (4), respectively.
- 5 (5) Conservation incentive contracts.—
- 6 Section 1240B(j)(1) of the Food Security Act of
- 7 1985 (16 U.S.C. 3839aa-2(j)(1)) is amended by
- 8 adding at the end the following:
- 9 "(C) CLIMATE CHANGE ADAPTATION AND
- 10 MITIGATION.—For the purposes of this sub-
- section, priority resource concerns include cli-
- mate change adaptation and mitigation.".
- 13 (d) Environmental Quality Incentives Plan.—
- 14 Section 1240E(a)(3) of the Food Security Act of 1985 (16
- 15 U.S.C. 3839aa-5(a)(3)) is amended by inserting ", and
- 16 a greenhouse gas emissions reduction plan" after "if appli-
- 17 cable".
- (e) Limitation on Payments.—Section 1240G of
- 19 the Food Security Act of 1985 (16 U.S.C. 3839aa–7) is
- 20 amended by striking "Not including payments made under
- 21 section 1240B(j), a person or legal entity may not receive,
- 22 directly or indirectly, cost-share or incentive payments
- 23 under this subchapter that, in aggregate, exceed \$450,000
- 24 for all contracts entered into under this subchapter by the
- 25 person or legal entity during the period of fiscal years

2014 through 2018, or the period of fiscal years 2019 through 2023" and inserting "A person or legal entity (in-3 cluding a joint venture and a general partnership) may 4 not receive, directly or indirectly, cost-share or incentive 5 payments under this subchapter that, in aggregate, exceed 6 \$450,000 for all contracts entered into under this subchapter by the person or legal entity during any 5-fiscal-8 year period". 9 (f) Conservation Innovation Grants.— 10 (1) AIR QUALITY CONCERNS FROM AGRICUL-11 TURAL OPERATIONS.—Section 1240H(b) of the 12 Food Security Act of 1985 (16 U.S.C. 3839aa–8(b)) 13 is amended— 14 (A) in paragraph (1), by inserting "and to 15 meet Federal, State, and local goals with re-16 spect to greenhouse gas emissions reductions" 17 after "local regulatory requirements"; and 18 (B) in paragraph (2), by striking "2019 19 through 2023" and inserting "2019 and 2020, 20 and \$50,000,000 for each of fiscal years 2021 21 through 2030". 22 (2)ON-FARM CONSERVATION INNOVATION 23 TRIALS.—Section 1240H(c)(2) of the Food Security 24 Act of 1985 (16 U.S.C. 3839aa-8(c)(2)) is amended by striking "2019 through 2023" and inserting 25

1	"2019 and 2020, \$50,000,000 of the funds made
2	available to carry out this subchapter for each of fis-
3	cal years 2021 through 2023, and \$100,000,000 of
4	the funds made available to carry out this sub-
5	chapter for each of fiscal years 2024 through 2030"
6	SEC. 303. CONSERVATION STEWARDSHIP PROGRAM.
7	(a) Definitions.—Section 1240I(2) of the Food Se-
8	curity Act of 1985 (16 U.S.C. 3839aa-21(2)) is amend-
9	ed—
10	(1) in subparagraph (A), by inserting "enhance-
11	ments," after "practices,"; and
12	(2) in subparagraph (B)(v), by inserting "and
13	climate change" before the period at the end.
14	(b) Conservation Stewardship Program.—Sec-
15	tion 1240J(a) of the Food Security Act of 1985 (16
16	U.S.C. 3839aa–22(a)) is amended—
17	(1) in the matter preceding paragraph (1), by
18	striking "2023" and inserting "2030"; and
19	(2) by striking paragraphs (1) and (2) and in-
20	serting the following:
21	"(1) by maintaining, actively managing, and
22	where possible, improving upon existing conservation
23	activities; and
24	"(2) by undertaking additional conservation ac-
25	tivities.".

(c) Stewardship Contracts.—

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- 2 (1) Submission of contract offers.—Sec-3 tion 1240K(a)(2)(B) of the Food Security Act of 4 1985 (16 U.S.C. 3839aa–23(a)(2)(B)) is amended 5 by striking "improving, maintaining, and managing" 6 and inserting "maintaining, actively managing, and, 7 where possible, improving".
 - (2) EVALUATION OF CONTRACT OFFERS.—Section 1240K(b)(3) of the Food Security Act of 1985 (16 U.S.C. 3839aa–23(b)(3)) is amended by striking "that national, State, and local priority resource concerns are effectively addressed" and inserting "that the program effectively targets improvements to soil health, increases in carbon sequestration, and reductions in greenhouse gas emissions".
- 16 (3) CONTRACT RENEWAL.—Section 17 1240K(e)(3) of the Food Security Act of 1985 (16 18 U.S.C. 3839aa–23(e)(3)) is amended to read as fol-19 lows:
 - "(3) agrees, by the end of the contract period, to meet the stewardship threshold of at least 2 additional priority resource concerns on the agricultural operation, if applicable.".
- 24 (d) Duties of the Secretary.—

1	(1) CLIMATE CHANGE ADAPTATION AND MITI-
2	GATION.—Section 1240L(a)(2) of the Food Security
3	Act of 1985 (16 U.S.C. 3839aa-24(a)(2)) is amend-
4	ed by inserting "(which may include climate change
5	adaptation and mitigation)" after "priority resource
6	concerns".
7	(2) Conservation stewardship pay-
8	MENTS.—Section 1240L(c) of the Food Security Act
9	of 1985 (16 U.S.C. 3839aa–24(c)) is amended—
10	(A) in paragraph (1)(B), by striking "im-
11	proving, maintaining, and managing" and in-
12	serting "maintaining, actively managing, and
13	improving"; and
14	(B) in paragraph (2)(E), by inserting ",
15	actively managed, and, where applicable, im-
16	proved" after "maintained".
17	(3) Payment Limitations.—Section 1240L(f)
18	of the Food Security Act of 1985 (16 U.S.C.
19	3839aa-24(f)) is amended—
20	(A) by striking "fiscal years 2019 through
21	2023" and inserting "any consecutive 5-year
22	period"; and
23	(B) by inserting "(including joint ventures
24	and general partnerships)" before the period at
25	the end.

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

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

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

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

1 SEC. 304. STATE ASSISTANCE FOR SOIL HEALTH.

- 2 Chapter 5 of subtitle D of title XII of the Food Secu-
- 3 rity Act of 1985 (16 U.S.C. 3839bb et seq.) is amended
- 4 by adding at the end the following:

5 "SEC. 1240S. STATE ASSISTANCE FOR SOIL HEALTH.

- 6 "(a) Availability and Purpose of Grants.—
- 7 Using funds made available under subsection (l), the Sec-
- 8 retary shall make grants to States or tribal governments
- 9 for each of fiscal years 2021 through 2030 to be used by
- 10 State departments of agriculture or appropriate tribal au-
- 11 thorities to improve soil health on agricultural lands.
- 12 "(b) Eligibility.—
- 13 "(1) In general.—To be eligible to receive a
- grant under this section, a State legislature or tribal
- government shall have enacted and be currently
- funding a State or tribal soil health program for ag-
- 17 ricultural land. A State department of agriculture or
- tribal government may then prepare and submit, for
- approval by the Secretary, an application at such
- time, and in such a manner, and containing such in-
- formation as the Secretary shall require, including
- an assurance that grant funds received under this
- section shall supplement the expenditure of State or
- tribal funds in support of soil health in that State,
- 25 rather than replace State or tribal funds.

1	"(2) Components.—A State or tribal soil
2	health program may include—
3	"(A) technical assistance;
4	"(B) financial assistance;
5	"(C) on-farm research and demonstration;
6	"(D) education, outreach, and training;
7	"(E) monitoring and evaluation; or
8	"(F) such other components as the Sec-
9	retary deems appropriate.
10	"(c) Tribal Option.—At the sole discretion of a
11	tribal government, an Indian tribe or tribal organization
12	shall have the option of being incorporated into a State
13	application rather than submitting its own application.
14	"(d) Grant Amount.—
15	"(1) Maximum.—The maximum grant any one
16	State or tribe may receive under this section for a
17	fiscal year shall be \$5,000,000.
18	"(2) Federal share.—The grant amount to a
19	State or tribe shall not exceed—
20	"(A) 50 percent of the State expenditure
21	for its soil health program; or
22	"(B) 75 percent of the tribal expenditure
23	for its soil health program.
24	"(e) Grant Term.—A grant under this section shall
25	be for one year and may be renewed annually.

- 1 "(f) Priority.—The Secretary shall give priority to
- 2 States or tribes with a climate action plan that includes
- 3 soil health, as determined by the Secretary.
- 4 "(g) Performance Measures and Evaluation.—
- 5 "(1) Performance measures.—Each applica-
- 6 tion under subsection (b) shall include performance
- 7 measures to be used to evaluate the State or tribal
- 8 program and the results of the assistance received
- 9 under this section.
- 10 "(2) Review.—The State department of agri-
- culture or the tribal authority shall submit a review
- and evaluation of its program to the Secretary at
- such intervals as the Secretary shall establish.
- 14 "(h) REVIEW OF APPLICATION.—In reviewing an ap-
- 15 plication submitted under subsection (b), the Secretary
- 16 shall ensure the State or tribal program is properly fo-
- 17 cused on soil health improvement, is broadly consistent
- 18 with the soil health principles of the Natural Resources
- 19 Conservation Service, and is meeting or exceeding its per-
- 20 formance measures.
- 21 "(i) Effect of Noncompliance.—If the Secretary,
- 22 after reasonable notice to a State or tribe, finds that there
- 23 has been a failure by the State or tribe to comply with
- 24 the terms of a grant made under this section, the Sec-

- 1 retary may disqualify, for one or more years, the State
- 2 or tribe from receipt of future grants under this section.
- 3 "(j) Audit Requirement.—For each year that a
- 4 State or tribe receives a grant under this section, the State
- 5 or tribe shall conduct an audit of the expenditures of grant
- 6 funds by the State or tribe and shall submit a copy of
- 7 the audit to the Secretary within 30 days of its completion.
- 8 "(k) Administration.—
- 9 "(1) Department.—The Secretary may not
- use more than 3 percent of the funds made available
- to carry out this section for a fiscal year for admin-
- istrative expenses.
- 13 "(2) STATES OR TRIBES.—A State or tribe re-
- ceiving a grant under this section may not use more
- than 7 percent of the funds received under the grant
- 16 for a fiscal year for administrative expenses.
- 17 "(l) Funding.—Of the funds of the Commodity
- 18 Credit Corporation, the Secretary shall make grants under
- 19 this section using—
- (1) \$60,000,000 for fiscal years 2021 through
- 21 2023;
- 22 "(2) \$80,000,000 for fiscal years 2024 through
- 23 2026; and
- (3) \$100,000,000 for fiscal year 2027 and
- each fiscal year thereafter.".

1 SEC. 305. FUNDING AND ADMINISTRATION.

2	(a) Commodity Credit Corporation.—
3	(1) Annual funding.—Section 1241(a) of the
4	Food Security Act of 1985 (16 U.S.C. 3841(a)) is
5	amended—
6	(A) in the matter preceding paragraph (1),
7	by striking "For each of fiscal years 2014
8	through 2023, the Secretary" and inserting
9	"The Secretary";
10	(B) in paragraph (1)—
11	(i) in subparagraph (A), by inserting
12	", and $$17,000,000$ for the period of fiscal
13	years 2024 through 2030," after "2023";
14	and
15	(ii) in subparagraph (B), by inserting
16	"and \$70,000,000 for the period of fiscal
17	years 2024 through 2030, including not
18	more than \$5,000,000 to provide outreach
19	and technical assistance," after "technical
20	assistance,";
21	(C) in paragraph (2)—
22	(i) in subparagraph (E), by striking ";
23	and" and inserting a semicolon;
24	(ii) in subparagraph (F), by striking
25	"2023." and inserting "2021; and"; and

1	(iii) by adding at the end the fol-
2	lowing:
3	$\text{``(G)}\ \$700,\!000,\!000\ \text{for each of fiscal years}$
4	2022 through 2030."; and
5	(D) in paragraph (3)—
6	(i) in subparagraph (A)—
7	(I) in clause (iv), by striking ";
8	and" and inserting a semicolon; and
9	(II) by adding at the end the fol-
10	lowing:
11	"(vi) \$3,000,000,000 for fiscal years
12	2024 through 2030; and"; and
13	(ii) in subparagraph (B)—
14	(I) in clause (iii), by striking
15	"\$750,000,000" and inserting
16	``\$2,000,000,000'';
17	(II) in clause (iv), by striking
18	"\$800,000,000 for fiscal year 2022;
19	and" and inserting "\$2,500,000,000
20	for fiscal year 2022;";
21	(III) in clause (v), by striking
22	\$1,000,000,000 for fiscal year
23	2023." and inserting "\$3,000,000,000
24	for fiscal year 2023; and"; and

1	(IV) by adding at the end the fol-
2	lowing:
3	"(vi) \$4,000,000,000 for fiscal years
4	2024 through 2030.".
5	(2) Availability of funds.—Section 1241(b)
6	of the Food Security Act of 1985 (16 U.S.C.
7	3841(b)) is amended by striking "2023" and insert-
8	ing "2030".
9	(3) Technical assistance.—Section 1241(c)
10	of the Food Security Act of 1985 (16 U.S.C.
11	3841(c)) is amended by adding at the end the fol-
12	lowing:
13	"(5) Special initiative.—
14	"(A) In General.—Beginning in fiscal
15	year 2021 and every year thereafter through
16	fiscal year 2030, the Secretary shall use for a
17	special technical assistance initiative to assist
18	producers in mitigating and adapting to climate
19	change, from the Commodity Credit Corpora-
20	tion, an amount equal to not less than 1 per-
21	cent of Commodity Credit Corporation funds
22	made available for a fiscal year for each of the
23	programs specified in subsection (a).
24	"(B) Provision of Technical Assist-
25	ANCE.—The Secretary shall provide technical

1	assistance under this special initiative to pro-
2	ducers—
3	"(i) directly;
4	"(ii) through an agreement with a
5	third-party provider (as defined in section
6	1242), or, at the option of the producer,
7	through a payment, as determined by the
8	Secretary, to the producer for a third-party
9	provider approved under section 1242, if
10	available; or
11	"(iii) through a cooperative agreement
12	or contract with—
13	"(I) a cooperative extension;
14	"(II) a non-governmental organi-
15	zation; or
16	"(III) a State, tribal, or Federal
17	agency.".
18	(4) Assistance to certain farmers or
19	RANCHERS FOR CONSERVATION ACCESS.—Section
20	1241(h) of the Food Security Act of 1985 (16
21	U.S.C. 3841(h)) is amended—
22	(A) in paragraph (1)(B), by striking "to
23	the maximum extent practicable" and all that
24	follows through the period at the end and in-
25	serting "to the maximum extent practicable, 30

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

1	1244(j)(1)(B) of the Food Security Act of 1985 (16)
2	U.S.C. 3844(j)(1)(B)) is amended—
3	(A) in clause (ii), by striking "; and" and
4	inserting a semicolon;
5	(B) in clause (iii), by striking the period at
6	the end and inserting "; and; and
7	(C) by adding at the end the following:
8	"(iv) accelerates progress in meeting
9	the goals established under title I of the
10	Agriculture Resilience Act.".
11	(3) Advanced grazing management.—Sec-
12	tion 1244 of the Food Security Act of 1985 (16
13	U.S.C. 3844) is amended by adding at the end the
14	following:
15	"(q) Advanced Grazing Management.—
16	"(1) In general.—In carrying out any con-
17	servation program administered by the Secretary,
18	the Secretary shall encourage advanced grazing
19	management, including management-intensive rota-
20	tional grazing, as such terms are defined in section
21	1240L(d).
22	"(2) Reservation of funds.—In each of fis-
23	cal years 2021 through 2030, the Secretary shall use
24	to carry out this subsection not less than two thirds
25	of any funds available for activities related to live-

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

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

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

"(1) Purpose.—The Secretary shall evaluate existing outcomes-based measurement systems for recordkeeping, modeling, and measurement of farm-level greenhouse gas emissions and soil carbon sequestration, including measures of soil disturbance, plant diversity, continual living cover, residue management, advanced grazing management, and crop-livestock integration, to determine which such systems can be implemented quickly, improve in accuracy and ease over time, use the best available science and technology, and are cost-effective.

"(2) Guidance.—Not later than 18 months after the date of enactment of this subsection, the Secretary shall issue guidance on the outcomesbased measurement system evaluated under paragraph (1), based on recommendations from the advisory committee under subsection (f), and information from agroecosystem models (including COMET Farm and COMET Farm Planner), remote sensing data and analysis (including the Operational Tillage Information System), soil health demonstration trials carried out under section 1240H(c)(7), existing and emerging public and private environmental services protocols, measurement systems, and benchmarks, and field-level measurement.

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

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(e)(7), and other similar public and private

- demonstration trials the Secretary determines appro-
- 2 priate, to inform the activities under subsections (g),
- (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 Con-
- 7 gress for changes or additions to the conservation
- 8 programs under this Act the Secretary determines
- 9 appropriate to accelerate net increases in soil carbon
- 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 devel-
- 16 oping a credit against tax to incentivize carbon capture
- 17 on farms and ranches.
- 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.

1 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—
6	(A) by striking "highly erodible" each
7	place it appears; and
8	(B) in subparagraph (B), by striking "and
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
25	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 seg.) is amended in the subtitle

- heading by striking "Highly Erodible Land" 1 2 and inserting "Cropland". 3 SEC. 308. AGROFORESTRY CENTERS. 4 Section 1243 of the Food, Agriculture, Conservation, 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 Centers.—The Secretary of Agriculture shall establish at the Forestry Sciences Laboratory of the United States 14 15 Forest Service, in Lincoln, Nebraska, a Semiarid Agroforestry Research, Development, and Demonstration Cen-16 ter, and acting through the Chief of the Forest Service 17 and in cooperation with the Natural Resources Conserva-18 tion Service, shall establish three additional regional agro-19 20 forestry centers at other locations to be determined by the 21 Secretary (referred to in this section as the 'Centers'). The 22 Secretary shall appoint a National Director and three Re-23 gional Directors to manage and coordinate the program established under subsection (b).";

(3) in subsection (b)—

25

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 (4)—
7	(i) by striking "in semiarid regions";
8	and
9	(ii) by striking "the Great Plains re-
10	gion" and inserting "particular regions";
11	(D) in paragraph (7), by striking "on
12	semiarid lands";
13	(E) in paragraph (8), by striking "on
14	semiarid lands worldwide" and inserting
15	"worldwide, including on semiarid lands"; and
16	(F) in paragraph (9)—
17	(i) by striking "on semiarid lands";
18	and
19	(ii) by inserting "and climate change"
20	after "pollution";
21	(4) in subsection (c), in the matter preceding
22	paragraph (1), by striking "Center" and inserting
23	"Centers"; and

1	(5) in subsection (d), by striking "through
2	2023" and inserting "and 2020 and \$25,000,000
3	for each of the fiscal years 2021 through 2030".
4	TITLE IV—FARMLAND PRESER-
5	VATION AND FARM VIABILITY
6	SEC. 401. LOCAL AGRICULTURE MARKET PROGRAM.
7	Section 210A of the Agricultural Marketing Act of
8	1946 (7 U.S.C. 1627c) is amended—
9	(1) in subsection (a)(12)—
10	(A) by redesignating clauses (iv) and (v) as
11	clauses (vi) and (vii), respectively; and
12	(B) by inserting after clause (iii) the fol-
13	lowing:
14	"(iv) is produced and marketed in a
15	manner that significantly improves soil
16	health and carbon sequestration;
17	"(v) when added to the crop rotation
18	on a farm, will significantly improve soil
19	health and carbon sequestration;";
20	(2) in subsection (b)—
21	(A) in paragraph (1)—
22	(i) in subparagraph (B), by striking ";
23	and" and inserting a semicolon;
24	(ii) in subparagraph (C), by striking
25	the period at the end and inserting ", in-

1	cluding value-added agricultural products
2	from crops that when added into crop rota-
3	tions on a farm will significantly improve
4	soil health and carbon sequestration; and";
5	and
6	(iii) by adding at the end the fol-
7	lowing:
8	"(D) markets for agricultural commodities
9	and products produced in a manner that signifi-
10	cantly improve soil health and carbon seques-
11	tration.";
12	(B) in paragraph (3)—
13	(i) by striking "and local" and insert-
14	ing ", local"; and
15	(ii) by inserting before the semicolon
16	at the end the following: ", and production
17	and marketing approaches to significantly
18	improve soil health and carbon sequestra-
19	tion'';
20	(C) in paragraph (5), by striking "and" at
21	the end;
22	(D) by redesignating paragraph (6) as
23	paragraph (7); and
24	(E) by inserting after paragraph (5) the
25	following:

1	"(6) enhances the economic viability of pro-
2	ducers and related agricultural enterprises; and";
3	(3) in subsection (d)—
4	(A) in paragraph (2)—
5	(i) in subparagraph (C)—
6	(I) in clause (i), by striking
7	"and" at the end;
8	(II) in clause (ii), by adding
9	"and" at the end; and
10	(III) by adding at the end the
11	following:
12	"(iii) agricultural commodities and
13	products that are produced and marketed
14	in a manner that significantly improve soil
15	health and carbon sequestration, or that
16	when added to a crop rotation on a farm
17	will significantly improve soil health and
18	carbon sequestration;"; and
19	(ii) in subparagraph (F), by striking
20	"and value-added agricultural products in
21	new and existing markets" and inserting
22	the following: ", value-added agricultural
23	products in new and existing markets, and
24	agricultural commodities and products that
25	are produced in a manner that enhances

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

1	tion, and expansion of markets for commodities and
2	farm products that significantly improve soil health
3	and carbon sequestration.
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	ucts;
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;
19	"(H) outreach regarding assistance avail-
20	able under subsection (d);
21	"(I) outreach regarding assistance avail-
22	able through other programs administers by
23	any other Federal Agency that supports the
24	adoption of farming practices that enhance soil
25	health and carbon sequestration; or

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

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

1	graph (A), by striking "subsection (i)(3)(E)" and in-
2	serting "subsection (j)(3)(E)"; and
3	(7) in subsection (j) (as redesignated by para-
4	graph (4))—
5	(A) in paragraph (1) by striking "fiscal
6	year 2019" and inserting "each of fiscal years
7	2019 and 2020 and \$150,000,000 for fiscal
8	year 2021";
9	(B) in paragraph (3)—
10	(i) in subparagraph (A)(i), by striking
11	"35" and inserting "36"; and
12	(ii) by amending subparagraph (B) to
13	read as follows:
14	"(B) Farmers' market and local food
15	PROMOTION GRANTS.—
16	"(i) In General.—Of the funds
17	made available to carry out this section for
18	a fiscal year, 47 percent shall be used for
19	grants under subsection (d)(6).
20	"(ii) Allocation among subpro-
21	GRAMS.—Of the funds reserved under
22	clause (i) for a fiscal year—
23	"(I) 40 percent shall be made
24	available for farmers market pro-
25	motion program grants; and

1	"(II) 60 percent shall be made
2	available for local food promotion pro-
3	gram grants.";
4	(C) by redesignating subparagraphs (D)
5	and (E) as subparagraphs (E) and (F), respec-
6	tively; and
7	(D) by inserting after subparagraph (C)
8	the following:
9	"(D) FARM VIABILITY AND LOCAL CLI-
10	MATE RESILIENCY.—Of the funds made avail-
11	able to carry out this section for a fiscal year,
12	10 percent shall be used to provide grants
13	under subsection (f).".
14	SEC. 402. ORGANIC CERTIFICATION COST-SHARE PRO-
15	GRAM.
16	Section 10606(b)(2) of the Farm Security and Rural
17	Investment Act of 2002 (7 U.S.C. 6523(b)(2)) is amended
18	by striking "\$750" and inserting "\$1,000".
19	SEC. 403. EXCLUSION OF GAIN FROM SALE OF CERTAIN
20	FARM PROPERTY AND AGRICULTURAL EASE-
21	MENTS.
22	(a) In General.—Part III of subchapter B of chap-
23	ter 1 of the Internal Revenue Code of 1986 is amended
24	by adding after section 121 the following new sections:

1	"SEC. 121A. EXCLUSION OF GAIN FROM SALE OF QUALIFIED
2	FARM PROPERTY.
3	"(a) Exclusion.—Gross income shall not include
4	gain from the sale or exchange of qualified farm property
5	if such property is sold to or exchanged with a transferee
6	who—
7	"(1) is a qualified farmer, and
8	"(2) meets the certification requirement of sub-
9	section (c).
10	"(b) Limitation.—
11	"(1) In general.—The amount of gain ex-
12	cluded from gross income under subsection (a) with
13	respect to any taxable year shall not exceed the ex-
14	cess, if any of—
15	"(A) \$500,000 (\$1,000,000 in the case of
16	a joint return), over
17	"(B) the amount excluded from the gross
18	income of the taxpayer for all prior taxable
19	years.
20	"(2) Special rule for joint returns.—The
21	amount of the exclusion under subsection (a) on a
22	joint return for any taxable year shall be allocated
23	equally between the spouses for purposes of applying
24	the limitation under paragraph (1) for any suc-
25	ceeding taxable year

1	"(c) Certification Requirement.—A qualified
2	farmer meets the certification requirement of this sub-
3	section if such person signs a written certification stating
4	the following:
5	"(1) Use certification as farm for farm-
6	ING PURPOSES.—The use of such property will be as
7	a farm for farming purposes at all times during the
8	recapture period.
9	"(2) RECAPTURE AGREEMENT.—The transferee
10	has been notified of the recapture liability arising
11	from a disposition or change in the use of such prop-
12	erty at any time during the recapture period.
13	"(d) Treatment of Disposition or Change in
14	Use of Property.—
15	"(1) In general.—If there is a recapture
16	event during the recapture period with respect to
17	any qualified farm property, then the tax imposed
18	under this chapter on the transferee referred to in
19	subsection (a) for the taxable year which includes
20	the first such recapture event shall be increased by
21	the amount excluded from the product of—
22	"(A) the transferor's gross income under
23	subsection (a) with respect to such qualified
24	farm property, multiplied by

1	"(B) the rate of tax in effect under section
2	(1)(h)(1)(D).
3	"(2) Recapture event defined.—For pur-
4	poses of this subsection, the term 'recapture event'
5	means, with respect to any qualified farm prop-
6	erty—
7	"(A) CESSATION OF OPERATION.—The
8	cessation of the operation of such property as
9	a farm for farming purposes at any time in the
10	recapture period.
11	"(B) Failure to materially partici-
12	PATE.—The failure of a qualified farmer to ma-
13	terially participate in the operation of the farm
14	at any time during the recapture period.
15	"(C) Change in Ownership.—
16	"(i) In general.—Except as pro-
17	vided in clause (ii), the disposition of any
18	interest in such property by the transferee
19	referred to in subsection (a) during the re-
20	capture period.
21	"(ii) AGREEMENT TO ASSUME RECAP-
22	TURE LIABILITY.—Clause (i) shall not
23	apply to any farm property if the person
24	acquiring the interest referred to in such
25	clause agrees in writing to assume the re-

capture liability of the person disposing of
such interest. In the event of such an assumption, this subsection shall apply to the
person acquiring such interest as though
such person were the transferee referred to
therein (and this subsection shall be applied as if there had been no change in
ownership).

"(3) Special rules.—

- "(A) No credits against tax.—Any increase in tax under this subsection shall not be treated as a tax imposed by this chapter for purposes of determining the amount of any credit under subpart A, B, or D of this part.
- "(B) NO RECAPTURE BY REASON OF HARDSHIP.—The increase in tax under this subsection shall not apply to any disposition of property or cessation of the operation of any property as a farm for farming purposes if such disposition or cessation occurs by reason of any hardship.
- "(e) Special Rules.—For purposes of this section, rules similar to the rules of subsections (e) and (f) of section 121 shall apply.
- 25 "(f) Definitions.—For purposes of this section—

1	"(1) Qualified farmer.—The term 'qualified
2	farmer' means—
3	"(A) a beginning farmer, socially disadvan-
4	taged farmer, qualified veteran farmer, young
5	farmer, or
6	"(B) any entity if 50 percent or more of
7	the capital and profits of such entity are owned
8	by one or more individuals described in para-
9	graph (A).
10	"(2) Beginning farmer.—The term begin-
11	ning farmer' means an individual that—
12	"(A) has not operated a farm, or
13	"(B) has operated a farm for not more
14	than 10 years.
15	"(3) Socially disadvantaged farmer.—The
16	term 'socially disadvantaged farmer' means an indi-
17	vidual who is a member of one or more of the fol-
18	lowing groups:
19	"(A) American Indians.
20	"(B) Alaska Natives.
21	"(C) Asians.
22	"(D) Blacks or African Americans.
23	"(E) Native Hawaiians or other Pacific Is-
24	landers.
25	"(F) Hispanics.

1	"(G) Women.
2	"(4) QUALIFIED VETERAN FARMER.—The term
3	'qualified veteran farmer' means an individual
4	who—
5	"(A) first obtained status as a veteran (as
6	defined in section 101(2) of title 38 United
7	States Code) in the most recent 10-year period,
8	and
9	"(B) has not operated a farm for more
10	than 10 years.
11	"(5) Young farmer.—The term 'young farm-
12	er' means an individual who has not attained age 46
13	as of the date of the sale or transfer referred to in
14	subsection (a).
15	"(6) Qualified farm property.—
16	"(A) IN GENERAL.—The term 'qualified
17	farm property' means real property located in
18	the United States if—
19	"(i) during the 5-year period ending
20	on the date of the sale or exchange re-
21	ferred to in subsection (a), such property
22	has been used by the taxpayer or a mem-
23	ber of the family of the taxpayer as a farm
24	for farming purposes for periods aggre-
25	gating 3 years or more, and

1	"(ii) there was material participation
2	by the taxpayer or a member of the family
3	of the taxpayer in the operation of the
4	farm during such 3 years.
5	"(B) Special rule for qualified farm
6	PROPERTY HELD BY AN ENTITY.—For purposes
7	of this section, if the taxpayer referred to in
8	paragraph (A) is other than an individual and
9	all of the capital and profits interests of such
10	entity are held by members of a single family,
11	then such members shall be treated as members
12	of the family of such taxpayer.
13	"(7) RECAPTURE PERIOD.—The term 'recap-
14	ture period' means the 10-year period following the
15	sale or exchange of qualified farm property described
16	in subsection (a).
17	"(8) OTHER DEFINITIONS.—The terms 'mem-
18	ber of the family', 'farm', 'farming purposes', and
19	'material participation' have the respective meanings
20	given such terms in section 2032A(e).
21	"SEC. 121B. EXCLUSION OF GAIN FROM SALE OF AGRICUL-
22	TURAL CONSERVATION EASEMENT.
23	"(a) Exclusion.—Gross income shall not include
24	gain from the sale or exchange of an agricultural conserva-
25	tion easement.

1	"(b) Limitation.—
2	"(1) In general.—The amount of gain ex-
3	cluded from gross income under subsection (a) with
4	respect to any taxable year shall not exceed the ex-
5	cess, if any of—
6	"(A) \$500,000 (\$1,000,000 in the case of
7	a joint return), over
8	"(B) the amount excluded from the gross
9	income of the taxpayer for all prior taxable
10	years.
11	"(2) Special rule for joint returns.—The
12	amount of the exclusion under subsection (a) on a
13	joint return for any taxable year shall be allocated
14	equally between the spouses for purposes of applying
15	the limitation under paragraph (1) for any suc-
16	ceeding taxable year.
17	"(c) AGRICULTURAL CONSERVATION EASEMENT DE-
18	FINED.—The term 'agricultural conservation easement'
19	means an easement or conservation-related restriction on
20	agricultural land (granted in perpetuity) that—
21	"(1) is conveyed for the purpose of protecting
22	natural resources and the agricultural nature of the
23	land, and
24	"(2) permits the landowner the right to con-
25	tinue agricultural production and related uses.

1	"(d) Special Rules.—For purposes of this section,
2	rules similar to the rules of subsections (e) and (f) of sec-
3	tion 121 shall apply.".
4	(b) Conforming Amendment.—The table of sec-
5	tions for part III of subchapter B of chapter 1 of the In-
6	ternal Revenue Code of 1986 is amended by adding after
7	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.".
8	(c) Effective Date.—The amendments made by
9	this section shall apply to any sale or exchange in taxable
10	years ending after December 31, 2020.
11	SEC. 404. FARMLAND PROTECTION POLICY ACT.
12	(a) Findings, Purpose, and Definitions.—Sec-
13	tion 1540 of the Agriculture and Food Act of 1981 (7
14	U.S.C. 4201) is amended—
15	(1) in subsection (a)—
16	(A) by redesignating paragraphs (4)
17	through (7) as paragraphs (5) through (8), re-
18	spectively; and
19	(B) by inserting after paragraph (3) the
20	following:
21	"(4) the Nation's farmland is a vital source of
22	environmental services, such as carbon sequestra-
23	tion;";

1	(2) in subsection (b), by inserting "tribal,"
2	after "State,"; and
3	(3) in subsection (c)—
4	(A) in paragraph (1)—
5	(i) in subparagraph (B), by striking
6	"that is used for" and inserting "that is
7	suitable for"; and
8	(ii) in subparagraph (C), by inserting
9	"and is suitable" after "local importance";
10	(B) in paragraph (4), by striking "; and"
11	and inserting a semicolon;
12	(C) in paragraph (5), by striking the pe-
13	riod at the end and inserting a semicolon; and
14	(D) by adding at the end the following:
15	"(6) the term 'conversion' means—
16	"(A) the physical conversion of farmland
17	to a nonagricultural use;
18	"(B) the effective conversion of farmland
19	as a consequence of physical conversion of adja-
20	cent farmland, which threatens the continued
21	viability of the land for agricultural use; or
22	"(C) a change in management of federally
23	owned land historically used for agriculture to
24	a non-agricultural use;

1	"(7) the term 'farmland of national signifi-
2	cance' is farmland that is the most suitable for in-
3	tensive crop and food production, as determined by
4	the Secretary, taking into consideration, among
5	other factors, its physical and chemical characteris-
6	ties; and
7	"(8) the term 'permanently protected farmland'
8	means farmland encumbered by a conservation ease-
9	ment held by the Federal government, by a State,
10	tribal, or local unit of government, or by a land con-
11	servation organization, that is perpetual or the max-
12	imum number of years allowed by State law.".
13	(b) Farmland Protection Policy.—Section 1541
14	of the Agriculture and Food Act of 1981 (7 U.S.C. 4202)
15	is amended to read as follows:
16	"SEC. 1541. FARMLAND PROTECTION POLICY.
17	"(a) In General.—It is the policy of the United
18	States that Federal programs—
19	"(1) shall minimize the conversion of farmland
20	to nonagricultural uses; and
21	"(2) shall not convert to nonagricultural uses
22	farmland—
23	"(A) that is permanently protected farm-
24	land;

1	"(B) that has been defined and delineated
2	by the Secretary under subsection (b) as farm-
3	land of national significance; or
4	"(C) that has been defined and delineated
5	by a State as significant to the State or a pri-
6	ority for inclusion in a State farmland protec-
7	tion program and for which the State has sub-
8	mitted a description under subsection (b).
9	"(b) Definition and Delineation of Land.—
10	"(1) National Significance.—The Secretary
11	shall define and delineate farmland of national sig-
12	nificance, and shall convene a group of experts, in-
13	cluding agronomists and soil scientists, to assist in
14	such definition and delineation.
15	"(2) State significance.—Any State wishing
16	to have land recognized under subsection (a)(2)(C)
17	shall provide a definition and delineation of such
18	lands to the Secretary.
19	"(c) Process and Criteria.—
20	"(1) Process and Criteria.—The Secretary
21	shall develop a process, including criteria—
22	"(A) to—
23	"(i) determine the potential conver-
24	sion of farmland as a consequence of any

1	action or activity conducted through a
2	Federal program;
3	"(ii) minimize the conversion of farm-
4	land or, for land identified under sub-
5	section (a)(2), avoid conversion; and
6	"(iii) provide notice regarding such
7	actions to the Secretary; and
8	"(B) that the Secretary shall use to make
9	determinations under subsection (d).
10	"(2) USE REQUIRED.—Each department, agen-
11	cy, independent commission, and other unit of the
12	Federal Government shall use the process and cri-
13	teria developed under paragraph (1) in carrying out
14	a Federal program.
15	"(d) Exemption.—Subsection (a)(2) shall not apply
16	if the Secretary determines, based on the process and cri-
17	teria developed under subsection (c), that converting farm-
18	land to nonagricultural uses cannot be avoided. In in-
19	stances where the Secretary makes such a determination,
20	the Federal program shall minimize the conversion of land
21	described in subsection (a)(2) to the maximum extent
22	practicable.
23	"(e) Information.—The Secretary may make avail-
24	able to States, units of local government, individuals, orga-

1	nizations, and other units of the Federal Government in-
2	formation—
3	"(1) useful in restoring, maintaining, and im-
4	proving the quantity and quality of farmland; and
5	"(2) concerning the location of permanently
6	protected farmland.
7	"(f) Assistance.—The Secretary shall provide as-
8	sistance to departments, agencies, independent commis-
9	sions, and other units of the Federal Government, upon
10	request, in using the process and criteria developed under
11	subsection (c).".
12	SEC. 405. AGRICULTURE CONSERVATION EASEMENT PRO-
13	GRAM.
14	Section 1265B of the Food Security Act of 1985 (16
1 5	TIOOOOFI):
15	U.S.C. 3865b) is amended—
16	(1) in subsection (b)—
16	(1) in subsection (b)—
16 17	(1) in subsection (b)— (A) in paragraph (4)(C)(iv), by striking
16 17 18	(1) in subsection (b)—(A) in paragraph (4)(C)(iv), by striking "only"; and
16 17 18 19	 (1) in subsection (b)— (A) in paragraph (4)(C)(iv), by striking "only"; and (B) by adding at the end the following:
16 17 18 19 20	 (1) in subsection (b)— (A) in paragraph (4)(C)(iv), by striking "only"; and (B) by adding at the end the following: "(6) CONDITION OF ASSISTANCE.—As a condi-
116 117 118 119 220 221	 (1) in subsection (b)— (A) in paragraph (4)(C)(iv), by striking "only"; and (B) by adding at the end the following: "(6) CONDITION OF ASSISTANCE.—As a condition of receiving cost-share assistance under this sec-
16 17 18 19 20 21 22	 (1) in subsection (b)— (A) in paragraph (4)(C)(iv), by striking "only"; and (B) by adding at the end the following: "(6) CONDITION OF ASSISTANCE.—As a condition of receiving cost-share assistance under this section, the owner of eligible land must agree to have

1	emissions reduction, not later than three years fol-
2	lowing the grant of the easement. The requirement
3	of this subparagraph may be satisfied by having in
4	place a conservation plan developed or recognized by
5	the Bureau of Indian Affairs."; and
6	(2) by striking subsection (d) and inserting the
7	following:
8	"(d) Technical Assistance.—The Secretary may
9	provide technical assistance, if requested, to assist in—
10	"(1) compliance with the terms and conditions
11	of easements; and
12	"(2) development and implementation of a con-
13	servation plan required under subsection (b)(6), in-
14	cluding, as applicable, a conservation plan for highly
15	erodible land required under subsection $(b)(4)(C)(iv)$
16	or a comprehensive conservation plan developed pur-
17	suant to subsection $(e)(1)$.
18	"(e) Financial Assistance.—
19	"(1) In general.—
20	"(A) ENROLLMENT IN CSP.—At the sole
21	option of the owner of the land subject to the
22	easement, the Secretary shall provide for the
23	automatic enrollment of the land subject to the
24	easement in the conservation stewardship pro-
25	gram established by subchapter B of chapter 4

1	of subtitle D, including financial assistance for
2	the development of a comprehensive conserva-
3	tion plan as provided by 1240L(e), if the person
4	or entity farming the land is otherwise eligible
5	for the program, as determined by the Sec-
6	retary.
7	"(B) Determination of compliance.—
8	Determining compliance with the terms of the
9	conservation stewardship program contract is
10	the sole responsibility of the Secretary.
11	"(C) Funding.—Funding received by an
12	eligible entity pursuant to this paragraph shall
13	not be considered in the calculation of costs
14	under subsection (b).
15	"(2) Timing.—The owner of the land subject to
16	the easement shall have up to three years after the
17	grant of the easement to exercise the option to enroll
18	in the conservation stewardship program as provided
19	under subparagraph (A).".
20	TITLE V—PASTURE-BASED
21	LIVESTOCK
22	SEC. 501. ANIMAL RAISING CLAIMS.
23	The Agricultural Marketing Act of 1946 (7 U.S.C.
24	1621 et seq.) is amended by adding at the end the fol-
25	lowing:

1	"Subtitle H—Animal Raising
2	Claims
3	"SEC. 298. REQUIRED VERIFICATION PROCESS FOR ANIMAL
4	RAISING CLAIMS.
5	"(a) In General.—In order to facilitate marketing,
6	truth in labeling, and new economic opportunities for pro-
7	ducers and businesses using animal raising claims, the
8	Secretary, acting through the Administrator of the Agri-
9	cultural Marketing Service in coordination with the Ad-
10	ministrator of the Food Safety and Inspection Service,
11	shall establish, not later than 2 years after the date of
12	the enactment of this subtitle and in a manner consistent
13	with United States obligations under international agree-
14	ments—
15	"(1) mandatory standards with respect to ani-
16	mal raising claims that may be made on the labeling
17	of any meat food products or poultry product;
18	"(2) procedures to verify any such claims prior
19	to the use in commerce of any meat food product or
20	poultry product bearing labeling with such a claim;
21	"(3) procedures whereby any such verification
22	is subsequently incorporated seamlessly with labeling
23	requirements under the Federal Meat Inspection Act
24	(21 U.S.C. 601 et seq.) and the Poultry Products
25	Inspection Act (21 U.S.C. 451 et seq.); and

1	"(4) on-farm and supply chain auditing and
2	verification procedures for ensuring the truthfulness
3	of such claims.
4	"(b) Standards.—In developing and approving ani-
5	mal raising claim standards under subsection (a), the Sec-
6	retary shall include standards relating to—
7	"(1) diet claims, including grass-fed, vege-
8	tarian-fed, and fed no animal byproducts;
9	"(2) living and raising condition claims, includ-
10	ing but not limited to cage free, free range, and pas-
11	ture raised;
12	"(3) antibiotic and hormone claims, including
13	but not limited to raised without antibiotics, no hor-
14	mones added (beef cattle, sheep), and raised without
15	growth promotants;
16	"(4) source claims demonstrating the animal
17	can be traced back to its farm of origin from birth
18	to slaughter;
19	"(5) age claims;
20	"(6) animal welfare claims;
21	"(7) environmental stewardship claims, includ-
22	ing greenhouse gas reduction and carbon sequestra-
23	tion claims;
24	"(8) breed claims: and

1	"(9) any other such claim as the Secretary de-
2	termines is appropriate.
3	"(c) Third-Party Certification.—A producer of
4	a meat food product or a poultry product may use an ani-
5	mal raising claim that is verified by a third party so long
6	as—
7	"(1) the claim is made consistent with stand-
8	ards established by the Secretary pursuant to sub-
9	section (a); and
10	"(2) the procedures used by such third party
11	for purposes of that verification and any subsequent
12	auditing are equivalent (as determined by the Sec-
13	retary) to the procedures used by the Secretary for
14	that verification and auditing.
15	"(d) Approval Process.—To the maximum extent
16	practicable, the Secretary shall require that a producer
17	seeking to make an animal raising claim, submit to the
18	Secretary prior to using the product that is the subject
19	of such animal raising claim the following documentation
20	to support such claim—
21	"(1) detailed written descriptions explaining the
22	controls used for ensuring that the raising claim is
23	valid from birth to harvest or the period of raising
24	being referenced by the claim;

1	"(2) a signed and dated document describing
2	how the animals are raised to support that specific
3	claim made is truthful and not misleading;
4	"(3) a written description of the product trac-
5	ing and segregation mechanism from time of slaugh-
6	ter or further processing through packaging and dis-
7	tribution;
8	"(4) a written description for the identification,
9	control, and segregation of non-conforming animals
10	or products; and
11	"(5) if a third party certifies a claim, a current
12	copy of the certificate.
13	"(e) Effect on Other Laws.—Nothing in this sec-
14	tion shall be construed to alter the authority of the Sec-
15	retary under the Federal Meat Inspection Act (21 U.S.C.
16	601 et seq.) or the Poultry Products Inspection Act (21
17	U.S.C. 451 et. seq.).
18	"(f) Consistency With Other Laws.—The Sec-
19	retary shall ensure consistency between the animal raising
20	claims standards established pursuant to subsection (a)
21	and the Organic Food Production Act of 1990 (7 U.S.C.
22	6501 et seq.) and any rules or regulations implementing

23 that Act.

1	"(g) Compliance Requirements.—Beginning on
2	the date that is three years after the date of the enactment
3	of this Act—
4	"(1) in the case of a domestic meat food prod-
5	uct or poultry product—
6	"(A) a person may sell or label a meat
7	food product or poultry product with an animal
8	raising label claim only if such products is pro-
9	duced and handled in accordance with the
10	standards established pursuant to subsection
11	(a); and
12	"(B) no person may sell or label a meat
13	food product or poultry product with an animal
14	raising label claim that is not in compliance
15	with such standards; and
16	"(2) in the case of an imported meat food prod-
17	uct or poultry product, such a product may be sold
18	or labeled with animal raising label claims if the
19	Secretary determines such product has been pro-
20	duced and handled under a verification program that
21	provides safeguards and guidelines that are at least
22	equivalent to the requirements of the standards es-
23	tablished pursuant to subsection (a).
24	"(h) Violation of This Title.—

- "(1) MISUSE OF LABEL.—Any person who,
 after notice and an opportunity to be heard, is found
 by the Secretary to have knowingly sold or labeled
 any meat food product or poultry product with an
 animal raising claim, except in accordance with this
 subtitle, shall be assessed a civil penalty of not more
 than \$10,000.
- 8 "(2) False statement.—Any person who 9 after notice and an opportunity to be heard, has 10 been found by the Secretary to make a false, fraud-11 ulent, or fictitious statement to the Secretary, a gov-12 erning Federal or State official, or a third-party cer-13 tifier, or conceals, covers up, falsifies, or deceives a 14 material fact to the Secretary, a governing Federal 15 or State official, or a third-party certifier with re-16 spect to an animal raising claim subject to the re-17 quirements of this subtitle shall be subject to a pen-18 alty specified in section 1001 of title 18, United 19 States Code.
- 20 "(i) AUTHORIZATION OF APPROPRIATIONS.—There 21 are authorized to be appropriated to carry out this subtitle 22 such sums as may be necessary.

23 "SEC. 299. APPLICABILITY.

24 "This subtitle shall only apply to meat food products 25 and poultry products that are subject to labeling require-

- 1 ments under the Federal Meat Inspection Act (21 U.S.C.
- 2 601 et seq.) and the Poultry Products Inspection Act (21
- 3 U.S.C. 451 et seq.).
- 4 "SEC. 300. DEFINITIONS.
- 5 "In this subtitle:
- 6 "(1) The term 'animal raising claim' means a 7 statement on the labeling of meat food products or 8 poultry products used in interstate commerce that 9 reference the way that the source animal for a meat 10 food product or poultry product was raised, includ-11 ing production practices that were used, such as liv-12 ing or raising conditions, the breed, or the location 13 or source of where the product is born, raised, and 14 processed.
 - "(2) The term 'meat food product' has the meaning given such term in section 1(j) of the Federal Meat Inspection Act (21 U.S.C. 601(j)).
- "(3) The term 'poultry product' has the meaning given such term in section 4(f) of the Poultry Products Inspection Act (7 U.S.C. 453(f)).".

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1	SEC. 502. GRANTS FOR REIMBURSEMENT OF COMPLIANCE
2	COSTS FOR VERY SMALL PROCESSORS OF
3	MEAT FOOD PRODUCTS AND POULTRY PROD-
4	UCTS.
5	(a) Meat Food Products.—Title V of the Federal
6	Meat Inspection Act (21 U.S.C. 683 et seq.) is amended
7	by adding at the end the following new section:
8	"SEC. 502. GRANTS FOR REIMBURSEMENT OF COMPLIANCE
9	COSTS FOR VERY SMALL PROCESSORS.
10	"(a) Establishment.—The Secretary shall estab-
11	lish a grant program to provide competitive grants to eligi-
12	ble establishments to assist such establishments in making
13	adjustments to the facilities, equipment, processes, and
14	operations of such establishments to meet the require-
15	ments of this Act. The Secretary may carry out such pro-
16	gram with any agency within the Department of Agri-
17	culture that the Secretary determines is appropriate.
18	"(b) Eligible Establishments.—An establish-
19	ment is eligible to receive a grant under this section if
20	such establishment is—
21	"(1) subject to Federal or State inspection
22	under this Act; and
23	"(2)(A) has fewer than 10 employees; or
24	"(B) has annual gross sales of less than
25	\$2,500,000.

1	"(c) Use of Funds.—An establishment receiving a
2	grant under this section shall use the funds made available
3	through such grant to cover—
4	"(1) the cost of developing and issuing (other
5	than the cost of labor), directly incurred or incurred
6	by a consultant, a Hazard Analysis and Critical
7	Control Points plan for the establishment; and
8	"(2) the actual costs of any adjustments to fa-
9	cilities, equipment, processes, and operations nec-
10	essary for the establishment to comply with this Act.
11	"(d) Amount of Grant.—The total amount of
12	funds provided to a recipient of a grant under this section
13	shall not exceed \$50,000.
14	"(e) Federal Share.—Funds provided under a
15	grant under this section shall not exceed 50 percent of
16	the costs referred to in subsection (c), as determined by
17	the Secretary.
18	"(f) Funding.—
19	"(1) Mandatory funding.—Of the funds of
20	the Commodity Credit Corporation, the Secretary
21	shall make available to carry out this section
22	\$10,000,000 for each of fiscal years 2021 through
23	2030.
24	"(2) Authorization of appropriations.—
25	There are authorized to be appropriated to carry out

1	this section \$10,000,000 for each of fiscal years
2	2021 through 2030.".
3	(b) POULTRY PRODUCTS.—The Poultry Products In-
4	spection Act (7 U.S.C. 451 et seq.) is amended by insert-
5	ing after section 25 (7 U.S.C. 468) the following:
6	"GRANTS FOR REIMBURSEMENT OF COMPLIANCE COSTS
7	FOR VERY SMALL PROCESSORS
8	"Sec. 25A.
9	"(a) Establishment.—The Secretary shall estab-
10	lish a grant program to provide competitive grants to eligi-
11	ble establishments to assist such establishments in making
12	adjustments to the facilities, equipment, processes, and
13	operations of such establishments to meet the require-
14	ments of this Act. The Secretary may carry out such pro-
15	gram with any agency within the Department of Agri-
16	culture that the Secretary determines is appropriate.
17	"(b) Eligible Establishments.—An establish-
18	ment is eligible to receive a grant under this section if
19	such establishment is—
20	"(1) subject to Federal or State inspection
21	under this Act; and

 $^{\prime\prime}(2)(A)$ has fewer than 10 employees; or

``(B) has annual gross sales of less than

\$2,500,000.

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23

1	"(c) Use of Funds.—An establishment receiving a
2	grant under this section shall use the funds made available
3	through such grant to cover—
4	"(1) the cost of developing and issuing (other
5	than the cost of labor), directly incurred or incurred
6	by a consultant, a Hazard Analysis and Critical
7	Control Points plan for the establishment; and
8	"(2) the actual costs of any adjustments to fa-
9	cilities, equipment, processes, and operations nec-
10	essary for the establishment to comply with this Act.
11	"(d) Amount of Grant.—The total amount of
12	funds provided to a recipient of a grant under this section
13	shall not exceed \$50,000.
14	"(e) Federal Share.—Funds provided under a
15	grant under this section shall not exceed 50 percent of
16	the costs referred to in subsection (c), as determined by
17	the Secretary.
18	"(f) Funding.—
19	"(1) Mandatory funding.—Of the funds of
20	the Commodity Credit Corporation, the Secretary
21	shall make available to carry out this section
22	\$10,000,000 for each of fiscal years 2021 through
23	2030.
24	"(2) Authorization of appropriations.—
25	There are authorized to be appropriated to carry out

1	this section \$10,000,000 for each of fiscal years
2	2021 through 2030.".
3	SEC. 503. CONSERVATION OF PRIVATE GRAZING LAND.
4	(a) Purpose.—Section 1240M(a) of the Food Secu-
5	rity Act of 1985 (16 U.S.C. 3839bb(a)) is amended—
6	(1) in paragraph (6), by inserting "conserving
7	water and" before "improving";
8	(2) in paragraph (7), by striking "; and and
9	inserting a semicolon;
10	(3) in paragraph (8), by striking the period at
11	the end and inserting "; and; and
12	(4) by adding at the end the following:
13	"(9) conserving and improving soil health and
14	improving grazing system resilience in the face of
15	climate change through advanced grazing manage-
16	ment practices; and
17	"(10) providing support for producers
18	transitioning from confinement and feedlot systems
19	or continuous grazing to managed grazing-based sys-
20	tems, including support for pasture development and
21	management.".
22	(b) Definitions.—Section 1240M(b)(2) of the Food
23	Security Act of 1985 (16 U.S.C. 3839bb(b)(2)) is amend-
24	ed by striking "hay land" and inserting "perennial hay
25	land, including silvopasture".

1	(c) Private Grazing Land Conservation Assist-
2	ANCE.—Section 1240M(c) of the Food Security Act of
3	1985 (16 U.S.C. 3839bb(c)) is amended—
4	(1) in paragraph (1)—
5	(A) in the matter preceding subparagraph
6	(A), by inserting "and partnerships described in
7	paragraph (2)(B)" after "local conservation dis-
8	tricts";
9	(B) in subparagraph (B), by striking
10	"grazing land management technologies" and
11	inserting "regionally appropriate, advanced
12	grazing land management technologies to im-
13	prove soil health and maximize carbon seques-
14	tration";
15	(C) in subparagraph (C)(iv), by inserting
16	"through integrated strategies that include ro-
17	tational and multispecies grazing, integrated
18	pest management, and other ecological prac-
19	tices" after "brush encroachment problems";
20	(D) in subparagraph (H), by striking "
21	and" and inserting a semicolon;
22	(E) in subparagraph (I), by striking the
23	period at the end and inserting "; and"; and
24	(F) by adding at the end the following:

1	"(J) assisting producers in transitioning
2	from confinement or feedlot systems or contin-
3	uous grazing to managed grazing-based sys-
4	tems, including assistance in pasture develop-
5	ment and management."; and
6	(2) by amending paragraph (2) to read as fol-
7	lows:
8	"(2) Program elements.—
9	"(A) TECHNICAL ASSISTANCE AND EDU-
10	CATION.—Personnel of the Department trained
11	in pasture and range management shall be
12	made available under the program to deliver
13	and coordinate technical assistance and edu-
14	cation to owners and managers of private graz-
15	ing land, including owners and managers inter-
16	ested in developing new or improved pasture or
17	grazing-based systems on their land, at the re-
18	quest of the owners and managers.
19	"(B) Partnerships.—In carrying out the
20	program under this section, the Secretary shall
21	provide research, demonstration, education (in-
22	cluding conferences, workshops, field days, and
23	trainings), workforce training, planning, and

outreach activities through partnerships with—

1	"(i) land-grant colleges and univer-
2	sities (as defined in section 1404 of the
3	National Agricultural Research, Extension,
4	and Teaching Policy Act of 1977 (7 U.S.C.
5	3103));
6	"(ii) nongovernmental organizations;
7	and
8	"(iii) tribal organizations.
9	"(C) Grants.—
10	"(i) In general.—In carrying out
11	the program under this section, the Sec-
12	retary shall provide funds on a competitive
13	basis to partnerships to use for State or
14	local action grants to conduct grazing land
15	research, demonstration, education, work-
16	force training, planning, and outreach
17	projects.
18	"(ii) Duration.—Grants made by
19	partnerships under this section shall be for
20	a period not to exceed 3 years.
21	"(iii) Cost sharing.—A partnership
22	that receives funding under this section
23	shall ensure that any funded project pro-
24	vides, from non-Federal sources, funds or

1	in-kind support valued at not less than 25
2	percent of the total cost of the project.
3	"(iv) Limitation on indirect
4	COSTS.—A partnership that receives fund-
5	ing under this section may not use more
6	than 15 percent of the total cost of the
7	project for the indirect costs of carrying
8	out the project.
9	"(v) Priority shall be
10	given to projects that—
11	"(I) focus on sustainable grazing
12	management systems and techniques
13	that assist producers with multiple
14	ecosystem services, including climate
15	change adaptation and mitigation;
16	and
17	"(II) involve beginning farmers
18	and ranchers, tribal producers, or new
19	graziers (including State or federally
20	registered apprenticeships).".
21	(d) Grazing Technical Assistance Self-
22	Help.—Section 1240M(d) of the Food Security Act of
23	1985 (16 U.S.C. 3839bb(d)) is amended—

1	(1) in paragraph $(1)(A)$, by inserting "and for
2	those interested in beginning grazing" before the
3	semicolon;
4	(2) in paragraph (2), by striking "may establish
5	2" and inserting "may establish"; and
6	(3) in paragraph (3)(C)—
7	(A) in clause (ii), by striking "; and and
8	inserting a semicolon;
9	(B) by redesignating clause (iii) as clause
10	(iv); and
11	(C) by inserting after clause (ii) the fol-
12	lowing:
13	"(iii) will improve climate change ad-
14	aptation and mitigation; and".
15	(e) Authorization of Appropriations.—Section
16	1240M(e) of the Food Security Act of 1985 (16 U.S.C.
17	3839bb(e)) is amended to read as follows:
18	"(e) Funding.—
19	"(1) Mandatory funding.—Of the funds of
20	the Commodity Credit Corporation, the Secretary
21	shall use to carry out this section \$50,000,000 for
22	each of fiscal years 2021 through 2030.
23	"(2) Grants.—Of the funds made available
24	under paragraph (1), the Secretary shall use not

1	more than 40 percent to carry out subsection
2	(e)(2)(C).
3	"(3) Authorization of appropriations.—
4	There is authorized to be appropriated to carry out
5	this section \$60,000,000 for each of fiscal years
6	2002 through 2030.".
7	SEC. 504. CONSERVATION RESERVE PROGRAM.
8	(a) Conservation Reserve.—Section 1231(d) of
9	the Food Security Act of 1985 (16 U.S.C. 3831(d)) is
10	amended—
11	(1) in paragraph (1)—
12	(A) in subparagraph (D), by striking ";
13	and" and inserting a semicolon;
14	(B) in subparagraph (E), by striking the
15	period at the end and inserting "; and"; and
16	(C) by adding at the end the following:
17	"(F) fiscal years 2024 through 2030, not
18	more than 32,000,000 acres."; and
19	(2) in paragraph (2)(A)—
20	(A) in clause (i), by striking "; and" and
21	inserting a semicolon;
22	(B) in clause (ii)(III), by striking the pe-
23	riod and inserting "; and"; and
24	(C) by adding at the end the following:

1	"(iii) the Secretary shall enroll and
2	maintain in the conservation reserve not
3	fewer than 7,000,000 acres of land de-
4	scribed in subsection (b)(3) by September
5	30, 2030, of which 5,000,000 acres shall
6	be reserved for the pilot program estab-
7	lished under section 1231C(c).".
8	(b) Pilot Programs.—Section 1231C of the Food
9	Security Act of 1985 (16 U.S.C. 3831c) is amended by
10	adding at the end the following:
11	"(c) Grasslands 30.—
12	"(1) In general.—
13	"(A) Enrollment.—The Secretary shall
14	establish a pilot program to enroll land in the
15	conservation reserve program through a 30-year
16	conservation reserve contract (referred to in
17	this subsection as a 'Grassland 30 contract') in
18	accordance with this subsection.
19	"(B) Inclusion of Acreage Limita-
20	TION.—For purposes of applying the limitations
21	in section 1231(d)(1), the Secretary shall in-
22	clude acres of land enrolled under this sub-
23	section.
24	"(2) Eligible Land.—Eligible land for enroll-
25	ment through a Grassland 30 contract—

1	"(A) is land that is eligible to be enrolled
2	in the conservation reserve program under the
3	grasslands initiative described in section
4	1231(d)(2); and
5	"(B) shall not be limited to land that is
6	subject to an expired covered contract.
7	"(3) Expired conservation contract elec-
8	TION.—
9	"(A) Definition of Covered Con-
10	TRACT.—In this paragraph, the term 'covered
11	contract' means a contract entered into under
12	this subchapter that—
13	"(i) expires on or after the date of en-
14	actment of this subsection; and
15	"(ii) covers land enrolled in the con-
16	servation reserve program under the grass-
17	lands initiative described in section
18	1231(d)(2).
19	"(B) Election.—On the expiration of a
20	covered contract, an owner or operator party to
21	the covered contract shall elect—
22	"(i) not to reenroll the land under the
23	contract;
24	"(ii) to offer to reenroll the land
25	under the contract if the land remains eli-

1	gible under the terms in effect as of the
2	date of expiration; or
3	"(iii) not to reenroll the land under
4	the contract and to enroll that land
5	through a Grassland 30 contract under
6	this subsection.
7	"(4) Term.—The term of a Grassland 30 con-
8	tract shall be 30 years.
9	"(5) AGREEMENTS.—To be eligible to enroll
10	land in the conservation reserve program through a
11	Grassland 30 contract, the owner of the land shall
12	enter into an agreement with the Secretary—
13	"(A) to implement a conservation reserve
14	plan developed for the land;
15	"(B) to comply with the terms and condi-
16	tions of the contract and any related agree-
17	ments; and
18	"(C) to temporarily suspend the base his-
19	tory for the land covered by the contract.
20	"(6) Terms and conditions of grassland
21	30 CONTRACTS.—
22	"(A) In general.—A Grassland 30 con-
23	tract shall include terms and conditions that
24	promote sustainable grazing systems, protect
25	and enhance soil carbon levels, and are compat-

1	ible with wildlife habitat conservation, as deter-
2	mined by the Secretary, and may include any
3	additional provision that the Secretary deter-
4	mines is appropriate to carry out this sub-
5	section or facilitate the practical administration
6	of this subsection.
7	"(B) Violation.—On the violation of a
8	term or condition of a Grassland 30 contract,
9	the Secretary may require the owner to refund
10	all or part of any payments received by the
11	owner under the conservation reserve program,
12	with interest on the payments, as determined
13	appropriate by the Secretary.
14	"(C) Compatible uses.—Land subject to
15	a Grassland 30 contract may be used for com-
16	patible economic uses, including hunting and
17	fishing, if the use—
18	"(i) is specifically permitted by the
19	conservation reserve plan developed for the
20	land; and
21	"(ii) is consistent with the long-term
22	protection and enhancement of the con-
23	servation resources for which the contract
24	was established.
25	"(7) Compensation.—

1	"(A) AMOUNT OF PAYMENTS.—The Sec-
2	retary shall provide payment under this sub-
3	section to an owner of land enrolled through a
4	Grassland 30 contract using 30 annual pay-
5	ments in an amount equal to the amount that
6	would be used if the land were to be enrolled
7	in the conservation reserve program under sec-
8	tion $1231(d)(2)$.
9	"(B) Form of Payment.—Compensation
10	for a Grassland 30 contract shall be provided
11	by the Secretary in the form of a cash payment
12	in an amount determined under subparagraph
13	(A).
14	"(C) TIMING.—The Secretary shall provide
15	any annual payment obligation under subpara-
16	graph (A) as early as practicable in each fiscal
17	year.
18	"(D) PAYMENTS TO OTHERS.—The Sec-
19	retary shall make a payment, in accordance
20	with regulations prescribed by the Secretary, in
21	a manner as the Secretary determines is fair
22	and reasonable under the circumstances, if an
23	owner who is entitled to a payment under this
24	section—
25	"(i) dies;

1	"(ii) becomes incompetent;
2	"(iii) is succeeded by another person
3	or entity who renders or completes the re-
4	quired performance; or
5	"(iv) is otherwise unable to receive the
6	payment.
7	"(8) Technical assistance.—
8	"(A) IN GENERAL.—The Secretary shall
9	assist owners in complying with the terms and
10	conditions of a Grassland 30 contract.
11	"(B) Contracts or agreements.—The
12	Secretary may enter into 1 or more contracts
13	with private entities or agreements with a
14	State, nongovernmental organization, or Indian
15	Tribe to carry out necessary maintenance of a
16	Grassland 30 contract if the Secretary deter-
17	mines that the contract or agreement will ad-
18	vance the purposes of the conservation reserve
19	program.
20	"(9) Administration.—
21	"(A) Conservation reserve plan.—
22	The Secretary shall develop a conservation re-
23	serve plan for any land subject to a Grassland
24	30 contract, which shall include practices and
25	activities necessary to maintain, protect, and

1	enhance the conservation value of the enrolled
2	land, including the protection and enhancement
3	of soil carbon levels.
4	"(B) Delegation of contract adminis-
5	TRATION.—
6	"(i) Federal, state, tribal, or
7	LOCAL GOVERNMENT AGENCIES.—The Sec-
8	retary may delegate any of the manage-
9	ment, monitoring, and enforcement respon-
10	sibilities of the Secretary under this sub-
11	section to other Federal, State, Tribal, or
12	local government agencies that have the
13	appropriate authority, expertise, and re-
14	sources necessary to carry out those dele-
15	gated responsibilities.
16	"(ii) Conservation organiza-
17	TIONS.—The Secretary may delegate any
18	management responsibilities of the Sec-
19	retary under this subsection to conserva-
20	tion organizations if the Secretary deter-
21	mines the conservation organization has
22.	similar expertise and resources "

SEC. 505. ALTERNATIVE MANURE MANAGEMENT PROGRAM.

- 2 Chapter 5 of subtitle D of title XII of the Food Secu-
- 3 rity Act of 1985 (16 U.S.C. 3839bb et seq.) is further
- 4 amended by adding at the end the following:
- 5 "SEC. 1240T. ALTERNATIVE MANURE MANAGEMENT PRO-
- 6 GRAM.

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- 7 "(a) Definitions.—In this section:
- 8 "(1) Pasture-based MANAGEMENT.—The 9 term 'pasture-based management' means a dairy or 10 livestock production system in which the animals 11 spend all or a substantial portion of their time graz-12 ing on fields in which some or all of the manure is 13 deposited and left in the field and decomposes 14 aerobically.
 - "(2) Non-digester dairy or livestock methane management method' means a method that may be used by operators of dairy or livestock operations to transition from wet manure handling and storage, where anaerobic conditions are present, to dry manure handling and storage, including open solar drying or composting of manure onsite, conversion of dairy and livestock operations to pasture-based management, solid separation technologies, scrape conversion, and other strategies to mitigate methane emis-

- sions from manure management, as determined by the Secretary.
- 3 "(3) ONSITE OPEN SOLAR DRYING OR4 COMPOSTING OF MANURE.—The term 'onsite open 5 solar drying or composting of manure' means the 6 collection, storage, and drying of dairy or livestock 7 manure in a nonliquid environment on a farm or 8 ranch.
 - "(4) SCRAPE CONVERSION.—The term 'scrape conversion' means the conversion of flush water lagoon systems to solid-scrape or dry manure management practices, including vacuum technologies for manure management.
 - "(5) Solid separation technologies.—The term 'solid separation technologies' means technologies designed to separate liquid components of manure from mineral and organic solid components, for the purposes of reducing methane emissions.
 - "(6) ELIGIBLE PRODUCER.—The term 'eligible producer' means a dairy or livestock producer whose baseline manure management practices prior to enrollment in the program include the anaerobic decomposition of volatile solids stored in a lagoon or other predominantly liquid anaerobic environment.

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1	"(b) Establishment.—The Secretary shall estab-
2	lish an alternative manure management program to sup-
3	port non-digester dairy and livestock methane manage-
4	ment strategies to effectively reduce greenhouse gas emis-
5	sions and to maximize environmental benefits.
6	"(c) Payments.—During the 2021 through 2030 fis-
7	cal years, the Secretary shall provide payments to eligible
8	producers that enter into contracts with the Secretary
9	under the program.
10	"(d) Practices.—Each eligible producer requesting
11	funding for a project under the program shall include at
12	least one of the following project components that reduce
13	baseline methane emissions on the operation of the pro-
14	ducer:
15	"(1) Conversion of dairy and livestock oper-
16	ations to pasture-based management that eliminates
17	or reduces the quantity of manure stored in anaer-
18	obic conditions, including—
19	"(A) conversion of a non-pasture dairy or
20	livestock operation to pasture-based manage-
21	ment;
22	"(B) increasing the amount of time live-
23	stock spend at pasture at an existing pasture
24	operation; or

1	"(C) improving pasture-based manage-
2	ment, including transitioning to managed rota-
3	tional grazing.
4	"(2) Alternative manure treatment and storage
5	practices, including—
6	"(A) installation of a compost bedded pack
7	barn that composts manure;
8	"(B) installation of slatted floor pit storage
9	manure collection that must be cleaned out at
10	least monthly; or
11	"(C) other similar practices, as determined
12	by the Secretary.
13	"(3) Conversion to a solid separation system in
14	which manure solids are separated prior to entry
15	into a wet, anaerobic environment at a dairy or live-
16	stock operation, or installation of a new solid separa-
17	tion system with significantly higher separation effi-
18	ciency than the existing solid separation system, in
19	conjunction with one or more of the following prac-
20	tices:
21	"(A) Open solar drying or composting of
22	manure onsite.
23	"(B) Solar drying in an enclosed environ-
24	ment.

1	"(C) Forced evaporation with natural-gas
2	fueled dryers.
3	"(D) Storage of manure in unconfined
4	piles or stacks.
5	"(E) Composting in an enclosed vessel,
6	with forced aeration and continuous mixing.
7	"(F) Composting in piles with forced aer-
8	ation but no mixing.
9	"(G) Composting in intensive windrows
10	with regular turning for mixing and aeration.
11	"(H) Composting in passive windrows with
12	infrequent turning for mixing and aeration.
13	"(4) Scrape conversion in conjunction with one
14	of the practices listed in paragraph (3).
15	"(e) Term.—A contract under the program shall
16	have a term that does not exceed 3 years.
17	"(f) Payments.—
18	"(1) Availability of payments.—Payments
19	provided to an eligible producer under this section
20	may be used to implement one or more practices de-
21	scribed in subsection (d).
22	"(2) Payment amounts.—The Secretary may
23	provide a payment to an eligible producer under the
24	program for an amount that is up to 100 percent of
25	the costs associated with planning, design, materials,

1	equipment, installation, labor, management, mainte-
2	nance, and training related to implementing a prac-
3	tice described in subsection (d).
4	"(3) Limitation on payments.—A person or
5	legal entity (including a joint venture and a general
6	partnership) may not receive, directly or indirectly
7	payments under the program that exceed \$750,000
8	during any 5-year period.
9	"(4) ADVANCED PAYMENTS.—The Secretary
10	shall provide at least 50 percent of the amount of
11	total payments to an eligible producer in advance for
12	all costs related to purchasing materials and equip-
13	ment or contracting.
14	"(g) Modification or Termination of Con-
15	TRACTS.—
16	"(1) Voluntary modification or termi-
17	NATION.—The Secretary may modify or terminate a
18	contract entered into with an eligible producer under
19	the program if—
20	"(A) the producer agrees to the modifica-
21	tion or termination; and
22	"(B) the Secretary determines that the
23	modification or termination is in the public in-
24	terest.

1	"(2) Involuntary termination.—The Sec-
2	retary may terminate a contract under the program
3	if the Secretary determines that the eligible produces
4	violated the contract.
5	"(h) Cluster Applications.—The Secretary shall
6	establish procedures under which—
7	"(1) groups of eligible producers may submit ϵ
8	joint application in order to facilitate centralized
9	composting facilities; and
10	"(2) the Secretary will apportion payments to
11	each eligible producer associated with such a joint
12	application.
13	"(i) Evaluation of Applications.—
14	"(1) Evaluation criteria.—The Secretary
15	shall develop criteria for evaluating applications that
16	will ensure that the purposes of the program are ful-
17	filled in a cost effective manner and in a manner
18	that will maximize greenhouse gas emissions reduc-
19	tions and overall environmental benefits.
20	"(2) Grouping of Applications.—The Sec-
21	retary may group and evaluate applications relative
22	to other applications for similar farming operations
23	"(j) Duties of Producers.—To receive payments
24	under the program, an eligible producer shall agree—

1	"(1) to implement an alternative manure man-
2	agement program plan that describes the greenhouse
3	gas emissions reductions and other environmental
4	benefits to be achieved through 1 or more practices
5	that are approved by the Secretary;
6	"(2) to supply information as required by the
7	Secretary to determine compliance with the program
8	plan and requirements of the program; and
9	"(3) to comply with such additional provisions
10	as the Secretary determines are necessary to carry
11	out the program plan.
12	"(k) Duties of the Secretary.—The Secretary
13	shall—
14	"(1) determine and publish factors for esti-
15	mating the emissions reductions for each program
16	practice to aid eligible producers in development of
17	applications and program plans; and
18	"(2) assist an eligible producer in achieving the
19	greenhouse gas emissions reduction and other envi-
20	ronmental goals of the program plan by—
21	"(A) providing payments for developing
22	and implementing 1 or more practices, as ap-
23	propriate; and

1	"(B) providing the producer with informa-
2	tion, technical assistance, and training to aid in
3	implementation of the plan.
4	"(l) Funding.—The Secretary shall use the funds,
5	facilities, and authorities of the Commodity Credit Cor-
6	poration to carry out the program (including the provision
7	of technical assistance) using, to the maximum extent
8	practicable, \$1,500,000,000 for the period of fiscal years
9	2021 through 2030.".
10	TITLE VI—ON-FARM
11	RENEWABLE ENERGY
12	SEC. 601. RURAL ENERGY FOR AMERICA PROGRAM.
13	Section 9007 of the Farm Security and Rural Invest-
14	ment Act of 2002 (7 U.S.C. 8106) is amended—
15	(1) in subsection (a)—
16	(A) in the matter preceding paragraph (1),
17	by striking "and renewable energy develop-
18	ment" and inserting ", renewable energy devel-
19	opment, and the reduction of carbon dioxide
20	and carbon dioxide equivalent emissions"; and
21	(B) in paragraph (2), by striking "and re-
22	newable energy systems" and inserting ", re-
23	newable energy systems, and carbon dioxide and
24	carbon dioxide equivalent gas emissions reduc-
25	tions'':

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

1	(iv) by adding at the end the fol-
2	lowing:
3	"(C) assisting in the development of feasi-
4	bility studies and plans for implementing rec-
5	ommendations provided under subparagraph
6	(B).";
7	(3) in subsection (c)—
8	(A) in paragraph (1)(A)(i), by inserting ",
9	agricultural processors," after "agricultural
10	producers'';
11	(B) in paragraph (2)—
12	(i) by redesignating subparagraphs
13	(F) and (G) as subparagraphs (G) and
14	(H), respectively; and
15	(ii) by inserting after subparagraph
16	(E) the following:
17	"(F) carbon accounting assessments devel-
18	oped under subsection (d);";
19	(C) in paragraph (3)(A), by striking "25"
20	and inserting "50";
21	(D) in paragraph (4), by adding at the end
22	the following:
23	"(F) Pre-approved technologies.—In
24	order to streamline the adoption of renewable

1	energy systems and the adoption of energy effi-
2	ciency improvements, the Secretary shall—
3	"(i) beginning with fiscal year 2021,
4	develop a pre-approved technologies and
5	products list and streamlined application
6	process for projects utilizing pre-approved
7	products; and
8	"(ii) update such list every 2 fiscal
9	years."; and
10	(E) by adding at the end the following:
11	"(5) Priority.—In making grants or loan
12	guarantees under this subsection, priority shall be
13	provided to proposed projects that utilize tech-
14	nologies—
15	"(A) with the lowest carbon footprint; or
16	"(B) that the Secretary determines would
17	result in the largest net decreases of carbon di-
18	oxide and carbon dioxide equivalent emissions
19	as determined through the carbon accounting
20	assessments under subsection (d).";
21	(4) in subsection (d)—
22	(A) in the subsection heading, by inserting
23	"AND TECHNICAL ASSISTANCE" after "OUT-
24	REACH";

(B) by striking "The Secretary shall" and
inserting "Using funds made available under
subsection (h)(4), the Secretary shall"; and
(C) by inserting "and technical assistance"
after "outreach";
(5) by redesignating subsections (d), (e), and
(f) as subsections (f), (g), and (h), respectively;
(6) by inserting after subsection (c) the fol-
lowing:
"(d) Carbon Accounting.—
"(1) IN GENERAL.—Not later than 2 years
after the date of the enactment of this subsection,
the Secretary shall work with the National Renew-
able Energy Laboratory established pursuant to sec-
tion 10 of the Solar Energy Research, Development,
and Demonstration Act of 1974 to develop carbon
accounting estimates for renewable energy systems
and energy efficiency upgrades (including a pre-ap-
proved technologies list and reserve fund tech-
nologies), supported through assistance provided
under this section.
"(2) Program Guidance.—The results of the
carbon accounting assessments shall be used to
guide program actions as much as possible in order

to achieve the purpose specified in subsection (a).

1	"(e) Demonstration Practice.—
2	"(1) IN GENERAL.—The Secretary shall hold
3	regional demonstration projects that incentivize agri-
4	cultural producers to reduce the carbon footprint or
5	overall carbon equivalent emissions of such pro-
6	ducers to the largest extent possible through the use
7	of both energy efficiency improvements and renew-
8	able energy systems.
9	"(2) Extension.—The Secretary shall promote
10	the results of the regional demonstration projects
11	carried out under paragraph (1)."; and
12	(7) in subsection (h) (as redesignated by para-
13	graph (5))—
14	(A) in paragraph (1), by striking subpara-
15	graphs (A) through (E) and inserting the fol-
16	lowing:
17	"(A) \$50,000,000 for each of fiscal years
18	2014 through 2020;
19	"(B) \$100,000,000 for fiscal year 2021;
20	"(C) \$200,000,000 for fiscal year 2022;
21	"(D) \$300,000,000 for fiscal year 2023;
22	and
23	"(E) $$400,000,000$ for fiscal year 2024
24	and each fiscal year thereafter.":

1	(B) in paragraph (2)(B), by striking "be-
2	come available" and inserting "be used"; and
3	(C) by adding at the end the following:
4	"(4) Administrative expenses.—Not more
5	than 8 percent of the amount made available to
6	carry out this section for a fiscal year may be used
7	for administrative expenses incurred in carrying out
8	this section.
9	"(5) RESERVATION OF FUNDS.—Of the funds
10	made available to carry out this section for a fiscal
11	year, the Secretary may reserve—
12	"(A) not more than 10 percent for grants
13	under subsection (c) to support the adoption of
14	underutilized but proven, commercial tech-
15	nologies; and
16	"(B) not more that 5 percent to carry out
17	subsection (e) to hold regional demonstration
18	projects and promote the results of such
19	projects.".
20	SEC. 602. STUDY ON DUAL-USE RENEWABLE ENERGY SYS-
21	TEMS.
22	(a) In General.—The Secretary of Agriculture shall
23	conduct a study on dual-use renewable energy systems,
24	which shall include—

1	(1) an assessment on the compatibility of dif-
2	ferent species of livestock with different dual-use re-
3	newable energy system designs, including—
4	(A) the optimal height of and distance be-
5	tween solar panels for—
6	(i) livestock grazing; and
7	(ii) shade for livestock;
8	(B) manure management considerations;
9	(C) fencing requirements; and
10	(D) other animal handling considerations;
11	(2) an assessment of the compatibility of dif-
12	ferent crop types with different dual-use renewable
13	energy system designs, including—
14	(A) the optimal height of and distance be-
15	tween solar panels for—
16	(i) plant shading; and
17	(ii) farm equipment use;
18	(B) the impact on crop yield; and
19	(C) market opportunities to sell crops at a
20	premium price;
21	(3) a risk-benefit analysis of dual-use renewable
22	energy systems in different regions of the United
23	States, including a comparison between the total
24	greenhouse gas impact of dual-use renewable energy

1	systems and renewable energy systems that displace
2	agricultural production; and
2	(1) a 5 was plan for how the research and ex

- 4 tension activities of the Department of Agriculture 5 could be used to better support dual-use renewable 6 energy systems that do not displace agricultural pro-7 duction.
- 8 (b) Definition of Dual-Use Renewable Energy 9 Systems.—In this section, the term "dual-use renewable 10 energy systems" means renewable energy production and 11 agricultural production, including crop or animal produc-12 tion, occurring together on the same piece of land.
- 13 (c) Report.—Not later than 1 year after the date 14 of the enactment of this Act, the Secretary of Agriculture 15 shall submit to the Committee on Agriculture of the House 16 of Representatives and the Committee on Agriculture, Nu17 trition, and Forestry of the Senate a written report con18 taining the results of the study required by subsection (a).
 19 SEC. 603. AGSTAR PROGRAM.

20 (a) IN GENERAL.—The Secretary of Agriculture (in 21 this section referred to as the "Secretary") shall maintain 22 a program, to be known as the AgSTAR program, that— 23 (1) supports anaerobic digestion in the agricultural sector to reduce methane emissions from live-

25 stock waste;

1	(2) conducts outreach, education, and training
2	on anaerobic digestion of livestock waste;
3	(3) provides technical and regulatory assistance
4	on anaerobic digestion of livestock waste to stake-
5	holders, including farmers and ranchers, on issues
6	including—
7	(A) permitting;
8	(B) codigestion of multiple organic wastes
9	in one digester; and
10	(C) interconnection to physically link a di-
11	gester to the electrical power grid;
12	(4) promotes centralized, multi-farm digesters
13	that use livestock waste from more than 1 farm or
14	ranch;
15	(5) collects and reports data on anaerobic diges-
16	tion of livestock waste; and
17	(6) maintains a database of on-farm anaerobic
18	digester projects in the United States.
19	(b) Transition.—The Administrator of the Environ-
20	mental Protection Agency shall take such steps as may
21	be appropriate to provide for an orderly transition of the
22	activities carried out under the AgSTAR program of the
23	Environmental Protection Agency to the AgSTAR pro-
24	gram under this section.

1	(c) Administration.—The Secretary shall carry out
2	the program through the Natural Resources Conservation
3	Service, in coordination with the Administrator of the En-
4	vironmental Protection Agency and other Federal agencies
5	as necessary, and in partnership with the Regional Cli-
6	mate Hubs, cooperative extension services, and other
7	agencies of the Department of Agriculture.
8	(d) Limitations on Authorization of Appro-
9	PRIATIONS.—To carry out the AgSTAR program under
10	this section, there are authorized to be appropriated to
11	the Secretary not more than \$5,000,000 for each fiscal
12	year.
13	TITLE VII—FOOD LOSS AND
13	
14	WASTE
14	WASTE
14 15	WASTE Subtitle A—Food Date Labeling
14 15 16	WASTE Subtitle A—Food Date Labeling SEC. 701. DEFINITIONS.
14 15 16 17	WASTE Subtitle A—Food Date Labeling SEC. 701. DEFINITIONS. In this title:
14 15 16 17 18	WASTE Subtitle A—Food Date Labeling SEC. 701. DEFINITIONS. In this title: (1) ADMINISTERING SECRETARIES.—The term
14 15 16 17 18	WASTE Subtitle A—Food Date Labeling SEC. 701. DEFINITIONS. In this title: (1) ADMINISTERING SECRETARIES.—The term "administering Secretaries" means—
14 15 16 17 18 19 20	WASTE Subtitle A—Food Date Labeling SEC. 701. DEFINITIONS. In this title: (1) ADMINISTERING SECRETARIES.—The term "administering Secretaries" means— (A) the Secretary of Agriculture with re-
14 15 16 17 18 19 20 21	WASTE Subtitle A—Food Date Labeling SEC. 701. DEFINITIONS. In this title: (1) ADMINISTERING SECRETARIES.—The term "administering Secretaries" means— (A) the Secretary of Agriculture with respect to any product that is under the Secretaries.
14 15 16 17 18 19 20 21	WASTE Subtitle A—Food Date Labeling SEC. 701. DEFINITIONS. In this title: (1) ADMINISTERING SECRETARIES.—The term "administering Secretaries" means— (A) the Secretary of Agriculture with respect to any product that is under the Secretary of Agriculture's jurisdiction and is—

1	(ii) a meat food product, as defined in
2	section 1 of the Federal Meat Inspection
3	Act (21 U.S.C. 601); or
4	(iii) an egg product, as defined in sec-
5	tion 4 of the Egg Products Inspection Act
6	(21 U.S.C. 1033); and
7	(B) the Secretary of Health and Human
8	Services with respect to any product that is
9	under the Secretary of Health and Human
10	Services' jurisdiction and is a food (as defined
11	in section 201 of the Federal Food, Drug, and
12	Cosmetic Act (21 U.S.C. 321)).
13	(2) DISCARD DATE.—The term "discard date"
14	means a date voluntarily printed on food packaging,
15	which signifies the end of the estimated period of
16	shelf life under any stated storage conditions, after
17	which the food labeler advises the product not be
18	consumed.
19	(3) FOOD LABELER.—The term "food labeler"
20	means the producer, manufacturer, distributor, or
21	retailer that places a date label on food packaging
22	of a product.
23	(4) QUALITY DATE.—The term "quality date"
24	means a date voluntarily printed on food packaging

1	that is intended to communicate to consumers the
2	date after which—
3	(A) the quality of the product may begin
4	to deteriorate; but
5	(B) the product remains apparently whole-
6	some food (as defined in subsection (b)(2) of
7	section 22 of the Child Nutrition Act of 1966
8	(42 U.S.C. 1791(b)(2)); also known as the Bill
9	Emerson Good Samaritan Food Donation Act).
10	SEC. 702. QUALITY DATES AND DISCARD DATES.
11	(a) Quality Dates.—
12	(1) In general.—If a food labeler includes a
13	quality date on food packaging, the label shall use
14	the uniform quality date label phrase under para-
15	graph (2).
16	(2) Uniform phrase.—The uniform quality
17	date label phrase under this paragraph shall be
18	"BEST If Used By" or, if permissible under sub-
19	section (c)(3), the standard abbreviation of "BB",
20	unless and until the administering Secretaries, act-
21	ing jointly, specify through rulemaking another uni-
22	form phrase to be used for purposes of complying
23	with paragraph (1).
24	(3) OPTION OF THE LABELER.—The decisions
25	on whether to include a quality date on food pack-

aging and which foods should be so labeled shall be at the discretion of the food labeler.

(b) Discard Dates.—

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- (1) IN GENERAL.—If a food labeler includes a discard date on food packaging, the label shall use the uniform discard date label phrase under paragraph (2).
- 8 (2) Uniform Phrase.—The uniform discard 9 date label phrase under this paragraph shall be "USE By" or, if permissible under subsection 10 11 (c)(3), the standard abbreviation of "UB", unless 12 and until the administering Secretaries, acting joint-13 ly, specify through rulemaking another uniform 14 phrase to be used for purposes of complying with 15 paragraph (1).
 - (3) OPTION OF THE LABELER.—The decisions on whether to include a discard date on food packaging and which foods should be so labeled shall be at the discretion of the food labeler.
- 20 (c) QUALITY DATE AND DISCARD DATE LABEL-21 ING.—
- 22 (1) IN GENERAL.—The quality date or discard 23 date, as applicable, and immediately adjacent uni-24 form quality date label phrase or discard date label 25 phrase—

1	(A) shall be—
2	(i) in single easy-to-read type style;
3	and
4	(ii) located in a conspicuous place on
5	the package of the food; and
6	(B) may be on the label or, at the discre-
7	tion of the food labeler, elsewhere on the pack-
8	age.
9	(2) Date format.—Each quality date and dis-
10	card date shall be stated in terms of day and month
11	and, as appropriate, year.
12	(3) Abbreviations.—A food labeler may use a
13	standard abbreviation of "BB" and "UB" for the
14	quality date and discard date, respectively, only if
15	the food packaging is too small to include the uni-
16	form phrase described in subsection $(a)(2)$ or $(b)(2)$,
17	as applicable.
18	(4) Freeze by.—A food labeler may add "or
19	Freeze By' following a quality date or discard date
20	uniform phrase.
21	(d) Infant Formula.—This Act and the amend-
22	ments made by this Act—
23	(1) do not apply with respect to infant formula
24	(as defined in section 201(z) of the Federal Food,
25	Drug, and Cosmetic Act (21 U.S.C. 321(z))); and

1	(2) shall not be construed to affect the require-
2	ments pertaining to infant formula under section
3	412 of the Federal Food, Drug, and Cosmetic Act
4	(21 U.S.C. 350a) and other applicable provisions of
5	law.
6	(e) Education.—Not later than 1 year after the
7	date of enactment of this Act, the administering Secre-
8	taries, acting jointly, shall provide consumer education
9	and outreach on the meaning of quality date and discard
10	date food labels.
11	(f) Rule of Construction; Preemption.—
12	(1) Rule of Construction.—Nothing in this
13	Act or the amendments made by this Act shall be
14	construed to prohibit any State or political subdivi-
15	sion of a State from establishing or continuing in ef-
16	fect any requirement that prohibits the sale or dona-
17	tion of foods based on passage of the discard date.
18	(2) Preemption.—No State or political sub-
19	division of a State may establish or continue in ef-
20	fect any requirement that—
21	(A) relates to the inclusion in food labeling
22	of a quality date or a discard date that is dif-
23	ferent from or in addition to, or that is other-
24	wise not identical with, the requirements of this
25	Act and the amendments made by this Act; or

- (B) prohibits the sale or donation of foods
 based on passage of the quality date.
- 3 (3) Enforcement.—The administering Secre-4 taries, acting jointly and in coordination with the 5 Federal Trade Commission, shall ensure that the 6 uniform quality date label phrase and uniform dis-7 card date label phrase are standardized across all 8 food products.
- 9 (4) Savings.—Notwithstanding paragraph (2), 10 nothing in this Act, nor any amendment made by 11 this Act, nor any standard or requirement imposed 12 pursuant to this Act, shall be construed to preempt, 13 displace, or supplant any State or Federal common 14 law rights or any State or Federal statute creating 15 a remedy for civil relief, including those for civil 16 damage, or a penalty for criminal conduct.
- 17 (g) Time Temperature Indicator Labels.—
 18 Nothing in this Act or the amendments made by this Act
 19 shall be construed to prohibit or restrict the use of time20 temperature indicator labels or similar technology that is
 21 in addition to or in lieu of any uniform quality date label
 22 phrase under subsection (a)(2) or uniform discard date
 23 label phrase under subsection (b)(2).

1 SEC. 703. MISBRANDING.

2	(a) FDA VIOLATIONS.—Section 403 of the Federal
3	Food, Drug, and Cosmetic Act (21 U.S.C. 343) is amend-
4	ed by adding at the end the following:
5	"(z) If it is food and its labeling is in violation of
6	section 3 of the Food Date Labeling Act of 2019.".
7	(b) Poultry Products.—Section 4(h) of the Poul-
8	try Products Inspection Act (21 U.S.C. 453(h)) is amend-
9	ed—
10	(1) in paragraph (11), by striking "or" at the
11	end;
12	(2) in paragraph (12), by striking the period at
13	the end and inserting "; or"; and
14	(3) by adding at the end the following:
15	"(13) if its labeling is in violation of section 3
16	of the Food Date Labeling Act of 2019.".
17	(c) MEAT PRODUCTS.—Section 1(n) of the Federal
18	Meat Inspection Act (21 U.S.C. 601(n)) is amended—
19	(1) in paragraph (11), by striking "or" at the
20	end;
21	(2) in paragraph (12), by striking the period at
22	the end and inserting "; or"; and
23	(3) by adding at the end the following:
24	"(13) if its labeling is in violation of section 3
25	of the Food Date Labeling Act of 2019"

- 1 (d) Egg Products.—Section 7(b) of the Egg Prod-
- 2 ucts Inspection Act (21 U.S.C. 1036(b)) is amended in
- 3 the first sentence by adding before the period at the end
- 4 "or if its labeling is in violation of section 3 of the Food
- 5 Date Labeling Act of 2019".

6 SEC. 704. REGULATIONS.

- 7 Not later than 2 years after the date of enactment
- 8 of this Act, the Secretaries, acting jointly, shall promul-
- 9 gate final regulations for carrying out the provisions of
- 10 this Act and the amendments made by this Act.

11 SEC. 705. DELAYED APPLICABILITY.

- 12 This Act and the amendments made by this Act shall
- 13 apply only with respect to food products that are labeled
- 14 on or after the date that is 2 years after the date of pro-
- 15 mulgation of final regulations under section 5.

16 Subtitle B—Other Provisions

- 17 SEC. 711. COMPOSTING AS CONSERVATION PRACTICE.
- 18 (a) Definitions.—Section 1201(a) of the Food Se-
- 19 curity Act of 1985 (16 U.S.C. 3801(a)) is amended—
- 20 (1) by redesignating paragraphs (3) through
- 21 (27) as paragraphs (4) through (28), respectively;
- 22 and
- 23 (2) by inserting after paragraph (2) the fol-
- lowing:

1	"(3) Compositing practice.—The term
2	'composting practice' means—
3	"(A) an activity (including an activity that
4	does not require the use of a composting facil-
5	ity) to produce compost from organic waste
6	that is—
7	"(i) generated on a farm; or
8	"(ii) brought to a farm from the near-
9	by community; and
10	"(B) the use of compost on a farm to im-
11	prove water retention and soil health, subject to
12	the condition that such a use shall be in compli-
13	ance with applicable Federal, State, and local
14	laws.".
15	(b) Conservation Stewardship Program.—Sec-
16	tion 1240I(2)(B)(i) of the Food Security Act of 1985 (16
17	U.S.C. 3839aa–21(2)(B)(i)) is amended by inserting "and
18	composting practices" after "agriculture drainage man-
19	agement systems".
20	(c) Environmental Quality Incentives Pro-
21	GRAM.—Section 1240A(6)(A)(ii) of the Food Security Act
22	of 1985 (16 U.S.C. 3839aa–1(6)(A)(ii)) is amended by in-
23	serting ", including composting practices" before the semi-
24	colon at the end.

1	(d) Delivery of Technical Assistance.—Section
2	1242(h) of the Food Security Act of 1985 (16 U.S.C.
3	3842(h)) is amended by adding at the end the following:
4	"(5) Development of composting practice
5	STANDARD.—In addition to conducting a review of
6	any composting facilities practice standard under
7	this subsection, the Secretary shall develop and im-
8	plement a composting practice standard.".
9	SEC. 712. AMENDMENTS TO FEDERAL FOOD DONATION
10	ACT.
11	(a) Purpose.—Section 2 of the Federal Food Dona-
12	tion Act of 2008 (Public Law 110–247; 42 U.S.C. 1792
13	note) is amended by striking "encourage" and inserting
14	"require".
15	(b) Definitions.—Section 3 of the Federal Food
16	Donation Act of 2008 (Public Law 110–247; 42 U.S.C.
17	1792 note) is amended—
18	(1) by redesignating paragraphs (3) and (4) as
19	paragraphs (4) and (5), respectively; and
20	(2) by inserting after paragraph (2) the fol-
21	lowing:
22	"(3) Executive agency.—The term 'executive
23	agency' has the meaning given the term in section
24	133 of title 41. United States Code.".

1	(c) Report on Food Waste by Certain Federal
2	CONTRACTORS.—Section 4 of the Federal Food Donation
3	Act of 2008 (Public Law 110–247; 42 U.S.C. 1792) is
4	amended—
5	(1) by amending subsection (a) to read as fol-
6	lows:
7	"(a) In General.—
8	"(1) Requirement.—Not later than 180 days
9	after the date of enactment of the Act, the Federal
10	Acquisition Regulation issued in accordance with
11	section 1121 of title 41, United States Code, shall
12	be revised to provide that, except as provided in
13	paragraph (2), all contracts of more than \$10,000
14	for the provision, service, or sale of food in the
15	United States, or for the lease or rental of Federal
16	property to a private entity for events at which food
17	is provided in the United States, shall include a
18	clause that—
19	"(A) requires the donation of excess, ap-
20	parently wholesome food to nonprofit organiza-
21	tions that provide assistance to food-insecure
22	people in the United States;
23	"(B) states the terms and conditions de-
24	scribed in subsection (b): and

1	"(C) requires the annual submission, in a
2	form and manner specified by the executive
3	agency awarding the contract, of the report de-
4	scribed in subsection (d).
5	"(2) Exception.—Paragraph (1) shall not
6	apply to a contract with an executive agency that
7	has issued a regulation in effect on the date of en-
8	actment of the Act that prohibits a donation de-
9	scribed in paragraph (1)(A)."; and
10	(2) by adding at the end the following new sub-
11	sections:
12	"(c) Application to Congress.—
13	"(1) Contracts.—This Act shall apply to the
14	House of Representatives and to contracts entered
15	into by the House of Representatives, and to the
16	Senate and to contracts entered into by the Senate,
17	in the same manner and to the same extent as this
18	Act applies to an executive agency and to contracts
19	entered into by an executive agency.
20	"(2) Administration.—For purposes of car-
21	rying out paragraph (1)—
22	"(A) the Chief Administrative Officer of
23	the House of Representatives shall be consid-
24	ered to be the head of the House of Representa-
25	tives; and

1	"(B) the Secretary of the Senate shall be
2	considered to be the head of the Senate.
3	"(d) Data; Reports.—
4	"(1) Report described.—The report de-
5	scribed in this subsection, with respect to a contract
6	described in subsection (a) entered into by a con-
7	tractor and an executive agency, is a report from the
8	contractor to the executive agency that describes, for
9	each month of performance of the contract during
10	the year covered by the report, the weight of appar-
11	ently wholesome food that was, pursuant to the con-
12	tract, disposed of in each of the following manners:
13	"(A) Donation.—Donation by the con-
14	tractor pursuant to this Act (organized by the
15	name of the organization receiving such food).
16	"(B) Composting.—Composting or other
17	recycling by the contractor.
18	"(C) DISCARDING.—Discarding by the
19	contractor (organized by the reason such food
20	was so discarded).
21	"(2) Reports to omb.—Not later than 30
22	days after the date that an executive agency receives
23	a report pursuant to paragraph (1)(C), the agency
24	shall submit a copy of the report to the Director of
25	the Office of Management and Budget.

1	"(3) Reports to congress.—The Director of
2	the Office of Management and Budget shall submit
3	to Congress an annual report aggregating the infor-
4	mation in the reports received pursuant to para-
5	graph (2) during the year covered by the report."
6	(d) Authorization of Appropriations.—The
7	Federal Food Donation Act of 2008 (42 U.S.C. 1792) is
8	amended by adding at the end the following:
9	"SEC. 5. AUTHORIZATION OF APPROPRIATIONS.
10	"There is authorized to be appropriated to the Sec-
11	retary of Agriculture to carry out this Act \$10,000,000
12	for fiscal year 2021 and each fiscal year thereafter.".
13	SEC. 713. GRANTS FOR COMPOSTING AND ANAEROBIC DI
1)	
14	GESTION FOOD WASTE-TO-ENERGY
	GESTION FOOD WASTE-TO-ENERGY PROJECTS.
14	
14 15 16	PROJECTS.
14 15 16 17	PROJECTS. (a) IN GENERAL.—Subtitle G of the Solid Waste Dis-
14 15 16 17	PROJECTS. (a) IN GENERAL.—Subtitle G of the Solid Waste Disposal Act (42 U.S.C. 6971 et seq.) is amended by adding
14 15 16 17	PROJECTS. (a) IN GENERAL.—Subtitle G of the Solid Waste Disposal Act (42 U.S.C. 6971 et seq.) is amended by adding at the end the following:
114 115 116 117 118	PROJECTS. (a) IN GENERAL.—Subtitle G of the Solid Waste Disposal Act (42 U.S.C. 6971 et seq.) is amended by adding at the end the following: "SEC. 7011. GRANTS FOR COMPOSTING AND ANAEROBIC DISPOSALE."
114 115 116 117 118 119 220	PROJECTS. (a) IN GENERAL.—Subtitle G of the Solid Waste Disposal Act (42 U.S.C. 6971 et seq.) is amended by adding at the end the following: "SEC. 7011. GRANTS FOR COMPOSTING AND ANAEROBIC DISPOSATION FOOD WASTE-TO-ENERGY.
14 15 16 17 18 19 20 21	PROJECTS. (a) IN GENERAL.—Subtitle G of the Solid Waste Disposal Act (42 U.S.C. 6971 et seq.) is amended by adding at the end the following: "SEC. 7011. GRANTS FOR COMPOSTING AND ANAEROBIC DISPOSITION FOOD WASTE-TO-ENERGY PROJECTS.

1	composting or anaerobic digestion food waste-to-energy
2	projects.
3	"(b) Eligible States.—
4	"(1) Eligibility.—In order to be eligible to
5	receive a grant under this section, a State shall—
6	"(A) have in effect a plan to limit the
7	quantity of food waste that may be disposed of
8	in landfills in the State; and
9	"(B) provide to the Administrator—
10	"(i) a written commitment that the
11	State has read and agrees to comply with
12	the Food Recovery Hierarchy of the Envi-
13	ronmental Protection Agency, particularly
14	as applied to apparently wholesome food
15	(as defined in section 22(b) of the Child
16	Nutrition Act of 1966 (42 U.S.C.
17	1791(b))) that may be provided to or re-
18	ceived by the State; and
19	"(ii) a written end-product recycling
20	plan that provides for the beneficial use of
21	the material resulting from any anaerobic
22	digestion food waste-to-energy operation
23	with respect to which the loan or grant is
24	made, in a manner that meets all applica-

1	ble Federal, State, and local laws that pro-
2	tect human health and the environment.
3	"(2) Limitation.—A grant under subsection
4	(a) may not be used for an anaerobic digester that
5	uses solely manure as undigested biomass.
6	"(3) Preference.—The Administrator shall
7	give preference to grants under subsection (a) for
8	anaerobic digesters that use primarily nonedible
9	food, crop waste, or nonedible food and crop waste
10	as undigested biomass.
11	"(c) Authorization of Appropriations.—There
12	is authorized to be appropriated to carry out this section
13	\$100,000,000 for each fiscal year.
14	"(d) State Defined.—In this section, the term
15	'State' means each State of the United States, the District
16	of Columbia, each territory or possession of the United
17	States, and each federally recognized Indian Tribe.".
18	(b) CLERICAL AMENDMENT.—The table of contents
19	for the Solid Waste Disposal Act (42 U.S.C. 6901 et seq.)
20	is amended by inserting after the item relating to section
21	7010 the following:

"Sec. 7011. Grants for composting and an aerobic digestion food waste-to-energy projects.".

1	SEC. 714. SCHOOL FOOD WASTE REDUCTION GRANT PRO-
2	GRAM.
3	(a) In General.—Section 18 of the Richard B. Rus-
4	sell National School Lunch Act (42 U.S.C. 1769) is
5	amended by inserting before subsection (b) the following
6	"(a) School Food Waste Reduction Grant Pro-
7	GRAM.—
8	"(1) Grant program established.—
9	"(A) IN GENERAL.—The Secretary shall
10	carry out a program to make grants, on a com-
11	petitive basis, to eligible local educational agen-
12	cies to carry out food waste measurement and
13	reporting, prevention, education, and reduction
14	projects.
15	"(B) Regional Balance.—In awarding
16	grants under this subsection, the Secretary
17	shall, to the maximum extent practicable, en-
18	sure that—
19	"(i) a grant is awarded to an eligible
20	local educational agency in each region
21	served by the Administrator of the Food
22	and Nutrition Service; and
23	"(ii) equitable treatment of rural
24	urban, and tribal communities.
25	"(2) Application.—To be eligible to receive a
26	grant under this subsection, an eligible local edu-

1	cational agency shall submit an application to the
2	Secretary at such time, in such manner, and con-
3	taining such information as the Secretary may re-
4	quire.
5	"(3) Priority.—In making grants under this
6	subsection the Secretary shall give priority to an eli-
7	gible local educational agency that demonstrates in
8	the application under paragraph (2) that such eligi-
9	ble local educational agency will use the grant to—
10	"(A) carry out experiential education ac-
11	tivities that encourage children enrolled in such
12	eligible local educational agency to participate
13	in food waste measurement and education;
14	"(B) prioritize the best use of food in ac-
15	cordance with the Food Recovery Hierarchy
16	published by the Administrator of the Environ-
17	mental Protection Agency;
18	"(C) with respect to food waste prevention
19	and reduction, collaborate with other eligible
20	local educational agencies, tribes, nongovern-
21	mental and community-based organizations,
22	and other community partners;
23	"(D) evaluate the activities described in
24	subparagraphs (A) through (C) and make eval-
25	uation plans; and

1	"(E) establish a food waste measurement
2	prevention, and reduction project with long-
3	term sustainability.
4	"(4) Federal share.—
5	"(A) IN GENERAL.—The Federal share of
6	a food waste measurement, prevention, and re-
7	duction project funded through a grant awarded
8	under this subsection shall not exceed 75 per-
9	cent of the total cost of such food waste reduc-
10	tion project.
11	"(B) FEDERAL MATCHING.—As a condi-
12	tion of receiving a grant under this subsection
13	an eligible local educational agency shall provide
14	matching funds in the form of cash or in-kind
15	contributions, including facilities, equipment, or
16	services provided by State and local govern-
17	ments, nonprofit organizations, and private
18	sources.
19	"(5) USE OF FUNDS.—An eligible local edu-
20	cational agency that receives a grant under this sec-
21	tion shall use funds under such grant to carry out
22	at least one of the following:
23	"(A) Planning a food waste measurement
24	prevention, and reduction project.

1	"(B) Carrying out activities under such a
2	project.
3	"(C) Providing training to support such a
4	project.
5	"(D) Purchasing equipment to support
6	such a project.
7	"(E) Offering food waste education to stu-
8	dents enrolled in such eligible local educational
9	agency.
10	"(6) Evaluation.—
11	"(A) AGREEMENT.—As a condition of re-
12	ceiving a grant under this subsection, each eli-
13	gible local educational agency shall agree to co-
14	operate in an evaluation by the Secretary of the
15	project carried out using grant funds.
16	"(B) Periodic evaluation.—Not later
17	than 2 years after the date of the enactment of
18	this paragraph and every 2 years thereafter, the
19	Secretary shall carry out an evaluation of the
20	grants made under this section that includes—
21	"(i) the amount of Federal funds used
22	to carry out such grants; and
23	"(ii) an evaluation of the outcomes of
24	the projects carried out pursuant to such
25	grants.

1	"(7) Definition of eligible local edu-
2	CATIONAL AGENCY.—In this subsection, the term 'el-
3	igible local educational agency' means a local edu-
4	cational agency that participates in the school lunch
5	program under this Act or the school breakfast pro-
6	gram established under section 4 of the Child Nutri-
7	tion Act of 1966 (42 U.S.C. 1773).".
8	(b) Technical Assistance.—Section 21(b) of the
9	Richard B. Russell National School Lunch Act (42 U.S.C.
10	1769b-1(b)) is amended—
11	(1) in paragraph (2), by striking "and" at the
12	$\mathrm{end};$
13	(2) in paragraph (3), by striking the period at
14	the end and inserting "; and"; and
15	(3) by adding at the end the following:
16	"(4) food waste measurement, prevention, and
17	reduction.".

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