#### 117TH CONGRESS 1ST SESSION

# S. 1337

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

### IN THE SENATE OF THE UNITED STATES

APRIL 22, 2021

Mr. Heinrich (for himself, Mr. Sanders, Mrs. Gillibrand, and Mr. Blumenthal) introduced the following bill; which was read twice and referred to the Committee on Finance

# 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 of 2021".
- 6 (b) Table of Contents for
- 7 this Act is as follows:
  - Sec. 1. Short title; table of contents.
  - Sec. 2. Definition of Secretary.

TITLE I—NATIONAL GOALS

Sec. 101. National 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 for rural areas program.

#### 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. Study and report on feasibility of agricultural carbon capture tax credit.
- Sec. 307. Conservation compliance.
- Sec. 308. National and regional agroforestry centers.

#### TITLE IV—FARMLAND PRESERVATION AND FARM VIABILITY

- Sec. 401. Local Agriculture Market Program.
- Sec. 402. National 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. Agricultural conservation easement program.

#### TITLE V—PASTURE-BASED LIVESTOCK

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

#### TITLE VI—ON-FARM RENEWABLE ENERGY

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

#### TITLE VII—FOOD LOSS AND WASTE

#### Subtitle A—Food Date Labeling

Sec. 701. Definitions.

- 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 SEC. 2. DEFINITION OF SECRETARY.

- 2 In this Act, the term "Secretary" means the Sec-
- 3 retary of Agriculture.

# 4 TITLE I—NATIONAL GOALS

- 5 SEC. 101. NATIONAL GOALS.
- 6 (a) Purpose.—The purpose of the goals established
- 7 under this title is to prevent climate change from exceed-
- 8 ing 1.5 degrees Celsius of warming above preindustrial lev-
- 9 els through a national greenhouse gas emission reduction
- 10 effort.
- 11 (b) National Goals.—The national goals for the
- 12 agricultural sector shall be to achieve—
- 13 (1) not less than a 50 percent reduction in net
- greenhouse gas emissions, as compared to those lev-
- els during calendar year 2010, by not later than De-
- 16 cember 31, 2030; and
- 17 (2) net zero emissions by not later than Decem-
- 18 ber 31, 2040.

1	(c) Subgoals.—To achieve the national goals de-
2	scribed in subsection (b), there are established the fol-
3	lowing subgoals:
4	(1) Research.—The total Federal investment
5	in public food and agriculture research and exten-
6	sion should—
7	(A) at a minimum, as compared to that
8	total Federal investment for fiscal year 2021—
9	(i) triple by not later than December
10	31, 2030; and
11	(ii) quadruple by not later than De-
12	cember 31, 2040; and
13	(B) strongly focus on climate change adap-
14	tation and mitigation, soil health and carbon se-
15	questration, nutrient and manure management
16	to curb nitrous oxide and methane emissions,
17	agroforestry, advanced grazing management
18	and crop-livestock integration, other agro-eco-
19	logical systems, on-farm and food system en-
20	ergy efficiency and renewable energy produc-
21	tion, farmland preservation and viability, food
22	waste reduction, and any other related areas, as
23	determined by the Secretary.
24	(2) Soil Health.—The United States
25	should—

1	(A) immediately become a member of the
2	Partners Forum and the Consortium of the 4
3	per 1000 Initiative, hosted by the Consultative
4	Group for International Agricultural Research,
5	with the aim of increasing total soil carbon
6	stocks by 0.4 percent annually to reduce carbon
7	in the atmosphere, restore soil health and pro-
8	ductivity, and thereby improve food security;
9	(B) sufficiently expand adoption of soil
10	health practices (including diverse crop rota-
11	tions, cover cropping, conservation tillage, pe-
12	rennial crop production systems, agroforestry,
13	composting, biologically based nutrient manage-
14	ment, and advanced grazing management, in-
15	cluding silvopasture)—
16	(i) to reduce nitrous oxide emissions
17	from agricultural soils, as compared to
18	those levels during calendar year 2021—
19	(I) by 25 percent by not later
20	than December 31, 2030; and
21	(II) by 75 percent by not later
22	than December 31, 2040;
23	(ii) to increase soil carbon stocks by
24	0.4 percent annually on at least 50 percent

1	of agricultural land by not later than De-
2	cember 31, 2030; and
3	(iii) to meet or exceed the threshold
4	described in clause (ii) on all agricultural
5	land by not later than December 31, 2040;
6	(C) expand implementation of regionally
7	appropriate cover crops and other continual liv-
8	ing cover so that—
9	(i) at least 50 percent of cropland
10	acres include 1 or more cover crops or
11	other continual living cover in the rotations
12	of the cropland acres by not later than De-
13	cember 31, 2030;
14	(ii) at least 75 percent of cropland
15	acres include 1 or more cover crops or
16	other continual living cover in the rotations
17	of the cropland acres by not later than De-
18	cember 31, 2040;
19	(iii) cropland acres are covered by
20	crops (including forages and hay crops),
21	cover crops, or residue for an average of
22	75 percent of each calendar year by not
23	later than December 31, 2030; and
24	(iv) cropland acres are covered by
25	crops (including forages and hav crops),

1	cover crops, or residue for an average of
2	85 percent of each calendar year by not
3	later than December 31, 2040; and
4	(D) encourage conversion of at least—
5	(i) 15 percent of annual grain crop
6	acres, as in use on the date of enactment
7	of this Act, to agroforestry, perennial graz-
8	ing, perennial grain crops, or other peren-
9	nial production systems by not later than
10	December 31, 2030; and
11	(ii) 30 percent of annual grain crop
12	acres, as in use on the date of enactment
13	of this Act, to agroforestry, perennial graz-
14	ing, perennial grain crops, or other peren-
15	nial production systems by not later than
16	December 31, 2040.
17	(3) Farmland Preservation.—
18	(A) 2030 GOAL.—The rate of conversion of
19	agricultural land to development, and the rate
20	of conversion of grassland to cropping, should
21	be reduced by at least 80 percent, as compared
22	to those rates for calendar year 2021 by not
23	later than December 31, 2030.

1	(B) 2040 GOAL.—There should be no con-
2	version of agricultural land to development, or
3	grassland to cropping, by December 31, 2040.
4	(4) Pasture-Based Livestock.—The live-
5	stock sector should—
6	(A) establish advanced grazing manage-
7	ment, including management-intensive rota-
8	tional grazing, on at least—
9	(i) 50 percent of all grazing land by
10	not later than December 31, 2030; and
11	(ii) 100 percent of all grazing land by
12	not later than December 31, 2040;
13	(B) reduce greenhouse gas emissions re-
14	lated to feeding of ruminants by—
15	(i) at least—
16	(I) $\frac{1}{3}$ by not later than Decem-
17	ber 31, 2030; and
18	(II) $\frac{1}{2}$ by not later than Decem-
19	ber 31, 2040; and
20	(ii) reducing nongrazing feeding of
21	ruminants, growing feed grains and for-
22	ages with soil health and nutrient manage-
23	ment practices that minimize net green-
24	house gas emissions from cropland, and
25	designing livestock feed mixtures and sup-

1	plements to mitigate enteric methane emis-
2	sions;
3	(C) re-integrate livestock and crop produc-
4	tion systems at farm, local, and regional levels
5	to facilitate environmentally sound management
6	and field application of manure and reduce the
7	need for long-term manure storage by increas-
8	ing acreage on individual farms under crop-live-
9	stock integrated management by at least—
10	(i) 100 percent as compared to cal-
11	endar year 2017 levels by not later than
12	December 31, 2030; and
13	(ii) 300 percent as compared to cal-
14	endar year 2017 levels by not later than
15	December 31, 2040; and
16	(D)(i) immediately cease building any new
17	or expanded waste lagoons for confined animal
18	feeding operations; and
19	(ii) convert—
20	(I) by not later than December 31,
21	2030, at least ½ of wet manure handling
22	and storage to non-digester dairy or live-
23	stock methane management methods (as
24	defined in section 1240T(a) of the Food
25	Security Act of 1985); and

1	(II) by not later than December 31,
2	2040, at least <sup>2</sup> / <sub>3</sub> of wet manure handling
3	and storage to non-digester dairy or live-
4	stock methane management methods (as so
5	defined).
6	(5) On-farm renewable energy.—The agri-
7	cultural sector should—
8	(A) implement energy audits and energy
9	efficiency improvements on at least—
10	(i) 50 percent of farms by not later
11	than December 31, 2030; and
12	(ii) 100 percent of farms by not later
13	than December 31, 2040;
14	(B) expand on-farm clean renewable en-
15	ergy production to a level that is at least—
16	(i) double the 2017 level by not later
17	than December 31, 2030; and
18	(ii) triple the 2017 level by not later
19	than December 31, 2040; and
20	(C) install and manage on-farm renewable
21	energy infrastructure in a manner that does
22	not—
23	(i) compromise the climate resilience
24	and greenhouse gas mitigation goals of this
25	Act; or

1	(ii) adversely impact farmland, soil,
2	and water resources, or food production.
3	(6) FOOD LOSS AND WASTE.—Consistent with
4	the Food Waste Challenge launched by the Depart-
5	ment of Agriculture and the Environmental Protec-
6	tion Agency in June 2013, and the national food
7	loss and waste goal announced in September 2015,
8	the food and agricultural sector should commit to—
9	(A) at least a 50 percent reduction in food
10	loss and waste by not later than December 31,
11	2030;
12	(B) at least a 75 percent reduction in food
13	loss and waste by not later than December 31,
14	2040; and
15	(C) in a manner consistent with the Food
16	Recovery Hierarchy established by the Environ-
17	mental Protection Agency, diverting from land-
18	fills through composting and other means at
19	least—
20	(i) 50 percent of unavoidable food
21	waste and food processing byproducts by
22	not later than December 31, 2030; and
23	(ii) 90 percent of unavoidable food
24	waste and food processing byproducts by
25	not later than December 31, 2040.

## 1 SEC. 102. ACTION PLAN.

2	(a) In General.—The Secretary shall—
3	(1) develop a plan (referred to in this section as
4	the "plan"), which may involve actions to be taken
5	by other Federal agencies, to make significant and
6	rapid progress to achieve the national goals de-
7	scribed in section 101; and
8	(2) make the plan available for public comment
9	for a period of not less than 90 days.
10	(b) Actions.—Actions under the plan shall—
11	(1) include issuing regulations, providing incen-
12	tives, carrying out research and development pro-
13	grams, and any other actions the Secretary deter-
14	mines are necessary to achieve the national goals de-
15	scribed in section 101; and
16	(2) be designed—
17	(A) to fully implement the provisions of
18	this Act and the amendments made by this Act;
19	(B) to provide benefits for farmers and
20	ranchers, rural communities, small businesses,
21	and consumers;
22	(C) to improve public health, resilience,
23	and environmental outcomes, especially for
24	rural and low-income households, communities
25	of color, Tribal and indigenous communities,
26	and communities that are disproportionately

1	vulnerable to the impacts of climate change, air
2	and water pollution, and other resource deg-
3	radation; and
4	(D) to prioritize investments that reduce
5	emissions of greenhouse gases and sequester
6	carbon while simultaneously helping to solve
7	other pressing agro-environmental resource con-
8	cerns, increase farming and ranching opportuni-
9	ties, create quality jobs, improve farmworker
10	working conditions and living standards, and
11	make communities more resilient to the effects
12	of climate change.
13	(c) Final Plan.—Not later than 18 months after
14	the date of enactment of this Act, the Secretary shall—
15	(1) finalize the plan, taking into account any
16	public comments received on the plan;
17	(2) begin implementation of the plan; and
18	(3) submit the plan to Congress.
19	(d) UPDATES.—Beginning 2 years after the date on
20	which the Secretary submits the plan to Congress under

thereafter, the Secretary shall—

(1) review and revise the plan to ensure that
the plan is sufficient to achieve the national goals
described in section 101; and

subsection (c)(3), and not less frequently than biennially

21

1	(2) submit the revised plan to Congress.
2	(e) Annual Report.—Not later than 1 year after
3	the date on which the Secretary submits the plan to Con-
4	gress under subsection (c)(3), and annually thereafter, the
5	Secretary shall submit to Congress, and make publicly
6	available, an annual report that describes, for the period
7	covered by the report—
8	(1) actions taken pursuant to the plan and the
9	effects of those actions;
10	(2) the conclusion of the most recent review of
11	the plan conducted under subsection (d), if applica-
12	ble; and
13	(3) a summary of any revisions made to the
14	plan under that subsection.
15	TITLE II—RESEARCH
16	SEC. 201. RESEARCH, EXTENSION, AND EDUCATION PUR-
17	POSE.
18	Section 1402 of the National Agricultural Research,
19	Extension, and Teaching Policy Act of 1977 (7 U.S.C.
20	3101) is amended—
21	(1) by redesignating paragraphs (8) and (9) as
22	paragraphs (9) and (10), respectively; and
23	(2) by inserting after paragraph (7) the fol-
24	lowing:

1	"(8) accelerate the ability of agriculture and the
2	food system of the United States to first achieve net-
3	zero carbon emissions and then be carbon positive by
4	removing additional carbon dioxide from the atmos-
5	phere;".
6	SEC. 202. REGIONAL HUBS FOR RISK ADAPTATION AND
7	MITIGATION TO CLIMATE CHANGE.
8	Title IV of the Agricultural Research, Extension, and
9	Education Reform Act of 1998 is amended by inserting
10	before section 404 (7 U.S.C. 7624) the following:
11	"SEC. 401. REGIONAL HUBS FOR RISK ADAPTATION AND
12	MITIGATION TO CLIMATE CHANGE.
13	"(a) Establishment.—The Secretary shall estab-
14	lish a national network of regional hubs for risk adapta-
15	tion and mitigation to climate change to provide to farm-
16	ers, ranchers, forest landowners, and other agricultural
17	and natural resource managers—
18	"(1) science-based, region-specific, cost-effec-
19	tive, and practical information and program support
20	for science-informed decisionmaking in light of the
21	increased costs, opportunities, risks, and
22	vulnerabilities associated with a changing climate;
23	and
24	"(2) access to assistance to implement that de-
25	cisionmaking.

1	"(b) Eligibility.—An entity shall be eligible to be
2	selected as a regional hub under subsection (a) if the enti-
3	ty is any office of the Agricultural Research Service, the
4	Forest Service, or any other agency of the Department
5	of Agriculture that the Secretary determines to be appro-
6	priate.
7	"(c) Administration.—
8	"(1) IN GENERAL.—The network established
9	under subsection (a) shall be designated and admin-
10	istered jointly by the Agricultural Research Service
11	and the Forest Service, in partnership with other
12	Federal agencies, including the following:
13	"(A) Within the Department of Agri-
14	culture, the following agencies:
15	"(i) The Natural Resources Conserva-
16	tion Service.
17	"(ii) The Farm Service Agency.
18	"(iii) The Risk Management Agency.
19	"(iv) The Animal and Plant Health
20	Inspection Service.
21	"(v) The National Institute of Food
22	and Agriculture.
23	"(B) The Department of the Interior.
24	"(C) The Department of Energy.

1	"(D) The Environmental Protection Agen-
2	ey.
3	"(E) The United States Geological Survey.
4	"(F) National Oceanic and Atmospheric
5	Administration.
6	"(G) National Aeronautics and Space Ad-
7	ministration.
8	"(H) Such other Federal agencies as the
9	Secretary determines to be appropriate.
10	"(2) Partners.—The regional hubs estab-
11	lished under subsection (a) shall work in close part-
12	nership with other stakeholders and partners, includ-
13	ing—
14	"(A) colleges and universities (as defined
15	in section 1404 of the Food and Agriculture
16	Act of 1977 (7 U.S.C. 3103));
17	"(B) cooperative extension services (as de-
18	fined in that section);
19	"(C) State agricultural experiment stations
20	(as defined in that section);
21	"(D) private entities;
22	"(E) State, local, and regional govern-
23	ments;
24	"(F) Indian Tribes;

1	"(G) agriculture and commodity organiza-
2	tions;
3	"(H) nonprofit and community-based orga-
4	nizations; and
5	"(I) other partners, as determined by the
6	Secretary.
7	"(d) Responsibilities.—A regional hub established
8	under subsection (a) shall—
9	"(1) offer tools, strategic management options,
10	and technical support to farmers, ranchers, and for-
11	est landowners to help those farmers, ranchers, and
12	forest landowners mitigate and adapt to climate
13	change;
14	"(2) direct farmers, ranchers, and forest land-
15	owners to Federal agencies that can provide pro-
16	gram support to enable those farmers, ranchers, and
17	forest landowners to implement science-informed
18	management practices that address climate change;
19	"(3) determine how climate and weather projec-
20	tions will impact the agricultural and forestry sec-
21	tors;
22	"(4) provide periodic regional assessments of
23	risk and vulnerability in the agricultural and for-
24	estry sectors—

1	"(A) to help farmers, ranchers, and forest
2	landowners better understand the potential di-
3	rect and indirect impacts of climate change;
4	and

- "(B) to inform the United States Global Change Research Program established under section 103 of the Global Change Research Act of 1990 (15 U.S.C. 2933);
- "(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 (as defined in that
  section), and other entities;
- "(6) work with any cooperative extension services (as defined in section 1404 of the Food and Agriculture Act of 1977 (7 U.S.C. 3103)), conservation districts, and nongovernmental organizations involved in farmer outreach in the region served by the hub to assist producers in developing business plans and conservation plans that take into account emerging climate risk science with respect to crop,

1	production, and conservation system changes that
2	will help producers adapt to a changing climate; and
3	"(7) establish, in partnership with programs
4	and projects carried out under subtitle B of title
5	XVI of the Food, Agriculture, Conservation, and
6	Trade Act of 1990 (7 U.S.C. 5801 et seq.), addi-
7	tional partnerships with farmers and nonprofit and
8	community-based organizations to conduct applied
9	on-farm research on climate change.
10	"(e) Priorities.—A regional hub established under
11	subsection (a) shall prioritize research and data collection
12	activities in the following areas:
13	"(1) Improved measurement and monitoring
14	of—
15	"(A) soil organic carbon sequestration; and
16	"(B) total net greenhouse gas impacts of
17	different farming systems and practices.
18	"(2) Lifecycle analysis for total net greenhouse
19	gas emissions related to—
20	"(A) alternative cropping systems;
21	"(B) alternative livestock production sys-
22	tems;
23	"(C) integrated cropping-livestock systems;
24	"(D) alternative biofuel crop production
25	systems and biofuel end uses:

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

1	"(4) Grazing-based livestock management sys-
2	tems to optimize the net greenhouse gas footprint,
3	including—
4	"(A) grazing land carbon sequestration;
5	and
6	"(B) mitigation of enteric methane.
7	"(5) Perennial production systems that seques-
8	ter carbon, enhance soil health, and increase resil-
9	ience, including—
10	"(A) perennial forages;
11	"(B) perennial grains; and
12	"(C) agroforestry.
13	"(f) Stakeholder Input.—Each regional hub es-
14	tablished under subsection (a)—
15	"(1) shall solicit input from stakeholders on
16	pressing needs, important issues, and outreach strat-
17	egies through a variety of mechanisms, including re-
18	gional stakeholder committees; and
19	"(2) may partner with stakeholders in con-
20	ducting research and developing tools.
21	"(g) Risk Management.—
22	"(1) IN GENERAL.—The Secretary shall appoint
23	a team of individuals representing the regional hubs
24	established under subsection (a), partners with those

1	regional hubs, and the Risk Management Agency to
2	develop recommendations to better account for—
3	"(A) climate risk in actuarial tables; and
4	"(B) soil health and other risk-reducing
5	conservation activities under the Federal crop
6	insurance program under the Federal Crop In-
7	surance Act (7 U.S.C. 1501 et seq.).
8	"(2) Submission of Recommendations.—
9	The team appointed under paragraph (1) shall sub-
10	mit to the Secretary, on an iterative basis, but not
11	less frequently than once every 2 years, the rec-
12	ommendations developed by the team under that
13	paragraph.
14	"(h) AUTHORIZATION OF APPROPRIATIONS.—There
15	is authorized to be appropriated to carry out this section
16	\$50,000,000 for each of fiscal years 2022 through 2030.".
17	SEC. 203. SUSTAINABLE AGRICULTURE RESEARCH AND
18	EDUCATION RESILIENCE INITIATIVE.
19	(a) Sustainable Agriculture Research and
20	Education.—Section 1619 of the Food, Agriculture,
21	Conservation, and Trade Act of 1990 (7 U.S.C. 5801) is
22	amended—
23	(1) in subsection (a)—
24	(A) in paragraph (5), by striking "and" at
25	the end;

1	(B) in paragraph (6), by striking the pe-
2	riod at the end and inserting "; and; and
3	(C) by adding at the end the following:
4	"(7) increase resilience in the context of a
5	changing climate and related economic, social, and
6	environmental shocks."; and
7	(2) in subsection (b)—
8	(A) in paragraph (2)—
9	(i) by striking "integrated crop man-
10	agement" and inserting "integrated crop
11	and livestock management system or prac-
12	tice"; and
13	(ii) by inserting "resilience," after
14	"profitability,"; and
15	(B) by striking paragraph (3) and insert-
16	ing the following:
17	"(3) The term 'resilience' means, with respect
18	to an agricultural management system, the ability of
19	that system to absorb and recover from climate and
20	other disturbances, such that the system is not im-
21	pacted by severe shocks.".
22	(b) Eligibility of Tribal Colleges to Enter
23	Into Research and Extension Project Agree-
24	MENTS.—Section 1621(b) of the Food, Agriculture, Con-
25	servation, and Trade Act of 1990 (7 U.S.C. 5811(b)) is

1	amended by striking "or Federal or State" and inserting
2	"1994 Institutions (as defined in section 532 of the Eq-
3	uity in Educational Land-Grant Status Act of 1994 (7
4	U.S.C. 301 note; Public Law 103–382)), or Federal,
5	State, or Tribal".
6	(c) AGRICULTURAL AND FOOD SYSTEM RESILIENCE
7	Initiative.—
8	(1) In general.—Section 1627 of the Food,
9	Agriculture, Conservation, and Trade Act of 1990 (7
10	U.S.C. 5821) is amended—
11	(A) in the section heading, by striking
12	"INTEGRATED MANAGEMENT SYSTEMS"
13	and inserting "AGRICULTURAL AND FOOD
13 14	and inserting "AGRICULTURAL AND FOOD SYSTEM RESILIENCE INITIATIVE";
14	SYSTEM RESILIENCE INITIATIVE";
14 15	SYSTEM RESILIENCE INITIATIVE"; (B) in subsection (a)—
14 15 16	SYSTEM RESILIENCE INITIATIVE";  (B) in subsection (a)—  (i) by striking paragraph (3);
14 15 16 17	SYSTEM RESILIENCE INITIATIVE";  (B) in subsection (a)—  (i) by striking paragraph (3);  (ii) by redesignating paragraphs (1),
14 15 16 17	SYSTEM RESILIENCE INITIATIVE";  (B) in subsection (a)—  (i) by striking paragraph (3);  (ii) by redesignating paragraphs (1),  (2), (4), and (5) as subparagraphs (C),
14 15 16 17 18	SYSTEM RESILIENCE INITIATIVE";  (B) in subsection (a)—  (i) by striking paragraph (3);  (ii) by redesignating paragraphs (1),  (2), (4), and (5) as subparagraphs (C),  (D), (E), and (F), respectively, and indent-
14 15 16 17 18 19 20	SYSTEM RESILIENCE INITIATIVE";  (B) in subsection (a)—  (i) by striking paragraph (3);  (ii) by redesignating paragraphs (1),  (2), (4), and (5) as subparagraphs (C),  (D), (E), and (F), respectively, and indenting appropriately;
14 15 16 17 18 19 20 21	SYSTEM RESILIENCE INITIATIVE";  (B) in subsection (a)—  (i) by striking paragraph (3);  (ii) by redesignating paragraphs (1),  (2), (4), and (5) as subparagraphs (C),  (D), (E), and (F), respectively, and indenting appropriately;  (iii) in the matter preceding subpara-
14 15 16 17 18 19 20 21	SYSTEM RESILIENCE INITIATIVE";  (B) in subsection (a)—  (i) by striking paragraph (3);  (ii) by redesignating paragraphs (1),  (2), (4), and (5) as subparagraphs (C),  (D), (E), and (F), respectively, and indenting appropriately;  (iii) in the matter preceding subparagraph (C) (as so redesignated), by striking

1	"(1) In General.—In close conjunction with
2	programs and projects established under sections
3	1621 and 1623, the Secretary shall establish a re-
4	search, education, extension, and outreach initiative
5	which may include farmer and rancher research and
6	demonstration grants, and use an interdisciplinary
7	approach wherever appropriate, to increase the resil-
8	ience of agriculture and the food system in the con-
9	text of a changing climate and related economic, so-
10	cial, and environmental shocks.
11	"(2) Purposes.—The purposes of the initiative
12	established under paragraph (1)"; and
13	(iv) in paragraph (2) (as so des-
14	ignated)—
15	(I) by inserting before subpara-
16	graph (C) (as so redesignated) the fol-
17	lowing:
18	"(A) to equip farmers to prepare, adapt
19	and transform the farming systems of the farm-
20	ers when confronted by shocks and stresses to
21	the agricultural production and livelihoods of
22	the farmers;
23	"(B) to support local and regional food
24	systems that support resilience and enhance

1	local access and control over productive re-
2	sources;";
3	(II) in subparagraph (C) (as so
4	redesignated)—
5	(aa) by striking "practices
6	and systems" and inserting "sys-
7	tems and practices";
8	(bb) by inserting "elimate
9	and" after "adverse";
10	(cc) by inserting "soil qual-
11	ity and" after "enhance"; and
12	(dd) by inserting "reduce
13	dependency on fossil fuels," after
14	"inputs,";
15	(III) in subparagraph (D) (as so
16	redesignated), by inserting "increase
17	resilience and" after "practices to";
18	(IV) in subparagraph (E) (as so
19	redesignated), by inserting "and prac-
20	tices" after "systems"; and
21	(V) in subparagraph (F) (as so
22	redesignated), by striking "inte-
23	grated" and all that follows through
24	"programs" and inserting "policies

1	and programs to improve food and ag-
2	ricultural system resilience"; and
3	(C) by striking subsections (b), (c), and (d)
4	and inserting the following:
5	"(b) Funding.—
6	"(1) Mandatory funding.—Of the funds of
7	the Commodity Credit Corporation, the Secretary
8	shall use to carry out this section \$50,000,000 for
9	fiscal year 2022 and each fiscal year thereafter.
10	"(2) Discretionary funding.—There is au-
11	thorized to be appropriated to carry out this section
12	through the National Institute of Food and Agri-
13	culture $$20,000,000$ for each of fiscal years $2022$
14	through 2030.".
15	(2) Conforming amendment.—The chapter
16	heading of chapter 2 of subtitle B of title XVI of the
17	Food, Agriculture, Conservation, and Trade Act of
18	$1990\ (7$ U.S.C. $5821)$ is amended to read as follows:
19	"AGRICULTURAL AND FOOD SYSTEM
20	RESILIENCE INITIATIVE".
21	SEC. 204. SUSTAINABLE AGRICULTURE TECHNOLOGY DE-
22	VELOPMENT AND TRANSFER PROGRAM.
23	(a) Technical Guides and Books.—Section 1628
24	of the Food, Agriculture, Conservation, and Trade Act of
25	1990 (7 U.S.C. 5831) is amended—

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

- 1 "(10) develop and provide information con-2 cerning climate change adaptation and mitigation 3 developed under this subtitle and other research and 4 education programs of the Department;"; (2) in subsection (h), by striking "Soil Con-5 6 servation Service" and inserting "Natural Resources 7 Conservation Service"; and (3) in subsection (i), by striking "2023" and in-8 9 serting "2021, and \$30,000,000 for each of fiscal 10 years 2022 through 2030". SEC. 205. LONG-TERM AGROECOLOGICAL NETWORK. 12 Title IV of the Agricultural Research, Extension, and 13 Education Reform Act of 1998 (7 U.S.C. 7624 et seq.) is amended by inserting after section 401 (as added by 14 15 section 202) the following: 16 "SEC. 402. LONG-TERM AGROECOLOGICAL NETWORK. 17 "(a) IN GENERAL.—
- 19 "(1) ESTABLISHMENT.—The Secretary, acting 19 through the Administrator of the Agricultural Re-20 search Service, shall provide for the establishment 21 and maintenance of a network of research sites oper-22 ated by the Agricultural Research Service for re-23 search on the sustainability of agricultural systems 24 in the United States, to be known as the 'Long-

1	Term Agroecological Research Network' (referred to
2	in this section as the 'Network').
3	"(2) Goals.—The Network shall have the fol-
4	lowing goals:
5	"(A) To understand and enhance the sus-
6	tainability of agriculture.
7	"(B) To integrate research projects with
8	common measurements on multiple
9	agroecosystems, such as cropland, rangeland,
10	and pastureland.
11	"(C) To develop new farming systems,
12	practices, and technologies to address agricul-
13	tural challenges and opportunities, including
14	challenges and opportunities posed by climate
15	change.
16	"(b) ACTIVITIES DESCRIBED.—The activities of the
17	Network shall include—
18	"(1) research conducted for a minimum of 30
19	years to develop novel scientific insights at regional
20	and national scales and evaluate the applicability of
21	and adaptation to local conditions;
22	"(2) the establishment and maintenance of mul-
23	tiple sites or research centers that capture the diver-
24	sity of agricultural production systems that function
25	as a network, and

1	"(3) the coordination of large-scale data collec-
2	tion relating to the sustainability of agricultural sys-
3	tems and the provision of infrastructure to research
4	sites to allow for analyzing and disseminating that
5	data.
6	"(c) Coordination of Research.—The Secretary
7	shall, in carrying out subsection (a)—
8	"(1) coordinate long-term agroecological re-
9	search to improve understanding within the Depart-
10	ment of how agroecosystems function at the field,
11	regional, and national scales;
12	"(2) designate research sites for inclusion in
13	the Network that are representative of major agri-
14	cultural regions;
15	"(3) ensure that each research site included in
16	the Network conducts experiments with common
17	goals and methods—
18	"(A) to increase agricultural productivity
19	and profitability;
20	"(B) to enhance agricultural resilience and
21	the capacity to mitigate and adapt to climate
22	change;
23	"(C) to boost the provision of ecosystem
24	services from agricultural landscapes, and

1	"(D) to improve opportunities for rural
2	communities;
3	"(4) make data collected at research sites in-
4	cluded in the Network open to researchers and the
5	public whenever practicable, and integrate data
6	across the network and partner sites; and
7	"(5) provide infrastructure to research sites in-
8	cluded in the Network for data collection, common
9	measurements, and data streams that complement
10	other national networks, such as the National Eco-
11	logical Observatory Network and the Long-Term Ec-
12	ological Research network.
13	"(d) AUTHORIZATION OF APPROPRIATIONS.—There
14	is authorized to be appropriated to carry out this section
15	$50,\!000,\!000$ for each of fiscal years 2022 through 2030.".
16	SEC. 206. PUBLIC BREED AND CULTIVAR RESEARCH.
17	(a) In General.—The Competitive, Special, and Fa-
18	cilities Research Grant Act (7 U.S.C. 3157) is amended—
19	(1) in subsection (a), by adding at the end the
20	following:
21	"(3) Definitions.—In this section:
22	"(A) CONVENTIONAL BREEDING.—The term
23	'conventional breeding' means the development of a
24	new variety of an organism through controlled mat-
25	ing and selection without the use of transgenic

1	methods, but which may include the use of informa-
2	tion gained through gene sequencing, genomic, and
3	metabolomics analyses to inform mating and selec-
4	tion choices.
5	"(B) Cultivar.—The term 'cultivar' means a
6	variety of a species of plant that has been inten-
7	tionally selected for use in cultivation because of the
8	improved characteristics of that variety of the spe-
9	cies.
10	"(C) Public breed and cultivar.—The
11	term 'public breed and cultivar' means an animal
12	breed or crop cultivar—
13	"(i) that is the commercially available end
14	product of a publicly funded breeding program
15	that has been sufficiently tested to demonstrate
16	improved characteristics and stable perform-
17	ance; and
18	"(ii) for which the rights of farmers to
19	save and use, and rights of breeders to share
20	and improve, are protected."; and
21	(2) by adding at the end the following:
22	"(l) Public Breed and Cultivar Development
23	Funding.—
24	"(1) In general.—Of the amount of grants
25	made under subsections (b) and (c), the Secretary

1	shall ensure that not less than the following amounts
2	are used for competitive research grants that sup-
3	port the development of public breeds and cultivars:
4	"(A) $$50,000,000$ for fiscal year 2022.
5	"(B) $60,000,000$ for fiscal year 2023.
6	"(C) $$70,000,000$ for fiscal year 2024.
7	"(D) $$80,000,000$ for fiscal year 2025.
8	"(E) $$90,000,000$ for fiscal year 2026.
9	"(F) $$100,000,000$ for each of the fiscal
10	years 2027 through 2030.
11	"(2) Priority.—In making grants for the pur-
12	pose described in paragraph (1), the Secretary shall
13	give priority to high-potential research projects that
14	lead to the release of public breeds and cultivars
15	that assist producers in mitigating and adapting to
16	climate change.
17	"(3) Grants.—The Secretary shall ensure
18	that—
19	"(A) the term of any competitive grant
20	made under subsection (b) for the purpose de-
21	scribed in paragraph (1) is not less than 5
22	years;
23	"(B) that term and any associated renewal
24	process facilitates the development and commer-

1	cialization of public breeds and cultivars
2	through long-term grants; and
3	"(C) when necessary, Tribal consultation
4	occurs to ensure public breed and cultivar de-
5	velopment does not infringe on the abilities of
6	Tribes to maintain culturally sensitive breeds
7	and cultivars.".
8	(b) Public Breed and Cultivar Research Ac-
9	TIVITIES COORDINATOR.—
10	(1) In general.—Section 251 of the Depart-
11	ment of Agriculture Reorganization Act of 1994 (7
12	U.S.C. 6971) is amended—
13	(A) in subsection (e), by adding at the end
14	the following:
15	"(7) Public breed and cultivar research
16	ACTIVITIES COORDINATOR.—
17	"(A) IN GENERAL.—The Under Secretary
18	shall appoint a coordinator within the Office of
19	the Chief Scientist that reports to the Under
20	Secretary to coordinate research activities at
21	the Department relating to the breeding of pub-
22	lic breeds and cultivars (as defined in para-
23	graph (3) of subsection (a) of the Competitive,
24	Special, and Facilities Research Grant Act (7
25	U.S.C. 3157(a))).

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

1	strong focus on delivery of resource-effi-
2	cient, stress-tolerant, regionally adapted
3	animal breeds and crop cultivars that—
4	"(I) help build agricultural resil-
5	ience to climate change; and
6	"(II) support on-farm carbon se-
7	questration and greenhouse gas miti-
8	gation, nutritional quality, and other
9	farmer-identified priority agronomic
10	and market traits;
11	"(iv) convene a working group to
12	carry out the coordination functions de-
13	scribed in this subparagraph composed of
14	individuals who are responsible for the
15	management, administration, or analysis of
16	public breeding programs within the De-
17	partment 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) to maximize delivery of public
2	breeds and cultivars, promote collaboration
3	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	(B) in subsection (f)(1)(D)(i), by striking
24	"(7 U.S.C. 450i(b))" and inserting "(7 U.S.C.
25	3157(b))".

- 1 (2) Conforming amendment.—Section
- 2 296(b)(6)(B) of the Department of Agriculture Re-
- 3 organization Act of 1994 (7 U.S.C. 7014(b)(6)(B))
- 4 is amended by striking "Scientist; and" and insert-
- 5 ing "Scientist (including the public breed and
- 6 cultivar research activities coordinator under sub-
- 7 section (e)(7) of that section); and".
- 8 (c) Public Breed and Cultivar Develop-
- 9 MENT.—Subtitle H of title XVI of the Food, Agriculture,
- 10 Conservation, and Trade Act of 1990 (7 U.S.C. 5921 et
- 11 seq.) is amended by adding at the end the following:
- 12 "SEC. 1681, PUBLIC BREED AND CULTIVAR DEVELOPMENT.
- 13 "(a) Funding.—The Secretary of Agriculture, acting
- 14 through the Administrator of the Agricultural Research
- 15 Service (referred to in this section as the 'Secretary') and
- 16 in conjunction with the Director of the National Genetic
- 17 Resources Program appointed under section 1633, shall
- 18 support the development of public breeds and cultivars (as
- 19 defined in paragraph (3) of subsection (a) of the Competi-
- 20 tive, Special, and Facilities Research Grant Act (7 U.S.C.
- 21 3157(a))) by Federal researchers.
- 22 "(b) Priority.—In supporting research under sub-
- 23 section (a) using funds made available pursuant to sub-
- 24 section (d), the Secretary shall give priority to high-poten-
- 25 tial research projects that lead to the release of public

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

1	out an internship program within the Agricultural Re-
2	search Service for graduate students pursuing a degree
3	or conducting research relating to climate change and ag-
4	riculture.
5	(b) Funding.—Of the funds of the Commodity Cred-
6	it Corporation, the Secretary may use to carry out the pro-
7	gram described in subsection (a) not more than
8	\$10,000,000 for each of fiscal years 2022 through 2030.
9	SEC. 208. AGRICULTURAL CLIMATE ADAPTATION AND MITI-
10	GATION THROUGH AFRI.
11	Subsection (b)(2) of the Competitive, Special, and
12	Facilities Grant Act (7 U.S.C. 3157(b)(2)) is amended by
13	adding at the end the following:
14	"(G) AGRICULTURAL CLIMATE ADAPTA-
15	TION AND MITIGATION.—Agricultural climate
16	adaptation and mitigation, including—
17	"(i) strategies for agricultural adapta-
18	tion to climate change, including adapta-
19	tion strategies for small and medium-sized
20	dairy, livestock, crop, and other commodity
21	operations;
22	"(ii) on-farm mitigation strategies and
23	solutions, including infrastructure, equip-
24	ment, and agricultural ecosystems-based
25	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 in sequestering carbon 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 "and"
25	at the end:

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 practices and technologies that sequester
12	carbon in soil; and
13	"(C) breeding research and cultivar devel-
14	opment to help adapt to climate change."; and
15	(2) in subsection (g)(3)(A), by striking "equal
16	to not less than the amount of the grant" and in-
17	serting "in an amount that is equal to not less than
18	25 percent of the funds provided through the
19	grant''.
20	SEC. 210. INTEGRATED PEST MANAGEMENT.
21	Section 406 of the Agricultural Research, Extension,
22	and Education Reform Act of 1998 (7 U.S.C. 7626) is
23	amended—
24	(1) by redesignating subsections (d), (e), and
25	(f) as subsections (f), (g), and (h), respectively; and

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—
12	"(1) are effective, affordable, and environ-
13	mentally sound;
14	"(2) maintain agricultural productivity and
15	healthy communities; and
16	"(3) improve climate resilience.".
17	SEC. 211. NATIONAL ACADEMY OF SCIENCES STUDY.
18	(a) STUDY.—The Secretary, in consultation with the
19	Secretary of Health and Human Services, shall enter into
20	an agreement with the National Academy of Sciences
21	under which the National Academy agrees to produce an
22	analysis of current scientific findings to determine the

links between human health and soil health by—

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

21 pursuant to subsection (a).

1	SEC. 212. APPROPRIATE TECHNOLOGY TRANSFER FOR
2	RURAL AREAS PROGRAM.
3	Section 310B(i)(2) of the Consolidated Farm and
4	Rural Development Act (7 U.S.C. 1932(i)(2)) is amend-
5	ed—
6	(1) in subparagraph (C), by striking "and" at
7	the end;
8	(2) by redesignating subparagraph (D) as sub-
9	paragraph (E); and
10	(3) by inserting after subparagraph (C) the fol-
11	lowing:
12	"(D) increase resilience by adapting to and
13	mitigating the effects of climate change; and".
14	TITLE III—SOIL HEALTH
15	SEC. 301. CROP INSURANCE.
16	(a) Voluntary Good Farming Practices.—Sec-
	(a) VOLUNTARY GOOD FARMING PRACTICES.—Section 508(a)(3)(A)(iii) of the Federal Crop Insurance Act
17	
17	tion 508(a)(3)(A)(iii) of the Federal Crop Insurance Act
17 18	tion 508(a)(3)(A)(iii) of the Federal Crop Insurance Act (7 U.S.C. 1508(a)(3)(A)(iii)) is amended—
17 18 19	tion 508(a)(3)(A)(iii) of the Federal Crop Insurance Act (7 U.S.C. 1508(a)(3)(A)(iii)) is amended—  (1) by striking "including scientifically" and in-
17 18 19 20	tion 508(a)(3)(A)(iii) of the Federal Crop Insurance Act (7 U.S.C. 1508(a)(3)(A)(iii)) is amended—  (1) by striking "including scientifically" and inserting the following: "including—
17 18 19 20 21	tion 508(a)(3)(A)(iii) of the Federal Crop Insurance Act (7 U.S.C. 1508(a)(3)(A)(iii)) is amended—  (1) by striking "including scientifically" and inserting the following: "including—  "(I) scientifically";
117 118 119 220 221	tion 508(a)(3)(A)(iii) of the Federal Crop Insurance Act (7 U.S.C. 1508(a)(3)(A)(iii)) is amended—  (1) by striking "including scientifically" and inserting the following: "including—  "(I) scientifically";  (2) in subclause (I) (as so designated), by strik-
17 18 19 20 21 22 23	tion 508(a)(3)(A)(iii) of the Federal Crop Insurance Act (7 U.S.C. 1508(a)(3)(A)(iii)) is amended—  (1) by striking "including scientifically" and inserting the following: "including—  "(I) scientifically";  (2) in subclause (I) (as so designated), by striking the period at the end and inserting "; and"; and

1	"(aa) the Natural Resources
2	Conservation Service; or
3	"(bb) an agricultural expert,
4	as determined by the Secretary.".
5	(b) RISK-REDUCTION-BASED DISCOUNTS.—Section
6	508(d) of the Federal Crop Insurance Act (7 U.S.C.
7	1508(d)) is amended—
8	(1) by redesignating paragraph (4) as para-
9	graph (5); and
10	(2) by inserting after paragraph (3) the fol-
11	lowing:
12	"(4) Risk-reduction based discount.—
13	"(A) In General.—Effective beginning
14	with the 2022 reinsurance year, the Corpora-
15	tion may provide a risk-reduction based pre-
16	mium discount for a producer of an agricultural
17	commodity who uses risk-reduction farming
18	practices, as determined by the Corporation in
19	accordance with subparagraph (B).
20	"(B) Risk-reduction farming prac-
21	TICES.— For purposes of subparagraph (A), a
22	risk-reduction farming practice may include any
23	of the following:
24	"(i) The use of a cover crop.

1	"(ii) A resource-conserving crop rota-
2	tion.
3	"(iii) Management-intensive rotational
4	grazing.
5	"(iv) Composting.
6	"(v) Any other risk-reducing and soil
7	health-promoting farming practice, as de-
8	termined by the Corporation.".
9	(c) Crop Production on Native Sod Applica-
10	BILITY.—
11	(1) Application to certain states.—Sec-
12	tion 508(o) of the Federal Crop Insurance Act (7
13	U.S.C. 1508(o)) is amended by striking paragraph
14	(3).
15	(2) Effective date.—The amendment made
16	by paragraph (1) shall take effect on the first day
17	of the first reinsurance year that begins after the
18	date that is 1 year after the date of enactment of
19	this Act.
20	SEC. 302. ENVIRONMENTAL QUALITY INCENTIVES PRO-
21	GRAM.
22	(a) Purposes.—Section 1240 of the Food Security
23	Act of 1985 (16 U.S.C. 3839aa) is amended—
24	(1) in the matter preceding paragraph (1), by
25	striking "and environmental quality" and inserting

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

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

1	(C) in paragraph (2), in the heading of
2	subparagraph (B), by striking "2023" and in-
3	serting "2030".
4	(4) Payments for conservation practices
5	RELATED TO ORGANIC PRODUCTION.—Section
6	1240B(i) of the Food Security Act of 1985 (16
7	U.S.C. 3839aa-2(i)) is amended—
8	(A) by striking paragraph (3); and
9	(B) by redesignating paragraphs (4) and
10	(5) as paragraphs (3) and (4), respectively.
11	(5) Conservation incentive contracts.—
12	Section 1240B(j) of the Food Security Act of 1985
13	(16 U.S.C. 3839aa–2(j)) is amended—
14	(A) in paragraph (1)—
15	(i) in subparagraph (A), by inserting
16	", which may include climate change adap-
17	tation and mitigation," after "priority re-
18	source concerns"; and
19	(ii) in subparagraph (B), by inserting
20	", which may include climate change adap-
21	tation and mitigation" before the period at
22	the end; and
23	(B) in paragraph (2)—
24	(i) in subparagraph (A)(ii)—

1	(I) in subclause (I), by striking
2	"or" at the end;
3	(II) in subclause (II), by striking
4	the period at the end and inserting ";
5	or"; and
6	(III) by adding at the end the
7	following:
8	"(III) funding, through annual
9	payments, for a suite of incentive
10	practices that are appropriate for the
11	region and land use and that best en-
12	hance soil health and carbon seques-
13	tration and reduce greenhouse gas
14	emissions, as determined by the Sec-
15	retary."; and
16	(ii) by striking subparagraph (B) and
17	inserting the following:
18	"(B) TERM.—
19	"(i) In general.—A contract under
20	this subsection shall have a term of not
21	less than 5, and not more than 10, years.
22	"(ii) Graduation option.—The Sec-
23	retary may reduce the term for a contract
24	under this subsection if the producer en-
25	ters into a conservation stewardship con-

1	tract under section 1240K with respect to
2	the eligible land that is subject to the con-
3	tract under this subsection.".
4	(d) Environmental Quality Incentives Plan.—
5	Section 1240E(a)(3) of the Food Security Act of 1985 (16
6	U.S.C. 3839aa-5(a)(3)) is amended by inserting ", and
7	a greenhouse gas emissions reduction plan" after "if appli-
8	cable".
9	(e) Limitation on Payments.—Section 1240G of
10	the Food Security Act of 1985 (16 U.S.C. 3839aa-7) is
11	amended by striking "Not including payments" and all
12	that follows through "2023" and inserting "A person or
13	legal entity (including a joint venture and a general part-
14	nership) may not receive, directly or indirectly, cost-share
15	or incentive payments under this subchapter that, in ag-
16	gregate, exceed \$450,000 for all contracts entered into
17	under this subchapter by the person or legal entity during
18	any 5-fiscal-year period".
19	(f) Conservation Innovation Grants.—
20	(1) Air quality concerns from agricul-
21	TURAL OPERATIONS.—Section 1240H(b) of the
22	Food Security Act of 1985 (16 U.S.C. 3839aa–8(b))
23	is amended—
24	(A) in paragraph (1)—

1	(i) by striking "practices to address"
2	in the first sentence and all that follows
3	through "The funds" in the second sen-
4	tence and inserting the following: "prac-
5	tices—
6	"(i) to address air quality concerns
7	from agricultural operations; and
8	"(ii) to meet Federal, State, and
9	local—
10	"(I) regulatory requirements; and
11	"(II) goals with respect to green-
12	house gas emissions reductions.
13	"(B) Basis of availability and use.—
14	Funds for payments under subparagraph (A)";
15	and
16	(ii) in the matter preceding clause (i)
17	(as so designated), by striking "The Sec-
18	retary" and inserting the following:
19	"(A) IN GENERAL.—The Secretary"; and
20	(B) in paragraph (2), by striking "2019
21	through 2023" and inserting "2019 through
22	2021, and \$50,000,000 for each of fiscal years
23	2022 through 2030".
24	(2) On-farm conservation innovation
25	TRIALS.—Section 1240H(c)(2) of the Food Security

- 1 Act of 1985 (16 U.S.C. 3839aa-8(c)(2)) is amend-
- ed, in the matter preceding subparagraph (A), by
- 3 striking "2019 through 2023" and inserting "2019
- 4 through 2021, \$50,000,000 of the funds made avail-
- 5 able to carry out this subchapter for each of fiscal
- 6 years 2022 and 2023, and \$100,000,000 of the
- funds made available to carry out this subchapter
- 8 for each of fiscal years 2024 through 2030".

## 9 SEC. 303. CONSERVATION STEWARDSHIP PROGRAM.

- 10 (a) Definitions.—Section 1240I of the Food Secu-
- 11 rity Act of 1985 (16 U.S.C. 3839aa-21) is amended—
- 12 (1) in paragraph (2)—
- 13 (A) in subparagraph (A), by inserting "en-
- hancements," after "practices,"; and
- 15 (B) in subparagraph (B)(v), by inserting
- "and climate change" before the period at the
- end; and
- 18 (2) in paragraph (3)(C), by inserting "main-
- tained, actively' after "implemented,".
- 20 (b) Conservation Stewardship Program.—Sec-
- 21 tion 1240J(a) of the Food Security Act of 1985 (16
- 22 U.S.C. 3839aa–22(a)) is amended—
- (1) in the matter preceding paragraph (1), by
- striking "2023" and inserting "2030"; and

1	(2) by striking paragraphs (1) and (2) and in-
2	serting the following:
3	"(1) by maintaining, actively managing, and,
4	where practicable, improving existing conservation
5	activities; and
6	"(2) by undertaking additional conservation ac-
7	tivities.".
8	(c) Stewardship Contracts.—
9	(1) Submission of contract offers.—Sec-
10	tion 1240K(a)(2)(B) of the Food Security Act of
11	1985 (16 U.S.C. 3839aa–23(a)(2)(B)) is amended
12	by striking "improving, maintaining, and managing"
13	and inserting "maintaining, actively managing, and,
14	where practicable, improving".
15	(2) Evaluation of contract offers.—Sec-
16	tion 1240K(b) of the Food Security Act of 1985 (16
17	U.S.C. 3839aa-23(b)) is amended—
18	(A) in paragraph (1)(A), by striking clause
19	(iii) and inserting the following:
20	"(iii) other criteria consistent with an
21	equal weighting of the factors described in
22	clauses (i) and (ii), as determined by the
23	Secretary, including criteria the Secretary
24	determines are necessary to ensure that—

1	"(I) the program effectively tar-
2	gets improvements to soil health, in-
3	creases in carbon sequestration, and
4	reductions in greenhouse gas emis-
5	sions; and
6	"(II) other national, State, and
7	local priority resource concerns are ef-
8	fectively addressed."; and
9	(B) by striking paragraph (3).
10	(3) Contract Renewal.—Section 1240K(e)
11	of the Food Security Act of 1985 (16 U.S.C.
12	3839aa-23(e)) is amended—
13	(A) in paragraph (3)—
14	(i) by striking subparagraph (B);
15	(ii) in subparagraph (A), by striking
16	"; or" at the end and inserting ", if appli-
17	cable."; and
18	(iii) by striking "period—" in the
19	matter preceding subparagraph (A) and all
20	that follows through "to meet" in subpara-
21	graph (A) and inserting "period, to meet";
22	(B) by redesignating paragraphs (1)
23	through (3) as subparagraphs (A) through (C),
24	respectively, and indenting appropriately;

1	(C) in the matter preceding subparagraph
2	(A) (as so redesignated), by striking "The Sec-
3	retary" and inserting the following:
4	"(1) IN GENERAL.—The Secretary"; and
5	(D) by adding at the end the following:
6	"(2) Ranking and payments.—In deter-
7	mining whether to accept an application for contract
8	renewal under this subsection, and when calculating
9	payments for those renewed contracts, the Secretary
10	shall consider the full conservation benefits across
11	the entire applicable agricultural operation, includ-
12	ing—
13	"(A) the number of priority resource con-
14	cerns with respect to which the producer is ex-
15	pected to meet or exceed the stewardship
16	threshold by the end of the contract period; and
17	"(B) the active management and mainte-
18	nance of ongoing conservation activities, includ-
19	ing—
20	"(i) the conservation activities adopt-
21	ed during a prior contract period; and
22	"(ii) the new or improved conservation
23	activities to be adopted if a contract is re-
24	newed.".
25	(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)—
11	(i) in subparagraph (A), by inserting
12	"on 1 or more types of eligible land cov-
13	ered by the contract" after "activities";
14	and
15	(ii) in subparagraph (B), by striking
16	"improving, maintaining, and managing"
17	and inserting "maintaining, actively man-
18	aging, and improving";
19	(B) in paragraph (2)—
20	(i) by striking subparagraph (B) and
21	inserting the following:
22	"(B) Income forgone by the producer, in-
23	cluding amounts that reflect—
24	"(i) increased economic risk; and
25	"(ii) loss in revenue due to—

1	"(I) production changes;
2	"(II) anticipated reductions in
3	yield;
4	"(III) transitioning to an organic
5	system, resource-conserving cropping
6	system, or perennial production sys-
7	tem; or
8	"(IV) acreage converted to con-
9	servation uses."; and
10	(ii) in subparagraph (E), by inserting
11	", actively managed, and, where applicable,
12	improved" after "maintained"; and
13	(C) by adding at the end the following:
14	"(6) Payments for conservation activi-
15	TIES RELATED TO ORGANIC PRODUCTION SYS-
16	TEMS.—
17	"(A) IN GENERAL.—The Secretary shall
18	provide payments under this subsection for con-
19	servation activities relating to—
20	"(i) organic production; and
21	"(ii) transitioning to organic produc-
22	tion.
23	"(B) Conservation activities.—Con-
24	servation activities described in subparagraph
25	(A) may include—

1	"(i) generally available and specifically
2	tailored conservation activities; and
3	"(ii) individual conservation activities
4	and bundles of conservation activities.
5	"(7) MINIMUM PAYMENT.—The amount of an
6	annual payment under the program shall be not less
7	than \$2,000.".
8	(3) Supplemental payments.—Section
9	1240L(d) of the Food Security Act of 1985 (16
10	U.S.C. 3839aa-24(d)) is amended—
11	(A) in the subsection heading, by inserting
12	", Perennial Production Systems," after
13	"Rotations";
14	(B) in paragraph (1)—
15	(i) by redesignating subparagraph (C)
16	as subparagraph (D); and
17	(ii) by inserting after subparagraph
18	(B) the following:
19	"(C) Perennial production system.—
20	The term 'perennial production system'
21	means—
22	"(i) the use of cropland for agro-
23	forestry, including alley cropping,
24	silvopasture, and related production prac-
25	tices, as determined by the Secretary;

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

1	(A) by striking the period at the end and
2	inserting the following: "; and
3	"(B) with respect to an organic production
4	system—
5	"(i) is integrated with an organic sys-
6	tem plan approved under the national or-
7	ganic program established under the Or-
8	ganic Foods Production Act of 1990 (7
9	U.S.C. 6501 et seq.); or
10	"(ii) allows a producer to transition to
11	organic production systems and pursue
12	certification under that Act."; and
13	(B) in the matter preceding subparagraph
14	(B) (as added by subparagraph (A)), by strik-
15	ing "plan that meets" and inserting the fol-
16	lowing: "plan that—
17	"(A) meets".
18	(5) Payment Limitations.—Section 1240L(f)
19	of the Food Security Act of 1985 (16 U.S.C.
20	3839aa-24(f)) is amended—
21	(A) by inserting "(including a joint venture
22	and a general partnership)" after "A person or
23	legal entity"; and

- 1 (B) by striking "fiscal years 2019 through 2 2023" and inserting "any consecutive 5-fiscal-3 year period".
- 4 SPECIALTY CROP AND ORGANIC (6)PRO-5 DUCERS.—Section 1240L(g) of the Food Security 6 Act of 1985 (16 U.S.C. 3839aa-24(g)) is amended by inserting ", and producers transitioning to or-7 ganic production systems," after "organic pro-8 9 ducers".
- 10 (7) SOIL HEALTH.—Section 1240L(k) of the 11 Food Security Act of 1985 (16 U.S.C. 3839aa– 12 24(k)) is amended by striking the period at the end 13 and inserting the following: ", including by—
- 14 "(1) conducting outreach to encourage the use 15 of contracts to improve soil health and sequester 16 carbon in the soil; and
- "(2) offering payments for soil testing to provide producers and the Secretary with information on the soil health and carbon sequestration impacts of conservation activities.".
- 21 (e) On-Farm Conservation Stewardship Inno-
- 22 VATION GRANTS.—Subchapter B of chapter 4 of subtitle
- 23 D of title XII of the Food Security Act of 1985 (16 U.S.C.
- 24 3839aa–21 et seq.) is amended by adding at the end the
- 25 following:

1	"SEC. 1240L-2. ON-FARM CONSERVATION STEWARDSHIP IN-
2	NOVATION GRANTS.
3	"(a) Definition of Agricultural Profes-
4	SIONAL.—In this section, the term 'agricultural profes-
5	sional' means a university researcher or educator, includ-
6	ing an extension agent or specialist, Federal agency field
7	staff, an agricultural consultant, State and local agency
8	staff, Tribal agency staff, a Federally-Recognized Tribes
9	Extension Program agent, and nonprofit organization
10	staff assisting farmers and ranchers at the local level.
11	"(b) Grants.—Using funds made available to carry
12	out this subchapter, the Secretary shall provide competi-
13	tive grants to carry out on-farm conservation innovation
14	projects on eligible land of program participants for the
15	purpose of stimulating innovative approaches on farms
16	and ranches to leverage Federal investment in conserva-
17	tion stewardship, in conjunction with agricultural produc-
18	tion or forest resource management, through the program.
19	"(c) Participants.—The Secretary shall provide
20	grants under this section—
21	"(1) directly to agricultural operations, or
22	groups of agricultural operations, participating in
23	the program; or
24	"(2) through partnerships between agricultural
25	professionals and small groups of agricultural oper-
26	ations participating in the program.

1	"(d) USE.—An entity that receives a grant under this
2	section directly or through a partnership in accordance
3	with subsection (c) shall carry out an on-farm conserva-
4	tion innovation project that—
5	"(1) facilitates on-farm research and dem-
6	onstration or pilot testing of new technologies or in-
7	novative conservation systems and practices that aim
8	to reduce greenhouse gas emissions and decarbonize
9	agriculture;
10	"(2) facilitates on-farm research and dem-
11	onstration or pilot testing of practices and systems
12	with a proven high impact for greenhouse gas emis-
13	sions reduction and decarbonization and low national
14	or regional adoption rates; or
15	"(3) helps to prepare program participants for
16	participation in environmental services markets that
17	have as a primary goal greenhouse gas emissions re-
18	duction or decarbonization of agriculture.
19	"(e) Incentive Payments.—
20	"(1) AGREEMENTS.—
21	"(A) In general.—In carrying out this
22	section, the Secretary shall enter into agree-
23	ments with agricultural operations (directly or
24	through governmental or nongovernmental or-
25	ganizations involved in a partnership with 1 or

1	more agricultural operations) on whose land an
2	on-farm conservation innovation project is being
3	carried out under this section to provide pay-
4	ments to the agricultural operations to assist
5	with adopting and evaluating new or innovative
6	conservation approaches to achieve conservation
7	benefits.
8	"(B) Amount.—Payments provided under
9	subparagraph (A) shall reflect the direct costs
10	of the research and demonstration and com-
11	pensation for foregone income, as appropriate
12	to address the increased economic risk or lower
13	economic return potentially associated with the
14	applicable 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	nongovernmental organization participating in
25	an on-farm conservation innovation project

1	under this subsection shall submit to the Sec-
2	retary an annual report describing the amount
3	of payments that the organization made to each
4	agricultural operation under this subsection.
5	"(3) Research, Technical Assistance, and
6	ADMINISTRATIVE EXPENSES.—The Secretary may
7	provide to a partnership described in paragraph
8	(1)(A) not more than \$50,000 for each on-farm con-
9	servation innovation project for research, technical
10	assistance, and administrative expenses.
11	"(4) LENGTH OF AGREEMENTS.—An agreement
12	entered into under paragraph (1)(A) shall be for a
13	period determined by the Secretary that is—
14	"(A) not less than 2 years; and
15	"(B) if appropriate, more than 2 years, in-
16	cluding if the longer period is appropriate to
17	support—
18	"(i) adaptive management over mul-
19	tiple crop years; and
20	"(ii) adequate data collection and
21	analysis by an agricultural operation or
22	partnership to report the natural resource
23	and agricultural production benefits of the
24	new or innovative conservation approaches
25	to the Secretary.

1	SEC. 1240L-3. CONTRIBUTIONS AND CONTRIBUTION
2	AGREEMENTS.
3	"(a) Contributions.—In carrying out the program
4	the Secretary may accept financial or other contributions
5	from individuals and public and private entities, if the Sec-
6	retary determines that the contributions will further the
7	purposes of the program.
8	"(b) Types of Support.—Contributions described
9	in subsection (a) may include support for conservation ac-
10	tivities to sequester carbon, reduce greenhouse gas emis-
11	sions, and achieve other related environmental benefits.
12	"(c) Considerations.—In determining whether to
13	accept a contribution under this section, the Secretary
14	shall consider whether the contribution would target sup-
15	port to 1 or more of the following:
16	"(1) Resource-conserving crop rotations, ad-
17	vanced grazing management, or perennial production
18	systems.
19	"(2) Cover crop activities.
20	"(3) Organic production systems.
21	"(4) Beginning farmers and ranchers, socially
22	disadvantaged farmers and ranchers, or other under-
23	served producers.
24	"(d) AGREEMENTS.—Any contribution under this
25	section shall be made subject to an agreement—

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

shall supplement the expenditure of State or Tribal

25

1	funds in support of soil health, rather than replace
2	State or Tribal funds for those purposes.
3	"(2) Use of funds.—A State or Tribal gov-
4	ernment may request funds under this section—
5	"(A) to develop or modify a State or Tribal
6	soil health plan; or
7	"(B) to implement a State or Tribal soil
8	health plan approved by the Secretary under
9	this section, including through—
10	"(i) technical assistance;
11	"(ii) financial assistance;
12	"(iii) on-farm research and dem-
13	onstration;
14	"(iv) education, outreach, and train-
15	ing;
16	"(v) monitoring and evaluation; or
17	"(vi) such other activities as the Sec-
18	retary determines to be appropriate.
19	"(3) Plan components.—Prior to approving a
20	State or Tribal soil health plan, the Secretary shall
21	ensure that the plan, at a minimum—
22	"(A) is broadly consistent with the soil
23	health principles of the Natural Resources Con-
24	servation Service; and

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

1	"(B) in the case of a grant for the pur-
2	poses described in subsection (b)(2)(B),
3	\$5,000,000.
4	"(2) Federal share.—
5	"(A) Grants to states.—The amount of
6	a grant to a State under this section shall not
7	exceed—
8	"(i) 75 percent of the cost of devel-
9	oping or modifying a soil health plan; or
10	"(ii) 50 percent of the cost of imple-
11	menting the soil health plan.
12	"(B) Grants to tribes.—The amount of
13	a grant to a Tribal government under this sec-
14	tion shall not exceed—
15	"(i) 90 percent of the cost of devel-
16	oping or modifying a soil health plan; or
17	"(ii) 75 percent of the cost of imple-
18	menting the soil health plan.
19	"(3) Non-federal funds.—A grant made
20	under this section shall be made on the condition
21	that the non-Federal share of expenditures under
22	paragraph (2) be provided by non-Federal sources.
23	"(e) Grant Term.—A grant under this section shall
24	be for 1 year and may be renewed annually, at the discre-
25	tion of the Secretary.

- 1 "(f) Priority.—The Secretary shall give priority to
- 2 States or Tribal governments with a climate action plan
- 3 that includes 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 results of the
- 8 assistance received under this section.
- 9 "(2) Review.—Each applicable State depart-
- ment of agriculture or Tribal authority shall submit
- 11 to the Secretary a review and evaluation of the
- progress of the State department of agriculture or
- 13 Tribal authority, using the performance measures
- under paragraph (1), at such intervals as the Sec-
- retary shall establish.
- 16 "(h) Effect of Noncompliance.—If the Sec-
- 17 retary, after reasonable notice to a State or Tribal govern-
- 18 ment, determines that there has been a failure by the
- 19 State or Tribal government to comply with the terms of
- 20 a grant made under this section, the Secretary may dis-
- 21 qualify, for 1 or more years, the State or Tribal govern-
- 22 ment from receipt of future grants under this section.
- 23 "(i) Audit Requirement.—For each year that a
- 24 State or Tribal government receives a grant under this
- 25 section, the State or Tribal government shall—

1	"(1) conduct an audit of the expenditures of
2	grant funds by the State or Tribal government; and
3	"(2) not later than 30 days after the completion
4	of the audit under paragraph (1), submit to the Sec-
5	retary a copy of the audit.
6	"(j) Administration.—
7	"(1) Department.—The Secretary may not
8	use more than 3 percent of the funds made available
9	to carry out this section for a fiscal year for admin-
10	istrative expenses.
11	"(2) States and Tribes.—A State or Triba
12	government receiving a grant under this section may
13	not use more than 7 percent of the funds received
14	under the grant for a fiscal year for administrative
15	expenses.
16	"(k) Funding.—Of the funds of the Commodity
17	Credit Corporation, the Secretary shall use to make grants
18	under this section—
19	"(1) $$60,000,000$ for each of fiscal years $2022$
20	through 2023;
21	"(2) $\$80,000,000$ for each of fiscal years $2024$
22	through 2026; and
23	"(3) $$100,000,000$ for fiscal year 2027 and
24	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" at the end;
24	(ii) in subparagraph (F), by striking
25	"2023." and inserting "2022; and"; and

1	(iii) by adding at the end the fol-
2	lowing:
3	"(G) \$700,000,000 for each of fiscal years
4	2023 through 2030."; and
5	(D) in paragraph (3)—
6	(i) in subparagraph (A)—
7	(I) in clause (iv), by striking
8	"and" at the end; and
9	(II) by adding at the end the fol-
10	lowing:
11	"(vi) \$3,000,000,000 for each of fiscal
12	years 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 each of fiscal
4	years 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 2022, and each 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, of the funds of the Commodity Credit
20	Corporation, an amount equal to not less than
21	1 percent of Commodity Credit Corporation
22	funds made available for the applicable fiscal
23	year for each of the programs described in sub-
24	section (a).

1	"(B) Provision of Technical Assist-
2	ANCE.—The Secretary shall provide technical
3	assistance under the special initiative under this
4	paragraph to producers—
5	"(i) directly;
6	"(ii)(I) through an agreement with a
7	third-party provider (as defined in section
8	1242(a)); or
9	"(II) at the option of the producer,
10	through a payment, as determined by the
11	Secretary, to the producer for a third-party
12	provider approved under section 1242, if
13	available; or
14	"(iii) through a cooperative agreement
15	or contract with—
16	"(I) a cooperative extension;
17	"(II) a nongovernmental organi-
18	zation; or
19	"(III) a State, Tribal, or Federal
20	agency.
21	"(C) Underserved producers.—In pro-
22	viding technical assistance under this para-
23	graph, the Secretary shall give priority to pro-
24	ducers who are persons described in section
25	1244(a)(2).".

1	(4) Assistance to certain farmers or
2	RANCHERS FOR CONSERVATION ACCESS.—Section
3	1241(h) of the Food Security Act of 1985 (16
4	U.S.C. 3841(h)) is amended—
5	(A) in paragraph (1)(B), by striking "to
6	the maximum extent practicable—" and all that
7	follows through the period at the end of clause
8	(ii) and inserting "to the maximum extent prac-
9	ticable, 30 percent to assist beginning farmers
10	or ranchers and socially disadvantaged farmers
11	or ranchers."; and
12	(B) in paragraph (2), by striking "2023"
13	and inserting "2030".
14	(b) Administrative Requirements for Con-
15	SERVATION PROGRAMS.—
16	(1) Incentives for certain farmers and
17	RANCHERS AND INDIAN TRIBES.—Section
18	1244(a)(1) of the Food Security Act of 1985 (16
19	U.S.C. 3844(a)(1)) is amended—
20	(A) in subparagraph (A), by striking
21	"and" at the end; and
22	(B) by striking subparagraph (B) and in-
23	serting the following:
24	"(B) to establish a new generation of pro-
25	ducers who use the full array of climate-friendly

1	conservation activities that reduce greenhouse
2	gas emissions, increase soil carbon, and improve
3	resilience to weather extremes; and
4	"(C) to enhance other long-term environ-
5	mental goals.".
6	(2) REVIEW AND GUIDANCE FOR PRACTICE
7	COSTS AND PAYMENT RATES.—Section
8	1244(j)(1)(B) of the Food Security Act of 1985 (16
9	U.S.C. 3844(j)(1)(B)) is amended—
10	(A) in clause (ii), by striking "and" at the
11	end;
12	(B) in clause (iii), by striking the period at
13	the end and inserting "; and; and
14	(C) by adding at the end the following:
15	"(iv) accelerates progress in meeting
16	the goals established under title I of the
17	Agriculture Resilience Act of 2021.".
18	(3) Advanced grazing management.—Sec-
19	tion 1244 of the Food Security Act of 1985 (16
20	U.S.C. 3844) is amended by adding at the end the
21	following:
22	"(q) Advanced Grazing Management.—
23	"(1) In general.—In carrying out any con-
24	servation program administered by the Secretary,
25	the Secretary shall encourage advanced grazing

- 1 management, including management-intensive rota-
- 2 tional grazing (as those terms are defined in section
- 3 1240L(d)(1).
- 4 "(2) Reservation of funds.—In each of fis-
- 5 cal years 2022 through 2030, the Secretary shall use
- 6 to carry out this subsection not less than  $\frac{2}{3}$  of any
- 7 funds available for activities relating to livestock
- 8 production under conservation programs adminis-
- 9 tered by the Secretary under this title (other than
- the conservation reserve program established under
- subchapter B of chapter 1 of subtitle D, except for
- acres enrolled in that program under section
- 13 1231(d)(2)).".
- 14 (c) Environmental Services Markets.—Section
- 15 1245 of the Food Security Act of 1985 (16 U.S.C. 3845)
- 16 is amended by adding at the end the following:
- 17 "(f) Soil Health and Greenhouse Gas Federal
- 18 Advisory Committee.—
- 19 "(1) ESTABLISHMENT.—Not later than 180
- 20 days after the date of enactment of this subsection,
- 21 the Secretary shall establish an advisory committee,
- to be known as the 'Soil Health and Greenhouse Gas
- 23 Federal Advisory Committee' (referred to in this
- subsection as the 'advisory committee').

1	"(2) Membership.—In carrying out paragraph
2	(1), the Secretary shall appoint members to the ad-
3	visory committee that—
4	"(A) reflect diversity in gender, age, race,
5	and geography; and
6	"(B) include—
7	"(i) farmers and ranchers, including
8	farmers and ranchers operating small and
9	mid-sized farms;
10	"(ii) organizations representing farm-
11	ers and ranchers, including organizations
12	representing farmers and ranchers oper-
13	ating small and mid-sized farms;
14	"(iii) scientists;
15	"(iv) environmental nonprofit organi-
16	zations;
17	"(v) existing private sector carbon and
18	ecosystem services market development ini-
19	tiatives;
20	"(vi) businesses working to reduce
21	greenhouse gas emissions from agriculture
22	in the supply chains of the businesses;
23	"(vii) relevant Federal agencies;
24	"(viii) youth engaged in the agri-
25	culture or food sector;

1	"(ix) Tribal communities; and
2	"(x) State agriculture agencies.
3	"(3) Terms.—
4	"(A) TERM LENGTH.—The term of a
5	member of the advisory committee shall be 2
6	years.
7	"(B) REAPPOINTMENT.—The Secretary
8	may reappoint a member of the advisory com-
9	mittee for not more than 2 consecutive terms.
10	"(4) Meetings.—The advisory committee shall
11	meet—
12	"(A) not fewer than 4 times in the first
13	year after the advisory committee is established;
14	and
15	"(B) not less frequently than twice annu-
16	ally thereafter.
17	"(5) RECOMMENDATIONS.—Not later than 1
18	year after the date on which the advisory committee
19	is established, and periodically thereafter, the advi-
20	sory committee shall submit to the Secretary rec-
21	ommendations on—
22	"(A) the feasibility of establishing reliable
23	outcomes-based measurement systems, as de-
24	scribed in subsection (g);

1	"(B) existing technology that provides reli-
2	able measurement data;
3	"(C) with respect to parameters for which
4	existing technology does not provide reliable
5	measurement data, research and technical
6	needs and, as appropriate, goals and plans for
7	that research;
8	"(D) standards for data collection and dis-
9	semination;
10	"(E) farmer data management and pri-
11	vacy;
12	"(F) greenhouse gas emissions and soil
13	health inventories and databases, as described
14	in subsection (h); and
15	"(G) criteria for soil health and green-
16	house gas emissions reductions payments and
17	environmental markets, as described in sub-
18	section (i).
19	"(g) Measurement System.—
20	"(1) Purpose.—The Secretary shall evaluate
21	existing outcomes-based measurement systems for
22	recordkeeping, modeling, and measurement of farm-
23	level greenhouse gas emissions and soil carbon se-
24	questration, including measures of soil disturbance,
25	plant diversity, continual living cover, residue man-

1	agement, advanced grazing management, and crop-
2	livestock integration, to determine which of those
3	systems—
4	"(A) can be implemented quickly;
5	"(B) can improve in accuracy and ease
6	over time;
7	"(C) use the best available science and
8	technology; and
9	"(D) are cost-effective.
10	"(2) GUIDANCE.—Not later than 18 months
11	after the date of enactment of this subsection, the
12	Secretary shall issue guidance on the outcomes-
13	based measurement systems evaluated under para-
14	graph (1), based on—
15	"(A) recommendations from the advisory
16	committee established under subsection (f); and
17	"(B) information from—
18	"(i) agroecosystem models, including
19	COMET Farm and COMET Farm Plan-
20	ner;
21	"(ii) remote sensing data and anal-
22	ysis, including the Operational Tillage In-
23	formation System;
24	"(iii) soil health demonstration trials
25	carried out under section $1240H(c)(7)$ ;

1	"(iv) existing and emerging public and
2	private environmental services protocols,
3	measurement systems, and benchmarks;
4	and
5	"(v) field-level measurement.
6	"(3) Review.—The Secretary, based on rec-
7	ommendations from the advisory committee estab-
8	lished under subsection (f), shall—
9	"(A) establish and maintain an outcomes-
10	based measurement system in accordance with
11	the guidance issued under paragraph (2) when
12	feasible;
13	"(B) conduct a periodic review of that sys-
14	tem;
15	"(C) periodically make any necessary up-
16	dates to that system; and
17	"(D) establish research and development
18	goals and plans, as necessary.
19	"(h) Inventory.—
20	"(1) In general.—Not later than 18 months
21	after the date of enactment of this subsection, and
22	every 2 years thereafter, the Secretary, in consulta-
23	tion with the advisory committee established under
24	subsection (f) and the Administrator of the Environ-
25	mental Protection Agency, shall conduct a nation-

1	wide soil health and agricultural greenhouse gas
2	emissions inventory that uses the best available
3	science and data to establish expected average per-
4	formance for soil carbon drawdown and storage and
5	greenhouse gas emissions reduction by primary pro-
6	duction type and production region.
7	"(2) Database.—The Secretary shall—
8	"(A) establish an accessible and interoper-
9	able database for the information collected
10	through the inventory conducted under para-
11	graph (1); and
12	"(B) improve and update that database
13	not less frequently than once every 2 years as
14	new data is collected.
15	"(i) Criteria.—
16	"(1) In general.—The Secretary, in consulta-
17	tion with the advisory committee established under
18	subsection (f), shall establish criteria for payments,
19	credits, or other forms of incentives to inform policy
20	and markets established to promote soil carbon se-
21	questration or greenhouse gas emissions reductions.
22	"(2) REQUIREMENTS.—The criteria established
23	under paragraph (1) shall—
24	"(A) have a documented likelihood to lead
25	to long-term net increases in soil carbon segues-

tration and net reductions in greenhouse gas
emissions, according to the best available
science;

- "(B) be based in part on environmental impact modeling of the changes of shifting from baseline agricultural practices to new or improved agricultural practices; and
- "(C) be designed to prevent the degradation of other natural resource or environmental conditions.

## "(j) Demonstration Trials.—

- "(1) IN GENERAL.—The Secretary shall periodically review the results from soil health demonstration trials carried out under section 1240H(c)(7), and other similar public and private demonstration trials that the Secretary determines to be appropriate, to inform the activities under subsections (g), (h), and (i).
- "(2) Recommendations.—In submitting reports pursuant to section 1240H(c)(7)(C)(ii), the Secretary shall include any recommendations to Congress for changes or additions to the conservation programs under this Act that the Secretary determines to be appropriate to accelerate net increases

1	in soil carbon sequestration and other improvements
2	in soil health.".
3	SEC. 306. STUDY AND REPORT ON FEASIBILITY OF AGRI-
4	CULTURAL CARBON CAPTURE TAX CREDIT.
5	(a) Study.—The Secretary of the Treasury (referred
6	to in this section as "the Secretary"), in coordination with
7	the Secretary of Agriculture, shall conduct a study of the
8	feasibility of developing a credit against Federal taxes to
9	incentivize carbon capture on farms and ranches.
10	(b) REPORT.—Not later than 1 year after the date
11	of the enactment of this Act, the Secretary shall submit
12	to Congress a report that describes the results of the study
13	described in subsection (a), including whether or not to
14	proceed with the development of the tax credit described
15	in such subsection and, if so, detailed recommendations
16	for—
17	(1) which taxpayers should be eligible for the
18	credit;
19	(2) methods for measuring (if feasible) or esti-
20	mating baseline soil carbon conditions on a farm or
21	ranch;
22	(3) methods for measuring (if feasible) or esti-
23	mating the amount of soil carbon sequestered or
24	abated on a farm or ranch;

1	(4) incentivizing early adoption of carbon cap-
2	ture practices;
3	(5) the number of years a taxpayer should be
4	eligible for the credit;
5	(6) establishing rules for recapture in instances
6	in which carbon capture ceases or carbon is not re-
7	tained in soil;
8	(7) establishing rules for recapture if ownership
9	of land is transferred;
10	(8) setting the dollar value of the credit;
11	(9) setting phase outs for credit eligibility;
12	(10) establishing certification requirements for
13	carbon capture;
14	(11) establishing rules for attributing the credit
15	to a taxpayer;
16	(12) establishing rules for carrying over unused
17	credits; and
18	(13) such other provisions as the Secretary de-
19	termines necessary.
20	SEC. 307. CONSERVATION COMPLIANCE.
21	(a) Definitions.—Section 1201(a) of the Food Se-
22	curity Act of 1985 (16 U.S.C. 3801(a)) is amended—
23	(1) in paragraph (3)—
24	(A) by striking "highly erodible" each
25	place it appears; and

1	(B) in subparagraph (B), by striking "and
2	conservation treatment measures" and inserting
3	"crop rotation and cover crop systems, and
4	other relevant conservation treatment meas-
5	ures";
6	(2) in paragraph (4)—
7	(A) in subparagraph (A), by striking
8	"and" at the end;
9	(B) in subparagraph (B)—
10	(i) by striking "or a substantial im-
11	provement in soil conditions on a field or
12	group of fields containing highly erodible
13	cropland" and inserting "and a substantial
14	improvement in soil health conditions (in-
15	cluding soil carbon levels) on a field or
16	group of fields containing cropland"; and
17	(ii) by striking the period at the end
18	and inserting a semicolon; and
19	(C) by adding at the end the following:
20	"(C) are designed to achieve, within 5
21	years of actively applying a conservation plan,
22	a level of erosion not to exceed twice the soil
23	loss tolerance level· and

1	"(D) are designed to effectively prevent the
2	formation of new, or treat all existing, ephem-
3	eral gullies."; and
4	(3) in paragraph (11)(A)(ii), by striking "exces-
5	sive average annual rate of erosion in relation to"
6	and inserting "average annual rate of erosion ex-
7	ceeding twice".
8	(b) Cropland Conservation.—
9	(1) Program ineligibility.—Section 1211 of
10	the Food Security Act of 1985 (16 U.S.C. 3811) is
11	amended—
12	(A) in subsection (a)—
13	(i) in the matter preceding paragraph
14	(1), by striking "produces an agricultural
15	commodity" and all that follows through
16	"as determined by the Secretary" and in-
17	serting "carries out an activity described in
18	subsection (b), as determined by the Sec-
19	retary,"; and
20	(ii) in paragraph (1)(D), by inserting
21	"cropland or" before "highly erodible
22	land";
23	(B) by redesignating subsection (b) as sub-
24	section (c);

1	(C) by inserting after subsection (a) the
2	following:
3	"(b) Activities Described.—Activities referred to
4	in subsection (a) are—
5	"(1) the production of an agricultural com-
6	modity on a field on which highly erodible land is
7	predominant;
8	"(2) the designation of land on which highly
9	erodible land or cropland is predominant to be set
10	aside, diverted, devoted to conservation uses, or oth-
11	erwise not cultivated under a program administered
12	by the Secretary to reduce production of an agricul-
13	tural commodity; and
14	"(3) the production of an agricultural com-
15	modity without having in place a conservation
16	plan."; and
17	(D) in subsection (c) (as so redesignated),
18	by striking the heading and inserting "Au-
19	THORITY OF SECRETARY.—".
20	(2) Exemptions.—Section 1212 of the Food
21	Security Act of 1985 (16 U.S.C. 3812) is amend-
22	$\operatorname{ed}$ —
23	(A) in subsection (a)(3), in the first and
24	second sentences, by striking "only be required
25	to apply a conservation plan established under

1	this subtitle. The person shall not be required
2	to meet a higher conservation standard than"
3	and inserting "be required to apply a conserva-
4	tion plan established under this subtitle con-
5	sistent with"; and
6	(B) in subsection $(f)(4)(A)$ —
7	(i) in clause (i), by striking "highly
8	erodible"; and
9	(ii) in clause (ii)(II), by inserting
10	"and soil health" after "erosion control".
11	(3) Conforming amendment.—Subtitle B of
12	title XII of the Food Security Act of 1985 (16
13	U.S.C. 3811 et seq.) is amended in the subtitle
14	heading by striking "Highly Erodible Land"
15	and inserting "Cropland".
16	SEC. 308. NATIONAL AND REGIONAL AGROFORESTRY CEN-
17	TERS.
18	Section 1243 of the Food, Agriculture, Conservation,
19	and Trade Act of 1990 (16 U.S.C. 1642 note; Public Law
20	101–624) is amended—
21	(1) by striking the section heading and insert-
22	ing "NATIONAL AND REGIONAL AGRO-
23	FORESTRY CENTERS";
24	(2) by striking subsection (a) and inserting the
25	following:

1	"(a) National and Regional Agroforestry
2	Centers.—
3	"(1) In General.—The Secretary of Agri-
4	culture (referred to in this section as the 'Sec-
5	retary')—
6	"(A) shall establish at the Forestry
7	Sciences Laboratory of the Forest Service, in
8	Lincoln, Nebraska, a Semiarid Agroforestry Re-
9	search, Development, and Demonstration Cen-
10	ter; and
11	"(B) acting through the Chief of the For-
12	est Service and in cooperation with the Natural
13	Resources Conservation Service, shall establish
14	not fewer than 3 additional regional agro-
15	forestry centers at other locations, as deter-
16	mined by the Secretary.
17	"(2) National and regional directors.—
18	The Secretary shall appoint a National Director and
19	Regional Directors to manage and coordinate the
20	program established under subsection (b).";
21	(3) in subsection (b)—
22	(A) in the matter preceding paragraph (1),
23	by striking "Center" and inserting "Centers es-
24	tablished under subparagraphs (A) and (B) of

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

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

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

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

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

1	"(ii) value-added agricultural products
2	in new and existing markets; and
3	"(iii) agricultural commodities and
4	products that are produced in a manner
5	that—
6	"(I) enhances soil health and car-
7	bon sequestration or significantly re-
8	duces greenhouse gas emissions; or
9	"(II) when added to a crop or
10	grazing rotation on a farm, will sig-
11	nificantly improve soil health and car-
12	bon sequestration or significantly re-
13	duce greenhouse gas emissions;"; and
14	(C) in paragraph (5)(A), by inserting "and
15	the Chief of the Natural Resources Conserva-
16	tion Service" before the period at the end;
17	(4) in subsection $(e)(2)(A)$ , by striking "sub-
18	section (i)" and inserting "subsection (j)";
19	(5) by redesignating subsections (f), (g), (h),
20	and (i) as subsections (g), (h), (i), and (j), respec-
21	tively;
22	(6) by inserting after subsection (e) the fol-
23	lowing:
24	"(f) FARM VIABILITY AND LOCAL CLIMATE RESIL-
25	IENCY CENTERS.—

1	"(1) IN GENERAL.—The Secretary, acting
2	through the Administrator of the Agricultural Mar-
3	keting Service and in coordination with the Adminis-
4	trator of the Rural Business-Cooperative Service and
5	the Chief of the Natural Resources Conservation
6	Service, shall provide grants to eligible entities de-
7	scribed in paragraph (2) to serve as farm viability
8	and local climate resiliency centers (referred to in
9	this section as 'centers') to support—
10	"(A) efforts to enhance farm viability; and
11	"(B) the development, coordination, and
12	expansion of markets for commodities and farm
13	products that significantly improve soil health
14	and carbon sequestration or significantly reduce
15	greenhouse gas emissions.
16	"(2) Eligible entities.—An entity is eligible
17	to receive a grant under this subsection if the entity
18	is—
19	"(A) an agricultural cooperative or other
20	agricultural business entity or a producer net-
21	work or association;
22	"(B) a local, State, or Tribal government;
23	"(C) a nonprofit corporation;
24	"(D) a public benefit corporation;
25	"(E) an economic development corporation;

1	"(F) an institution of higher education; or
2	"(G) such other entity as the Secretary
3	may designate.
4	"(3) USE OF FUNDS.—An eligible entity receiv-
5	ing a grant under this subsection shall use grant
6	funds to provide to entities described in subsection
7	(d)(5)(B)—
8	"(A) assistance for the development of
9	business plans and feasibility studies;
10	"(B) assistance in developing marketing
11	strategies for—
12	"(i) local products; and
13	"(ii) value-added agricultural products
14	in new and existing markets;
15	"(C) assistance in enterprise development
16	for the processing, aggregation, distribution,
17	and storage of—
18	"(i) local and regional food products
19	that are marketed locally or regionally; and
20	"(ii) value-added agricultural prod-
21	ucts;
22	"(D) assistance relating to finances and
23	recordkeeping;
24	"(E) assistance relating to enterprise and
25	business management:

1	"(F) assistance relating to ownership suc-
2	cession planning;
3	"(G) outreach and assistance in the adop-
4	tion of farming practices that enhance soil
5	health and carbon sequestration or significantly
6	reduce greenhouse gas emissions;
7	"(H) outreach regarding assistance avail-
8	able under subsection (d);
9	"(I) outreach regarding assistance avail-
10	able through other programs administered by
11	any other Federal agency that supports the
12	adoption of farming practices that enhance soil
13	health and carbon sequestration or significantly
14	reduce greenhouse gas emissions; or
15	"(J) at the request of the entity described
16	in subsection (d)(5)(B), assistance in applying
17	for a grant under subsection (d), including act-
18	ing on behalf of the entity in applying for the
19	grant.
20	"(4) Geographic diversity.—To the max-
21	imum extent practicable, the Secretary shall ensure
22	geographic diversity in selecting eligible entities to
23	receive a grant under this subsection.
24	"(5) Non-federal share.—An entity receiv-
25	ing a grant under this subsection shall provide fund-

1	ing in an amount equal to not less than 25 percent
2	of the total amount of the Federal portion of the
3	grant.
4	"(6) Applications.—
5	"(A) In general.—To be eligible to re-
6	ceive a grant under this subsection, an eligible
7	entity shall submit to the Secretary an applica-
8	tion at such time, in such manner, and con-
9	taining such information as the Secretary con-
10	siders necessary to evaluate and select applica-
11	tions.
12	"(B) Competitive process.—The Sec-
13	retary—
14	"(i) shall conduct a competitive proc-
15	ess to select applications submitted under
16	subparagraph (A);
17	"(ii) may assess and rank applications
18	with similar proposals as a group; and
19	"(iii) shall, prior to accepting applica-
20	tions under that subparagraph, make pub-
21	lic the criteria to be used in evaluating the
22	applications.
23	"(7) Priority.—The Secretary may give pri-
24	ority to applications submitted under paragraph
25	(6)(A) that include—

1	"(A) plans to use funds for 3 or more of
2	purposes described in paragraph (3); or
3	"(B) activities relating to improving the
4	use and expanded adoption of farming practices
5	that enhance soil health and carbon sequestra-
6	tion or significantly reduce greenhouse gas
7	emissions while simultaneously improving farm
8	viability.
9	"(8) Administrative expenses.—An entity
10	receiving a grant under this subsection may use not
11	more than 4 percent of the funds received through
12	the grant for administrative expenses.";
13	(7) in subsection (i)(1) (as so redesignated), in
14	the matter preceding subparagraph (A), by striking
15	"subsection $(i)(3)(E)$ " and inserting "subsection
16	(j)(3)(E)"; and
17	(8) in subsection (j) (as so redesignated)—
18	(A) in paragraph (1), by striking "fiscal
19	year 2019" and inserting "each of fiscal years
20	$2019$ through $2021$ and $\$150,\!000,\!000$ for fiscal
21	year 2022";
22	(B) in paragraph (3)—
23	(i) in subparagraph (A)(i), by striking
24	"35" and inserting "36"; and

1	(ii) by striking subparagraph (B) and
2	inserting the following:
3	"(B) Farmers' market and local food
4	PROMOTION GRANTS.—
5	"(i) In General.—Of the funds
6	made available to carry out this section for
7	a fiscal year, 36 percent shall be used for
8	grants under subsection (d)(6).
9	"(ii) Allocation among subpro-
10	GRAMS.—Of the funds made available for
11	grants under subsection (d)(6) for a fiscal
12	year—
13	"(I) 40 percent shall be made
14	available for farmers' market pro-
15	motion grants; and
16	"(II) 60 percent shall be made
17	available for local food promotion
18	grants.";
19	(C) by redesignating subparagraphs (D)
20	and (E) as subparagraphs (E) and (F), respec-
21	tively;
22	(D) by inserting after subparagraph (C)
23	the following:
24	"(D) FARM VIABILITY AND LOCAL CLI-
25	MATE RESILIENCY.—Of the funds made avail-

1	able to carry out this section for a fiscal year,
2	10 percent shall be used to provide grants
3	under subsection (f)."; and
4	(E) in subparagraph (E) (as so redesig-
5	nated), in the matter preceding clause (i), by
6	striking "or (C)" and inserting "(C), or (D)".
7	SEC. 402. NATIONAL ORGANIC CERTIFICATION COST-SHARE
8	PROGRAM.
9	(a) Federal Share.—Section 10606(b)(2) of the
10	Farm Security and Rural Investment Act of 2002 (7
11	U.S.C. 6523(b)(2)) is amended by striking "\$750" and
12	inserting "\$1,000".
13	(b) Mandatory Funding.—Section 10606(d)(1) of
14	the Farm Security and Rural Investment Act of 2002 (7
15	U.S.C. 6523(d)(1)) is amended by striking "shall make
16	available" in the matter preceding subparagraph (A) and
17	all that follows through the period at the end of subpara-
18	graph (C) and inserting "shall use such sums as are nec-
19	essary to carry out this section.".
20	SEC. 403. EXCLUSION OF GAIN FROM SALE OF CERTAIN
21	FARM PROPERTY AND AGRICULTURAL EASE-
22	MENTS.
23	(a) In General.—Part III of subchapter B of chap-
24	ter 1 of the Internal Revenue Code of 1986 is amended
25	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 under this section for all
19	prior taxable 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-
2.5	ceeding taxable year

1	"(c) Certification Requirement.—A transferee
2	meets the certification requirement of this subsection if
3	such transferee signs a written certification stating the fol-
4	lowing:
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 amount of the tax that will
11	be imposed on such transferee under subsection (d)
12	in the event of a recapture event (as defined in sub-
13	section (d)).
14	"(d) Treatment of Disposition or Change in
15	USE OF PROPERTY.—
16	"(1) In General.—If there is a recapture
17	event during the recapture period with respect to
18	any qualified farm property, then the tax imposed
19	under this chapter on the transferee described in
20	subsection (a) for the taxable year which includes
21	the first such recapture event shall be increased by
22	the product of—
23	"(A) the amount of the gain excluded from
24	the gross income of the transferor under sub-

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

acquiring the interest referred to in such clause agrees in writing to assume the recapture 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.

1	"(e) 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	"(f) Definitions.—For purposes of this section—
5	"(1) QUALIFIED FARMER.—The term 'qualified
6	farmer' means—
7	"(A) a beginning farmer, socially disadvan-
8	taged farmer, qualified veteran farmer, young
9	farmer, or
10	"(B) any entity if 50 percent or more of
11	the capital and profits of such entity are owned
12	by one or more individuals described in para-
13	graph (A).
14	"(2) Beginning farmer.—The term 'begin-
15	ning farmer' means an individual that—
16	"(A) has not operated a farm, or
17	"(B) as of the date of the sale or exchange
18	described in subsection (a), has operated a farm
19	for not more than 10 years.
20	"(3) Socially disadvantaged farmer.—The
21	term 'socially disadvantaged farmer' means an indi-
22	vidual who is a member of one or more of the fol-
23	lowing groups:
24	"(A) American Indians.
25	"(B) Alaska Natives.

1	"(C) Asians.
2	"(D) Blacks or African Americans.
3	"(E) Native Hawaiians or other Pacific Is-
4	landers.
5	"(F) Hispanics.
6	"(G) Women.
7	"(4) Qualified veteran farmer.—The term
8	'qualified veteran farmer' means an individual
9	who—
10	"(A) first obtained status as a veteran (as
11	defined in section 101(2) of title 38 United
12	States Code) during the 10-year period ending
13	on the date of the sale or exchange described in
14	subsection (a), and
15	"(B) has not operated a farm during such
16	10-year period.
17	"(5) Young farmer.—The term 'young farm-
18	er' means an individual who has not attained age 46
19	as of the date of the sale or exchange described to
20	in subsection (a).
21	"(6) QUALIFIED FARM PROPERTY.—The term
22	'qualified farm property' means real property located
23	in the United States if—
24	"(A) during the 5-year period ending on
25	the date of the sale or exchange referred to in

1	subsection (a), such property has been used by
2	the taxpayer or a member of the family of the
3	taxpayer as a farm for farming purposes for pe-
4	riods aggregating 3 years or more, and
5	"(B) there was material participation by
6	the taxpayer or a member of the family of the
7	taxpayer in the operation of the farm during
8	such 3 years.
9	"(7) Recapture Period.—The term recap-
10	ture period' means the 10-year period beginning on
11	the date of the sale or exchange of qualified farm
12	property described in subsection (a).
13	"(8) Material participation.—
14	"(A) In General.—Material participation
15	shall be determined in a manner similar to the
16	manner used for purposes of paragraph (1) of
17	section 1402(a) (relating to net earnings from
18	self-employment).
19	"(B) Application to entities.—
20	"(i) In general.—In the case of a
21	partnership, S corporation, or other entity,
22	the material participating requirements
23	under subsection (d)(2)(B) and paragraph
24	(6)(B) shall be treated as having been met
25	by such partnership. S. corporation, or

1	other entity if there is material participa
2	tion by individuals owning 50 percent or
3	more of the capital or profits interest or
4	such partnership, S corporation, or other
5	entity.
6	"(ii) Members of the family.—For
7	purposes of paragraph (6)(B), a member
8	of the family of an individual owning a
9	capital or profits interest of a partnership
10	S corporation, or other entity shall not be
11	taken into account for purposes of deter
12	mining whether the partnership, S corpora
13	tion, or other entity meets the materia
14	participating requirements under clause (i
15	unless such member of the family is also
16	owns a capital or profits interest in such
17	partnership, S corporation, or other entity
18	"(9) Other definitions.—The terms 'mem
19	ber of the family' 'farm' and 'farming purposes

have the respective meanings given such terms in

section 2032A(e).

20

1	"SEC. 121B. EXCLUSION OF GAIN FROM SALE OF AGRICUL-
2	TURAL CONSERVATION EASEMENT.
3	"(a) Exclusion.—Gross income shall not include
4	gain from the sale or exchange of an agricultural conserva-
5	tion easement.
6	"(b) Limitation.—
7	"(1) In general.—The amount of gain ex-
8	cluded from gross income under subsection (a) with
9	respect to any taxable year shall not exceed the ex-
10	cess, if any of—
11	"(A) \$500,000 (\$1,000,000 in the case of
12	a joint return), over
13	"(B) the amount excluded from the gross
14	income of the taxpayer under this section for all
15	prior taxable years.
16	"(2) Special rule for joint returns.—The
17	amount of the exclusion under subsection (a) on a
18	joint return for any taxable year shall be allocated
19	equally between the spouses for purposes of applying
20	the limitation under paragraph (1) for any suc-
21	ceeding taxable year.
22	"(c) AGRICULTURAL CONSERVATION EASEMENT DE-
23	FINED.—The term 'agricultural conservation easement'
24	means an easement or conservation-related restriction on
25	agricultural land (granted in perpetuity) that—

1	"(1) is conveyed for the purpose of protecting
2	natural resources and the agricultural nature of the
3	land, and
4	"(2) permits the landowner the right to con-
5	tinue agricultural production and related uses.
6	"(d) Special Rules.—For purposes of this section,
7	rules similar to the rules of subsections (e) and (f) of sec-
8	tion 121 shall apply.".
9	(b) Conforming Amendment.—The table of sec-
10	tions for part III of subchapter B of chapter 1 of the In-
11	ternal Revenue Code of 1986 is amended by adding after
12	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.".
13	(c) Effective Date.—The amendments made by
14	this section shall apply to any sale or exchange in taxable
15	years ending after December 31, 2021.
16	SEC. 404. FARMLAND PROTECTION POLICY ACT.
17	(a) Findings, Purpose, and Definitions.—Sec-
18	tion 1540 of the Agriculture and Food Act of 1981 (7
19	U.S.C. 4201) is amended—
20	(1) in subsection (a)—
21	(A) by redesignating paragraphs (4)
22	through (7) as paragraphs (5) through (8), re-
23	spectively; and

1	(B) by inserting after paragraph (3) the
2	following:
3	"(4) the Nation's farmland is a vital source of
4	environmental services, such as carbon sequestra-
5	tion;";
6	(2) in subsection (b), by inserting "Tribal,"
7	after "State,"; and
8	(3) in subsection (c)—
9	(A) by redesignating paragraphs (1), (2),
10	(3), and (5) as paragraphs (2), (7), (8), and
11	(6), respectively, and moving the paragraphs so
12	as to appear in numerical order;
13	(B) by inserting before paragraph (2) (as
14	so redesignated) the following:
15	"(1) 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 nonagricultural use;";

1	(C) in paragraph (2) (as so redesig-
2	nated)—
3	(i) in subparagraph (B), by striking
4	"that is used for" and inserting "that is
5	suitable for"; and
6	(ii) in subparagraph (C), by inserting
7	"and is suitable" after "local importance";
8	(D) by inserting after paragraph (2) (as so
9	redesignated) the following:
10	"(3) the term 'farmland of national signifi-
11	cance' means farmland that is the most suitable for
12	intensive crop and food production, as determined by
13	the Secretary, taking into consideration, among
14	other factors, the physical and chemical characteris-
15	tics of the farmland;";
16	(E) in paragraph (4), in the second sen-
17	tence, by striking "and" at the end;
18	(F) by inserting after paragraph (4) the
19	following:
20	"(5) the term 'permanently protected farmland'
21	means farmland encumbered by a conservation ease-
22	ment—
23	"(A) held by the Federal Government, a
24	State, Tribal, or local unit of government, or a
25	land conservation organization; and

1	"(B) that is perpetual or the maximum
2	number of years allowed by State law;";
3	(G) in paragraph (6) (as so redesignated),
4	by striking the period at the end and inserting
5	a semicolon;
6	(H) in paragraph (7) (as so redesignated),
7	by adding "and" at the end; and
8	(I) in paragraph (8) (as so redesignated),
9	by striking the semicolon at the end and insert-
10	ing a period.
11	(b) Farmland Protection Policy.—Section 1541
12	of the Agriculture and Food Act of 1981 (7 U.S.C. 4202)
13	is amended to read as follows:
14	"SEC. 1541. FARMLAND PROTECTION POLICY.
15	"(a) In General.—It is the policy of the United
16	States that Federal programs—
17	"(1) shall minimize the conversion of farmland
18	to nonagricultural uses; and
19	"(2) subject to subsection (d), shall not convert
20	to nonagricultural uses farmland—
21	"(A) that is permanently protected farm-
22	land;
23	"(B) that has been defined and delineated
24	by the Secretary under subsection (b)(1) as
25	farmland of national significance; or

1	"(C) that has been defined and delineated
2	by a State as significant to the State or a pri-
3	ority for inclusion in a State farmland protec-
4	tion program and for which the State has sub-
5	mitted a definition and delineation under sub-
6	section $(b)(2)$ .
7	"(b) Definition and Delineation of Land.—
8	"(1) National significance.—
9	"(A) IN GENERAL.—The Secretary shall
10	define and delineate farmland of national sig-
11	nificance.
12	"(B) Experts.—The Secretary shall con-
13	vene a group of experts, including agronomists
14	and soil scientists, to assist the Secretary in
15	carrying out subparagraph (A).
16	"(2) State significance.—Any State wishing
17	to have farmland recognized under subsection
18	(a)(2)(C) shall provide to the Secretary a definition
19	and delineation of the farmland.
20	"(c) Process and Criteria.—
21	"(1) Process and Criteria.—The Secretary
22	shall develop a process, including criteria—
23	"(A) to determine the potential conversion
24	of farmland as a consequence of any action or
25	activity conducted through a Federal program;

1	"(B)(i) to minimize the conversion of
2	farmland to nonagricultural uses; or
3	"(ii) in the case of farmland identified
4	under subsection (a)(2), to avoid conversion of
5	the farmland to nonagricultural uses;
6	"(C) to provide to the Secretary notice re-
7	garding actions described in subparagraphs (A)
8	and (B); and
9	"(D) that the Secretary shall use to make
10	determinations under subsection (d).
11	"(2) USE REQUIRED.—Each department, agen-
12	cy, independent commission, and other unit of the
13	Federal Government shall use the process and cri-
14	teria developed under paragraph (1) in carrying out
15	a Federal program.
16	"(d) Exemption.—
17	"(1) In general.—Subsection (a)(2) shall not
18	apply if the Secretary determines, based on the proc-
19	ess and criteria developed under subsection $(c)(1)$ ,
20	that converting farmland to nonagricultural uses
21	cannot be avoided.
22	"(2) Minimization of conversion.—In a
23	case in which the Secretary makes a determination
24	under paragraph (1), the Federal program shall

1	minimize the conversion of farmland described in
2	subsection (a)(2) to the maximum extent practicable.
3	"(e) Information.—The Secretary may make avail-
4	able to States, units of local government, individuals, orga-
5	nizations, and other units of the Federal Government in-
6	formation—
7	"(1) useful in restoring, maintaining, and im-
8	proving the quantity and quality of farmland; and
9	"(2) concerning the location of permanently
10	protected farmland.
11	"(f) Assistance.—The Secretary shall provide as-
12	sistance to departments, agencies, independent commis-
13	sions, and other units of the Federal Government, on re-
14	quest, in using the process and criteria developed under
15	subsection (c)(1).".
16	SEC. 405. AGRICULTURAL CONSERVATION EASEMENT PRO-
17	GRAM.
18	Section $1265\mathrm{B}$ of the Food Security Act of $1985$ (16
19	U.S.C. 3865b) is amended—
20	(1) in subsection (b)—
21	(A) in paragraph (4)(C)(iv), by striking
22	"only"; and
23	(B) by adding at the end the following:
24	"(6) Condition of Assistance.—

1	"(A) In general.—As a condition of re-
2	ceiving cost-share assistance under this section,
3	the owner of eligible land shall agree to have in
4	place a conservation plan that addresses appli-
5	cable resource concerns for the land subject to
6	the easement, including soil health and green-
7	house gas emissions reduction, not later than 3
8	years after the date on which the easement is
9	granted.
10	"(B) Bureau of Indian Affairs.—Sub-
11	paragraph (A) may be satisfied by having in
12	place a conservation plan developed or recog-
13	nized by the Bureau of Indian Affairs."; and
14	(2) by striking subsection (d) and inserting the
15	following:
16	"(d) Technical Assistance.—The Secretary may
17	provide technical assistance, if requested, to assist in—
18	"(1) compliance with the terms and conditions
19	of an easement; and
20	"(2) development and implementation of a con-
21	servation plan required under subsection (b)(6), in-
22	cluding, as applicable—
23	"(A) a conservation plan for highly erod-
24	ible land required under subsection
25	(b)(4)(C)(iv); and

1	"(B) a comprehensive conservation plan
2	developed pursuant to subsection (e)(1).
3	"(e) FINANCIAL ASSISTANCE.—
4	"(1) In general.—
5	"(A) ENROLLMENT IN CSP.—At the sole
6	option of the owner of the eligible land subject
7	to an easement, the Secretary shall provide for
8	the automatic enrollment of the eligible land
9	subject to the easement in the conservation
10	stewardship program established by subchapter
11	B of chapter 4 of subtitle D, including financial
12	assistance for the development of a comprehen-
13	sive conservation plan under section 1240L(e),
14	if the person or entity farming the eligible land
15	is otherwise eligible for the conservation stew-
16	ardship program, as determined by the Sec-
17	retary.
18	"(B) Determination of compliance.—
19	In the case of eligible land enrolled in the con-
20	servation stewardship program pursuant to sub-
21	paragraph (A), the Secretary shall have the sole
22	responsibility of determining compliance with
23	the terms of the conservation stewardship pro-

gram contract.

1	"(C) Funding received by an
2	eligible entity pursuant to this paragraph shall
3	not be considered in the calculation of costs
4	under subsection (b).
5	"(2) TIMING.—The owner of the eligible land
6	subject to an easement may exercise the option
7	under paragraph (1)(A) during the 3-year period be-
8	ginning on the date on which the easement is grant-
9	ed.".
10	TITLE V—PASTURE-BASED
11	LIVESTOCK
12	SEC. 501. ANIMAL RAISING CLAIMS.
13	The Agricultural Marketing Act of 1946 (7 U.S.C.
14	1621 et seq.) is amended by adding at the end the fol-
15	lowing:
16	"Subtitle H—Animal Raising
17	Claims
18	"SEC. 298A. DEFINITIONS.
19	"In this subtitle:
20	"(1) Animal raising claim.—The term 'ani-
21	mal raising claim' means a statement on the labeling
22	of a meat food product or poultry product used in
23	interstate commerce that references—

1	"(A) the manner in which the source ani-
2	mal for the meat food product or poultry prod-
3	uct was raised, including—
4	"(i) production practices that were
5	used, such as living or raising conditions;
6	and
7	"(ii) the location or source where the
8	source animal was born, raised, and proc-
9	essed; or
10	"(B) the breed of the source animal.
11	"(2) Meat food product.—The term 'meat
12	food product' has the meaning given the term in sec-
13	tion 1 of the Federal Meat Inspection Act (21
14	U.S.C. 601).
15	"(3) POULTRY PRODUCT.—The term 'poultry
16	product' has the meaning given the term in section
17	4 of the Poultry Products Inspection Act (21 U.S.C.
18	453).
19	"(4) Secretary.—The term 'Secretary' means
20	the Secretary of Agriculture, acting through the Ad-
21	ministrator of the Agricultural Marketing Service, in
22	coordination with the Administrator of the Food
23	Safety and Inspection Service.

1	"SEC. 298B. REQUIRED VERIFICATION PROCESS FOR ANI-
2	MAL RAISING CLAIMS.
3	"(a) Purpose.—The purpose of this section is to fa-
4	cilitate marketing, truth in labeling, and new economic op-
5	portunities for producers and businesses using animal
6	raising claims.
7	"(b) Standards and Procedures.—
8	"(1) In general.—Not later than 2 years
9	after the date of enactment of this subtitle, after
10	providing notice and an opportunity to comment,
11	and in a manner consistent with United States obli-
12	gations under international agreements, the Sec-
13	retary shall establish—
14	"(A) mandatory standards with respect to
15	animal raising claims, including the standards
16	described in paragraph (2);
17	"(B) procedures—
18	"(i) to verify an animal raising claim
19	prior to the use in commerce of any meat
20	food product or poultry product bearing
21	that claim; and
22	"(ii) that are incorporated seamlessly
23	with the labeling requirements under the
24	Federal Meat Inspection Act (21 U.S.C.
25	601 et seq.) and the Poultry Products In-
26	spection Act (21 U.S.C. 451 et seq.); and

1	"(C) on-farm and supply chain auditing
2	and verification procedures to ensure the truth-
3	fulness of animal raising claims.
4	"(2) Standards.—In developing and approv-
5	ing animal raising claim standards under paragraph
6	(1)(A), the Secretary shall include standards relat-
7	ing to—
8	"(A) diet claims, including claims that the
9	source animal was grass fed, vegetarian fed, or
10	fed no animal byproducts;
11	"(B) living and raising condition claims,
12	including claims that the source animal was
13	cage free, free range, or pasture raised;
14	"(C) antibiotic and hormone claims, in-
15	cluding claims that the source animal was
16	raised without antibiotics, had no hormones
17	added, or was raised without growth
18	promotants;
19	"(D) source claims that the source animal
20	can be traced back to its farm of origin from
21	birth to slaughter;
22	"(E) age claims;
23	"(F) animal welfare claims;

1	"(G) environmental stewardship claims, in-
2	cluding greenhouse gas reduction and carbon
3	sequestration claims;
4	"(H) breed claims; and
5	"(I) any other claim that the Secretary de-
6	termines appropriate.
7	"(3) Consistency with other laws.—The
8	Secretary shall ensure consistency between the ani-
9	mal raising claim standards established under this
10	subsection and the Organic Foods Production Act of
11	1990 (7 U.S.C. 6501 et seq.) and any rules or regu-
12	lations implementing that Act.
13	"(c) Third-Party Certification.—A producer of
14	a meat food product or a poultry product may use an ani-
15	mal raising claim that is verified by a third party if—
16	"(1) the claim is consistent with standards es-
17	tablished by the Secretary under subsection (b); and
18	"(2) the procedures used by the third party to
19	verify the claim, and for any subsequent auditing,
20	are equivalent to the verification and auditing proce-
21	dures established under subsection $(b)(1)(C)$ , as de-
22	termined by the Secretary.
23	"(d) Approval Process.—To the maximum extent
24	practicable, the Secretary shall require that a producer
25	seeking to make an animal raising claim shall submit to

1	the Secretary, prior to using the label on the meat food
2	product or poultry product that is the subject of the ani-
3	mal raising claim, the following documentation to support
4	the animal raising claim:
5	"(1) A detailed written description explaining
6	the controls used for ensuring that the animal rais-
7	ing claim is valid, as applicable—
8	"(A) from birth to harvest; or
9	"(B) for the period of raising referenced in
10	the animal raising claim.
11	"(2) A signed and dated document describing
12	the manner in which the source animals were raised.
13	"(3) A written description of the product trac-
14	ing and segregation mechanism used with respect to
15	the applicable meat food product or poultry product
16	from the time of slaughter of the source animal or
17	further processing through the packaging and dis-
18	tribution of the meat food product or poultry prod-
19	uct.
20	"(4) A written description of the identification,
21	control, and segregation of nonconforming animals
22	or products.
23	"(5) In the case of a meat food product or
24	poultry product certified by a third party, a current

copy of the third party certificate.

1	"(e)	Comp	LIANCE	Requirem	ENTS.—	-Beginning	on
2	the date	that is	3 years	after the	date of	enactment	of

"(1) a person may sell or label a domestic meat food product or poultry product with an animal raising claim only if the animal raising claim and the meat food product or poultry product is in compliance with the standards established under subsection (b); and

"(2) an imported meat food product or poultry product may be sold or labeled with an animal raising claim if, as determined by the Secretary, the animal raising claim and the meat food product or poultry product is in compliance with a verification program that provides safeguards and guidelines that are at least equivalent to the standards established under subsection (b).

## "(f) Violations.—

this subtitle—

"(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 in violation of this subtitle, including the standards and procedures established

- under subsection (b), shall be assessed a civil penalty of not more than \$10,000.
- "(2) False statement.—Any person who, 3 4 after notice and an opportunity to be heard, is found 5 by the Secretary to have made to the Secretary, a 6 Federal or State official, or a third-party certifier a 7 false, fraudulent, or fictitious statement, or to have 8 concealed to, hidden from, falsified to, or deceived 9 the Secretary, official, or certifier regarding a mate-10 rial fact, with respect to an animal raising claim 11 subject to the requirements of this subtitle, shall be
- 14 "(g) Effect on Other Laws.—Nothing in this sec-

subject to a penalty described in section 1001 of title

- 15 tion alters the authority of the Secretary under the Fed-
- 16 eral Meat Inspection Act (21 U.S.C. 601 et seq.) or the
- 17 Poultry Products Inspection Act (21 U.S.C. 451 et seq.).
- 18 "SEC. 298C. APPLICABILITY.

18, United States Code.

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- 19 "This subtitle shall only apply to meat food products
- 20 and poultry products that are subject to labeling require-
- 21 ments under the Federal Meat Inspection Act (21 U.S.C.
- 22 601 et seq.) or the Poultry Products Inspection Act (21
- 23 U.S.C. 451 et seq.).

1	"SEC. 298D. AUTHORIZATION OF APPROPRIATIONS.
2	"There are authorized to be appropriated to the Sec-
3	retary such sums as are necessary to carry out this sub-
4	title.".
5	SEC. 502. PROCESSING RESILIENCE GRANT PROGRAM.
6	Subtitle A of the Agricultural Marketing Act of 1946
7	(7 U.S.C. 1621 et seq.) is amended by adding at the end
8	the following:
9	"SEC. 210B. PROCESSING RESILIENCE GRANT PROGRAM.
10	"(a) Definitions.—In this section:
11	"(1) ELIGIBLE ENTITY.—The term 'eligible en-
12	tity' means—
13	"(A) a smaller establishment or very small
14	establishment (as those terms are defined in the
15	final rule entitled 'Pathogen Reduction; Hazard
16	Analysis and Critical Control Point (HACCP)
17	Systems' (61 Fed. Reg. 33806 (July 25,
18	1996)));
19	"(B) a slaughtering or processing estab-
20	lishment subject to—
21	"(i) a State meat inspection program
22	pursuant to section 301 of the Federal
23	Meat Inspection Act (21 U.S.C. 661); or
24	"(ii) a State poultry product inspec-
25	tion program pursuant to section 5 of the

1	Poultry Products Inspection Act (21)
2	U.S.C. 454);
3	"(C) a person, firm, or corporation engag-
4	ing in custom operations that is exempt from
5	inspection under—
6	"(i) section 23 of the Federal Meat
7	Inspection Act (21 U.S.C. 623); or
8	"(ii) section 15 of the Poultry Prod-
9	ucts Inspection Act (21 U.S.C. 464); and
10	"(D) a person seeking—
11	"(i) to establish and operate an estab-
12	lishment described in subparagraph (A) or
13	(B); or
14	"(ii) to engage in custom operations
15	described in subparagraph (C).
16	"(2) Minority-owned business.—The term
17	'minority-owned business' means a for-profit busi-
18	ness not less than 51 percent of which is owned by
19	1 or more Black American, Native American, His-
20	panic American, or Asian American individuals.
21	"(3) Secretary.—The term 'Secretary' means
22	the Secretary of Agriculture.
23	"(b) Grants.—
24	"(1) In general.—The Secretary shall estab-
25	lish a grant program under which the Secretary

1	shall award competitive grants to eligible entities to
2	expand meat and poultry processing capacity, create
3	jobs in, support the health and safety of, and en-
4	hance the resilience of the farm and food sector.
5	"(2) MAXIMUM AMOUNT.—The maximum
6	amount of a grant awarded under this section shall
7	not exceed \$500,000.
8	"(c) Applications.—
9	"(1) IN GENERAL.—An eligible entity seeking a
10	grant under this section shall submit to the Sec-
11	retary an application at such time, in such manner,
12	and containing such information as the Secretary
13	may require.
14	"(2) Applications for small grants.—The
15	Secretary shall establish a separate, simplified appli-
16	cation process for eligible entities applying for a
17	grant under this section of not more than \$100,000.
18	"(3) Accessibility of applications.—The
19	Secretary shall ensure that applications for a grant
20	under this section are—
21	"(A) accessible online; and
22	"(B) available through local staff of the
23	Department of Agriculture.
24	"(4) Reapplication.—If an application of an
25	eligible entity under this subsection is denied by the

1	Secretary, the eligible entity may submit a revised
2	application.
3	"(5) Priority.—In reviewing applications sub-
4	mitted under this subsection, the Secretary shall
5	give priority to proposals that will—
6	"(A) increase farmer and rancher access to
7	animal slaughter options within a 200-mile ra-
8	dius of the location of the farmer or rancher;
9	"(B) support an eligible entity described in
10	subsection (a)(1)(A) that has 150 employees or
11	fewer; or
12	"(C) support an eligible entity that is a
13	minority-owned business.
14	"(d) USE OF GRANT.—An eligible entity that receives
15	a grant under this section shall use the grant funds to
16	carry out activities in support of the purposes described
17	in subsection (b)(1), including through—
18	"(1) the development and issuance of a Hazard
19	Analysis and Critical Control Points plan for the eli-
20	gible entity, which may be developed by a consultant;
21	"(2) the purchase or establishment, as applica-
22	ble, of facilities, equipment, processes, and oper-
23	ations necessary for the eligible entity to comply
24	with applicable requirements under the Federal
25	Meat Inspection Act (21 U.S.C. 601 et seq.) or the

1	Poultry Products Inspection Act (21 U.S.C. 451 et
2	seq.);
3	"(3) the purchase of cold storage, equipment, or
4	transportation services;
5	"(4) the construction or purchase of humane
6	handling infrastructure, including holding space for
7	livestock prior to slaughter, shade structures, and
8	knock box structures;
9	"(5) the purchase of software and computer
10	equipment for record keeping, production data, and
11	Hazard Analysis and Critical Control Points record
12	review;
13	"(6) the provision of staff time and training for
14	implementing and monitoring health and safety pro-
15	cedures;
16	"(7) the development of a feasibility study or
17	business plan for establishing or expanding a small
18	meat or poultry processing facility; and
19	"(8) other activities associated with expanding
20	or establishing an eligible entity described in sub-
21	section (a)(1)(A), as determined by the Secretary.
22	"(e) Outreach.—Beginning on the date on which
23	the Secretary begins to accept applications under sub-
24	section (c)(1), the Secretary shall perform outreach to

1	States and eligible entities relating to grants under this
2	section.
3	"(f) FEDERAL SHARE.—The Federal share of the ac-
4	tivities carried out using a grant awarded under this sec-
5	tion shall not exceed 50 percent of the cost of those activi-
6	ties.
7	"(g) Administration.—The promulgation of regula-
8	tions under, and administration of, this section shall be
9	made without regard to—
10	"(1) the notice and comment provisions of sec-
11	tion 553 of title 5, United States Code; and
12	"(2) chapter 35 of title 44, United States Code
13	(commonly known as the 'Paperwork Reduction
14	Act').
15	"(h) Funding.—
16	"(1) Mandatory funding.—Of the funds of
17	the Commodity Credit Corporation, the Secretary
18	shall use to carry out this section \$10,000,000 for
19	each of fiscal years 2022 through 2030.
20	"(2) Authorization of appropriations.—In
21	addition to amounts made available under paragraph
22	(1), there is authorized to be appropriated to the
23	Secretary to carry out this section \$15,000,000 for

each of fiscal years 2022 through 2030.".

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

25 ANCE.—Section 1240M(c) of the Food Security Act of

1	(1) in paragraph (1)—
2	(A) in the matter preceding subparagraph
3	(A), by inserting "and partnerships described in
4	paragraph (2)(B)" after "local conservation dis-
5	tricts";
6	(B) in subparagraph (B), by striking
7	"grazing land management technologies" and
8	inserting "regionally appropriate, advanced
9	grazing land management technologies to im-
10	prove soil health and maximize carbon seques-
11	tration";
12	(C) in subparagraph (C)(iv), by inserting
13	"through integrated strategies that include ro-
14	tational and multispecies grazing, integrated
15	pest management, and other ecological prac-
16	tices" after "brush encroachment problems";
17	(D) in subparagraph (H), by striking
18	"and" at the end;
19	(E) in subparagraph (I), by striking the
20	period at the end and inserting "; and; and
21	(F) by adding at the end the following:
22	"(J) assisting producers in transitioning
23	from confinement or feedlot systems or contin-
24	uous grazing to managed grazing-based sys-

1	tems, including assistance in pasture develop-
2	ment and management."; and
3	(2) by striking paragraph (2) and inserting the
4	following:
5	"(2) Program elements.—
6	"(A) TECHNICAL ASSISTANCE AND EDU-
7	CATION.—Personnel of the Department trained
8	in pasture and range management shall be
9	made available under the program to deliver
10	and coordinate technical assistance and edu-
11	cation to owners and managers of private graz-
12	ing land, including owners and managers inter-
13	ested in developing new or improved pasture or
14	grazing-based systems on the land of the own-
15	ers and managers, at the request of the owners
16	and managers.
17	"(B) Partnerships.—In carrying out the
18	program under this section, the Secretary shall
19	provide research, demonstration, education (in-
20	cluding conferences, workshops, field days, and
21	trainings), workforce training, planning, and
22	outreach activities through partnerships with—
23	"(i) land-grant colleges and univer-
24	sities (as defined in section 1404 of the
25	National Agricultural Research, Extension,

1	and Teaching Policy Act of 1977 (7 U.S.C.
2	3103));
3	"(ii) nongovernmental organizations;
4	and
5	"(iii) Tribal organizations.
6	"(C) Grants.—
7	"(i) In General.—In carrying out
8	the program under this section, the Sec-
9	retary shall provide funds on a competitive
10	basis to partnerships described in subpara-
11	graph (B) to use for State or local action
12	grants to conduct grazing land research,
13	demonstration, education, workforce train-
14	ing, planning, and outreach projects.
15	"(ii) Duration.—Grants made by
16	partnerships under this subparagraph shall
17	be for a period not to exceed 3 years.
18	"(iii) Cost sharing.—A partnership
19	that receives funding under this subpara-
20	graph shall ensure that any funded project
21	provides, from non-Federal sources, funds
22	or in-kind support valued at not less than
23	25 percent of the total cost of the project.
24	"(iv) Limitation on indirect
25	COSTS.—A partnership that receives fund-

1	ing under this subparagraph may not use
2	more than 15 percent of the total cost of
3	the project for the indirect costs of car-
4	rying out the project.
5	"(v) Priority.—A partnership that
6	receives funding under this subparagraph
7	shall give priority to projects that—
8	"(I) focus on sustainable grazing
9	management systems and techniques
10	that assist producers with multiple
11	ecosystem services, including climate
12	change adaptation and mitigation;
13	and
14	"(II) involve beginning farmers
15	and ranchers, socially disadvantaged
16	farmers and ranchers, Tribal pro-
17	ducers, or new graziers (including
18	State or federally registered appren-
19	ticeships).".
20	(d) Grazing Technical Assistance Self-
21	Help.—Section 1240M(d) of the Food Security Act of
22	1985 (16 U.S.C. 3839bb(d)) is amended—
23	(1) in paragraph (1)(A), by inserting "and for
24	those interested in beginning grazing" before the
25	semicolon;

1	(2) in paragraph (2), by striking "may establish
2	2" and inserting "may establish"; and
3	(3) in paragraph (3)(C)—
4	(A) in clause (ii), by striking "and" at the
5	end;
6	(B) by redesignating clause (iii) as clause
7	(iv); and
8	(C) by inserting after clause (ii) the fol-
9	lowing:
10	"(iii) will improve climate change ad-
11	aptation and mitigation; and".
12	(e) Authorization of Appropriations.—Section
13	1240M of the Food Security Act of 1985 (16 U.S.C.
14	3839bb) is amended by striking subsection (e) and insert-
15	ing the following:
16	"(e) Funding.—
17	"(1) Mandatory funding.—Of the funds of
18	the Commodity Credit Corporation, the Secretary
19	shall use to carry out this section \$50,000,000 for
20	each of fiscal years 2022 through 2030.
21	"(2) Grants.—Of the funds made available
22	under paragraph (1), the Secretary shall use not
23	more than 40 percent to carry out subsection
24	(c)(2)(C).

1	"(3) Authorization of appropriations.—
2	There is authorized to be appropriated to carry out
3	this section \$60,000,000 for each of fiscal years
4	2022 through 2030.".
5	SEC. 504. CONSERVATION RESERVE PROGRAM.
6	(a) Conservation Reserve.—Section 1231(d) of
7	the Food Security Act of 1985 (16 U.S.C. 3831(d)) is
8	amended—
9	(1) in paragraph (1)—
10	(A) in subparagraph (D), by striking
11	"and" at the end;
12	(B) in subparagraph (E), by striking the
13	period at the end and inserting "; and"; and
14	(C) by adding at the end the following:
15	"(F) fiscal years 2024 through 2030, not
16	more than 32,000,000 acres."; and
17	(2) in paragraph (2)(A)—
18	(A) in clause (i), by striking "and" at the
19	end;
20	(B) in clause (ii)(III), by striking the pe-
21	riod at the end and inserting "; and"; and
22	(C) by adding at the end the following:
23	"(iii) the Secretary shall enroll and
24	maintain in the conservation reserve not
25	fewer than 7,000,000 acres of land de-

1	scribed in subsection (b)(3) by September
2	30, 2030, of which 5,000,000 acres shall
3	be reserved for the pilot program estab-
4	lished under section 1231C(c).".
5	(b) Pilot Programs.—Section 1231C of the Food
6	Security Act of 1985 (16 U.S.C. 3831c) is amended by
7	adding at the end the following:
8	"(c) Grassland 30.—
9	"(1) In general.—
10	"(A) Enrollment.—The Secretary shall
11	establish a pilot program to enroll land in the
12	conservation reserve program through a 30-year
13	conservation reserve contract (referred to in
14	this subsection as a 'Grassland 30 contract') in
15	accordance with this subsection.
16	"(B) Inclusion of Acreage Limita-
17	TION.—For purposes of applying the limitations
18	in section 1231(d)(1), the Secretary shall in-
19	clude acres of land enrolled under this sub-
20	section.
21	"(2) Eligible land for enroll-
22	ment through a Grassland 30 contract—
23	"(A) is land that is eligible to be enrolled
24	in the conservation reserve program under the

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

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

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

"(7)	Compensation.—
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"(A) Amount of payments.—The Secretary shall provide payment under this subsection to an owner of land enrolled through a Grassland 30 contract using 30 annual payments in an amount equal to the amount that would be used if the land were to be enrolled in the conservation reserve program under section 1231(d)(2).

- "(B) FORM OF PAYMENT.—Compensation for a Grassland 30 contract shall be provided by the Secretary in the form of a cash payment in an amount determined under subparagraph (A).
- "(C) TIMING.—The Secretary shall provide any annual payment obligation under subparagraph (A) as early as practicable in each fiscal year.
- "(D) Payments to others.—The Secretary shall make a payment, in accordance with regulations prescribed by the Secretary, in a manner as the Secretary determines is fair and reasonable under the circumstances, if an owner who is entitled to a payment under this section—

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

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

1	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.) (as amended
4	by section 304) is amended by adding at the end the fol-
5	lowing:
6	"SEC. 1240T. ALTERNATIVE MANURE MANAGEMENT PRO-
7	GRAM.
8	"(a) Definitions.—In this section:
9	"(1) Eligible Producer.—The term 'eligible
10	producer' means a dairy or livestock producer whose
11	baseline manure management practices prior to en-
12	rollment in the program include the anaerobic de-
13	composition of volatile solids stored in a lagoon or
14	other predominantly liquid anaerobic environment.
15	"(2) Non-digester dairy or livestock
16	METHANE MANAGEMENT METHOD.—The term 'non-
17	digester dairy or livestock methane management
18	method' means a method that may be used by an
19	operator of a dairy or livestock operation to transi-
20	tion from wet manure handling and storage, where
21	anaerobic conditions are present, to dry manure
22	handling and storage, including—
23	"(A) onsite open solar drying or
24	composting of manure;
25	"(B) conversion of dairy and livestock op-
26	erations to pasture-based management;

1	"(C) solid separation technologies;
2	"(D) scrape conversion; and
3	"(E) other strategies to mitigate methane
4	emissions from manure management, as deter-
5	mined by the Secretary.
6	"(3) Onsite open solar drying or
7	COMPOSTING OF MANURE.—The term 'onsite open
8	solar drying or composting of manure' means the
9	collection, storage, and drying of dairy or livestock
10	manure in a nonliquid environment on a farm or
11	ranch.
12	"(4) Pasture-based management.—The
13	term 'pasture-based management' means a dairy or
14	livestock production system in which the animals
15	spend all or a substantial portion of their time graz-
16	ing on fields in which some or all of the manure is
17	deposited and left in the field and decomposes
18	aerobically.
19	"(5) Program.—The term 'program' means
20	the alternative manure management program estab-
21	lished under subsection (b).
22	"(6) SCRAPE CONVERSION.—The term 'scrape
23	conversion' means the conversion of a flush water la-
24	goon system to solid-scrape or dry manure manage-

- ment practices, including vacuum technologies for
  manure management.
- "(7) Solid separation technology.—The term 'solid separation technology' means a technology designed to separate liquid components of manure from mineral and organic solid components
- 7 for the purposes of reducing methane emissions.
- 8 "(b) Establishment.—The Secretary shall estab-
- 9 lish an alternative manure management program to sup-
- 10 port non-digester dairy and livestock methane manage-
- 11 ment method strategies to effectively reduce greenhouse
- 12 gas emissions and maximize environmental benefits.
- 13 "(c) Payments.—During each of fiscal years 2022
- 14 through 2030, the Secretary shall provide payments to eli-
- 15 gible producers that enter into contracts with the Sec-
- 16 retary under the program.
- 17 "(d) Practices.—Each eligible producer requesting
- 18 funding for a project under the program shall include at
- 19 least 1 of the following project components that reduce
- 20 baseline methane emissions on the operation of the eligible
- 21 producer:
- 22 "(1) Conversion of a dairy or livestock oper-
- ation to pasture-based management that eliminates
- or reduces the quantity of manure stored in anaer-
- obic conditions, including—

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

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

- 1 may be used to implement 1 or more practices de-2 scribed in subsection (d).
- "(2) Payment amounts.—The Secretary may provide a payment to an eligible producer under the program for an amount that is not more than 100 percent of the costs associated with planning, design, materials, equipment, installation, labor, management, maintenance, and training relating to implementing a practice described in subsection (d).
  - "(3) LIMITATION ON PAYMENTS.—A person or legal entity (including a joint venture and a general partnership) may not receive, directly or indirectly, payments under the program that exceed \$750,000 during any 5-year period.
- 15 "(4) ADVANCED PAYMENTS.—The Secretary 16 shall provide not less than 50 percent of the amount 17 of total payments to an eligible producer in advance 18 for all costs relating to purchasing materials and 19 equipment or contracting.
- 20 "(g) Modification or Termination of Con-21 tracts.—
- "(1) VOLUNTARY MODIFICATION OR TERMI-NATION.—The Secretary may modify or terminate a contract entered into with an eligible producer under the program if—

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

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

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

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

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

1	"(F) carbon accounting assessments devel-
2	oped under subsection (d) with respect to the
3	renewable energy system to be installed or the
4	energy efficiency upgrade to be undertaken;";
5	(C) in paragraph (3)—
6	(i) in subparagraph (A), by striking
7	"The amount" and all that follows through
8	"25 percent" and inserting "Except as
9	provided in subparagraph (F), the amount
10	of a grant under this subsection shall not
11	exceed 50 percent";
12	(ii) by redesignating subparagraphs
13	(C) and (D) as subparagraphs (D) and
14	(E), respectively;
15	(iii) by inserting after subparagraph
16	(B) the following:
17	"(C) Maximum percentage of loan
18	GUARANTEE.—The portion of a loan that the
19	Secretary may guarantee under this section
20	shall be—
21	"(i) in the case of a loan in the
22	amount of not less than \$1,000,000, 80
23	percent of the principal amount of the
24	loan; and

1	"(ii) in the case of a loan in an
2	amount less than \$1,000,000, 90 percent
3	of the principal amount of the loan.";
4	(iv) in subparagraph (E) (as so redes-
5	ignated), by striking "subsection (f)" and
6	inserting "subsection (h)"; and
7	(v) by adding at the end the following:
8	"(F) Underserved producers.—The
9	amount of a grant provided under this sub-
10	section to an agricultural producer who is a be-
11	ginning farmer or rancher, a socially disadvan-
12	taged farmer or rancher, or a veteran farmer or
13	rancher (as those terms are defined in section
14	2501(a) of the Food, Agriculture, Conservation
15	and Trade Act of 1990 (7 U.S.C. 2279(a)))
16	shall not exceed 75 percent of the cost of the
17	activity funded by the grant.";
18	(D) in paragraph (4), by adding at the end
19	the following:
20	"(F) Pre-approved technologies.—In
21	order to streamline the adoption of renewable
22	energy systems and energy efficiency improve-
23	ments, the Secretary shall develop a stream-
24	lined application process for projects utilizing
25	pre-approved products and technologies in-

1	cluded on the list described in paragraph (5).";
2	and
3	(E) by adding at the end the following:
4	"(5) Pre-approved list.—The Secretary
5	shall, beginning in fiscal year 2022—
6	"(A) develop a list of pre-approved tech-
7	nologies and products for purposes of para-
8	graph $(4)(F)$ ; and
9	"(B) update that list every 2 fiscal years.
10	"(6) Priority.—In making grants or loan
11	guarantees under this subsection, the Secretary shall
12	give priority to proposed projects that utilize tech-
13	nologies—
14	"(A) with a substantially low carbon foot-
15	print; or
16	"(B) that would result in significant net
17	decreases of carbon dioxide and carbon dioxide
18	equivalent emissions, as determined by the Sec-
19	retary using the carbon accounting assessments
20	developed under subsection (d).";
21	(4) by redesignating subsections (d), (e), and
22	(f) as subsections (f), (g), and (h), respectively;
23	(5) by inserting after subsection (c) the fol-
24	lowing:
25	"(d) Carbon Accounting.—

- "(1) IN GENERAL.—Not later than 2 years after the date of enactment of the Agriculture Resil-ience Act of 2021, the Secretary, in collaboration with the National Renewable Energy Laboratory, shall develop carbon accounting assessments for re-newable energy systems and energy efficiency up-grades (including technologies on the list described in subsection (c)(5) and technologies described in subsection (h)(5)(A) supported by assistance pro-vided under this section.
  - "(2) PROGRAM GUIDANCE.—The Secretary shall, to the maximum extent practicable, use the carbon accounting assessments developed under paragraph (1) as guides in carrying out this section.
  - "(e) REGIONAL DEMONSTRATION PROJECTS.—
  - "(1) In General.—The Secretary shall carry out regional demonstration projects that incentivize agricultural producers to reduce their carbon footprint or overall carbon equivalent emissions to the maximum extent practicable through the use of energy efficiency improvements and renewable energy systems.
  - "(2) Publicization.—The Secretary shall publicize the results of the regional demonstration projects carried out under paragraph (1).";

1	(6) in subsection (f) (as so redesignated)—
2	(A) in the subsection heading, by inserting
3	"AND TECHNICAL ASSISTANCE" after "OUT-
4	REACH";
5	(B) by striking "The Secretary shall" and
6	inserting "Using funds made available under
7	subsection (h)(4), the Secretary shall";
8	(C) by inserting "and technical assistance"
9	after "outreach"; and
10	(D) by inserting "or provided, as applica-
11	ble," after "conducted";
12	(7) in subsection (g) (as so redesignated), by
13	striking "subsection (f)" each place it appears and
14	inserting "subsection (h)"; and
15	(8) in subsection (h) (as so redesignated)—
16	(A) in paragraph (1), by striking subpara-
17	graphs (A) through (E) and inserting the fol-
18	lowing:
19	"(A) \$50,000,000 for each of fiscal years
20	2014 through 2021;
21	"(B) $$100,000,000$ for fiscal year $2022$ ;
22	"(C) \$200,000,000 for fiscal year 2023;
23	"(D) $$300,000,000$ for fiscal year $2024$ ;
24	and

1	"(E) $$400,000,000$ for fiscal year $2025$
2	and each fiscal year thereafter.";
3	(B) in paragraph (2)(B), by striking "be-
4	come available" and inserting "be used"; and
5	(C) by adding at the end the following:
6	"(4) Administrative expenses.—Of the
7	funds made available to carry out this section for a
8	fiscal year, the Secretary shall use not more than 8
9	percent for administrative expenses.
10	"(5) Reservation of funds.—Of the funds
11	made available to carry out this section for a fiscal
12	year, the Secretary may reserve—
13	"(A) not more than 10 percent to provide
14	grants under subsection (c) to support the
15	adoption of underutilized but proven commer-
16	cial technologies; and
17	"(B) not more than 5 percent to carry out
18	subsection (e).".
19	SEC. 602. STUDY ON DUAL-USE RENEWABLE ENERGY SYS-
20	TEMS.
21	(a) Definition of Dual-Use Renewable Energy
22	System.—In this section, the term "dual-use renewable
23	energy system" means a system under which renewable
24	energy production and agricultural production, including

1	crop or animal production, occurs together on the same
2	piece of land.
3	(b) STUDY.—The Secretary shall conduct a study on
4	dual-use renewable energy systems that shall include—
5	(1) an assessment of the compatibility of dif-
6	ferent species of livestock with different dual-use re-
7	newable energy system designs, including—
8	(A) the optimal height of and distance be-
9	tween solar panels for—
10	(i) livestock grazing; and
11	(ii) shade for livestock;
12	(B) manure management considerations;
13	(C) fencing requirements; and
14	(D) other animal handling considerations;
15	(2) an assessment of the compatibility of dif-
16	ferent crop types with different dual-use renewable
17	energy system designs, including—
18	(A) the optimal height of and distance be-
19	tween solar panels for—
20	(i) plant shading; and
21	(ii) farm equipment use;
22	(B) the impact on crop yield; and
23	(C) market opportunities to sell crops at a
24	premium price: and

- 1 (3) a risk-benefit analysis of dual-use renewable
- 2 energy systems in different regions of the United
- 3 States, including a comparison between the total
- 4 greenhouse gas impact of dual-use renewable energy
- 5 systems and renewable energy systems that displace
- 6 agricultural production.
- 7 (c) 5-YEAR PLAN.—Based on the study under sub-
- 8 section (b), the Secretary shall develop a 5-year plan for
- 9 using the research and extension activities of the Depart-
- 10 ment of Agriculture to better support dual-use renewable
- 11 energy systems that do not displace agricultural produc-
- 12 tion.
- 13 (d) Report.—Not later than 1 year after the date
- 14 of enactment of this Act, the Secretary shall submit to
- 15 the Committee on Agriculture of the House of Representa-
- 16 tives and the Committee on Agriculture, Nutrition, and
- 17 Forestry of the Senate a report containing the results of
- 18 the study conducted under subsection (b).
- 19 SEC. 603. AGSTAR PROGRAM.
- 20 (a) IN GENERAL.—The Secretary shall maintain the
- 21 program known as the "AgSTAR program" within the
- 22 Department of Agriculture, under which the Secretary
- 23 shall—

1	(1) support the use of anaerobic digestion in
2	the agricultural sector to reduce methane emissions
3	from livestock waste;
4	(2) conduct outreach, education, and training
5	on anaerobic digestion of livestock waste;
6	(3) provide technical and regulatory assistance
7	on anaerobic digestion of livestock waste to stake-
8	holders, including farmers and ranchers, on issues
9	including—
10	(A) permitting;
11	(B) codigestion of multiple organic wastes
12	in one digester; and
13	(C) interconnection to physically link a di-
14	gester to the electrical power grid;
15	(4) promote centralized, multifarm digesters
16	that use livestock waste from more than 1 farm or
17	ranch;
18	(5) collect and report data on anaerobic diges-
19	tion of livestock waste; and
20	(6) maintain a database of on-farm anaerobic
21	digester projects in the United States.
22	(b) Transition From EPA.—
23	(1) In General.—The Administrator of the
24	Environmental Protection Agency shall take such
25	steps as are necessary to provide for an orderly tran-

1	sition	$\operatorname{for}$	the	activities	carried	out	under	the

- 2 AgSTAR program by the Environmental Protection
- 3 Agency to be carried out by the Secretary, in accord-
- 4 ance with subsection (c).
- 5 (2) DEADLINE.—The Administrator of the En-
- 6 vironmental Protection Agency shall finish carrying
- out paragraph (1) by not later than 1 year after the
- 8 date of enactment of this Act, such that the Sec-
- 9 retary has sole jurisdiction of the AgSTAR program
- by that date.
- 11 (c) Administration.—The Secretary shall carry out
- 12 the AgSTAR program through the Chief of the Natural
- 13 Resources Conservation Service—
- (1) in coordination with the Administrator of
- the Environmental Protection Agency and other
- 16 Federal agencies as necessary; and
- 17 (2) in partnership with the climate hubs, coop-
- erative extension services, and agencies of the De-
- 19 partment of Agriculture.
- 20 (d) Authorization of Appropriations.—There is
- 21 authorized to be appropriated to the Secretary to carry
- 22 out the AgSTAR program not more than \$5,000,000 for
- 23 each fiscal year.

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

1	(ii) a food (as defined in section 201
2	of the Federal Food, Drug, and Cosmetic
3	Act (21 U.S.C. 321)).
4	(2) DISCARD DATE.—The term "discard date"
5	means a date voluntarily printed on food packaging
6	that signifies the end of the estimated period of shelf
7	life under any stated storage conditions, after which
8	the food labeler advises the product not be con-
9	sumed.
10	(3) FOOD LABELER.—The term "food labeler"
11	means the producer, manufacturer, distributor, or
12	retailer that places a date label on food packaging
13	of a product.
14	(4) QUALITY DATE.—The term "quality date"
15	means a date voluntarily printed on food packaging
16	that is intended to communicate to consumers the
17	date after which—
18	(A) the quality of the product may begin
19	to deteriorate; but
20	(B) the product remains apparently whole-
21	some food (as defined in subsection (b) of the
22	Bill Emerson Good Samaritan Food Donation
23	Act (42 U.S.C. 1791(b))).
24	SEC. 702. QUALITY DATES AND DISCARD DATES.
25	(a) Quality Dates.—

- 1 (1) IN GENERAL.—If a food labeler includes a
  2 quality date on food packaging, the label shall use
  3 the uniform quality date label phrase under para4 graph (2).
  - (2) UNIFORM PHRASE.—The uniform quality date label phrase under this paragraph shall be "BEST If Used By" or, if permissible under subsection (c)(3), the standard abbreviation of "BB", unless and until the administering Secretaries, acting jointly, specify through rulemaking another uniform phrase to be used for purposes of complying with paragraph (1).
    - (3) OPTION OF THE LABELER.—The decisions on whether to include a quality date on food packaging and which foods should be so labeled shall be at the discretion of the food labeler.

## (b) DISCARD DATES.—

- (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).
- (2) UNIFORM PHRASE.—The uniform discard date label phrase under this paragraph shall be "USE By" or, if permissible under subsection (c)(3), the standard abbreviation of "UB", unless

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

1	(3) Abbreviations.—A food labeler may use a
2	standard abbreviation of "BB" and "UB" for the
3	quality date and discard date, respectively, only if
4	the food packaging is too small to include the uni-
5	form phrase described in subsection $(a)(2)$ or $(b)(2)$ ,
6	as applicable.
7	(4) Freeze by.—A food labeler may add "or
8	Freeze By" following a quality date or discard date
9	uniform phrase.
10	(d) Education.—Not later than 1 year after the
11	date of enactment of this Act, the administering Secre-
12	taries, acting jointly, shall provide consumer education
13	and outreach on the meaning of quality date and discard
14	date food labels.
15	(e) Rules of Construction; Preemption.—
16	(1) Infant formula.—This title and the
17	amendments made by this title shall not—
18	(A) apply to infant formula (as defined in
19	section 201 of the Federal Food, Drug, and
20	Cosmetic Act (21 U.S.C. 321)); and
21	(B) affect the requirements relating to in-
22	fant formula established under section 412 of
23	the Federal Food, Drug, and Cosmetic Act (21
24	U.S.C. 350a) or other applicable provisions of
25	law.

1	(2) Sale or donation of food based on
2	DISCARD DATE.—Nothing in this title or an amend-
3	ment made by this title prohibits any State or polit-
4	ical subdivision of a State from establishing or con-
5	tinuing in effect any requirement that prohibits the
6	sale or donation of foods based on passage of the
7	discard date.

- (3) TIME TEMPERATURE INDICATOR LABELS.—
  Nothing in this title or an amendment made by this
  title prohibits or restricts the use of time-temperature indicator labels or similar technology that is in
  addition to or in lieu of any uniform quality date
  label phrase under subsection (a)(2) or uniform discard date label phrase under subsection (b)(2).
- (4) Preemption.—No State or political subdivision of a State may establish or continue in effect any requirement that—
  - (A) relates to the inclusion in food labeling of a quality date or a discard date that is different from or in addition to, or that is otherwise not identical with, the requirements of this Act and the amendments made by this Act; or
  - (B) prohibits the sale or donation of foods based on passage of the quality date.

- 1 (5) Enforcement.—The administering Secre-2 taries, acting jointly and in coordination with the 3 Federal Trade Commission, shall ensure that the 4 uniform quality date label phrase and uniform dis-5 card date label phrase are standardized across all 6 food products. 7 (6) Savings.—Notwithstanding paragraph (4), nothing in this title, any amendment made by this 8
- nothing in this title, any amendment made by this
  title, or any standard or requirement imposed pursuant to this title preempts, displaces, or supplants
  any State or Federal common law rights or any
  State or Federal statute creating a remedy for civil
  relief, including a remedy for civil damage, or a pen-
- 15 SEC. 703. MISBRANDING.
- 16 (a) FDA VIOLATIONS.—Section 403 of the Federal
- 17 Food, Drug, and Cosmetic Act (21 U.S.C. 343) is amend-
- 18 ed by adding at the end the following:

alty for criminal conduct.

- 19 "(z) If it is food and its labeling is in violation of
- 20 section 702 of the Agriculture Resilience Act of 2021.".
- 21 (b) POULTRY PRODUCTS.—Section 4(h) of the Poul-
- 22 try Products Inspection Act (21 U.S.C. 453(h)) is amend-
- 23 ed—

- 24 (1) in paragraph (11), by striking "or" at the
- end;

1	(2) in paragraph (12), by striking the period at
2	the end and inserting "; or"; and
3	(3) by adding at the end the following:
4	"(13) if its labeling is in violation of section
5	702 of the Agriculture Resilience Act of 2021.".
6	(c) MEAT PRODUCTS.—Section 1(n) of the Federal
7	Meat Inspection Act (21 U.S.C. 601(n)) is amended—
8	(1) in paragraph (11), by striking "or" at the
9	end;
10	(2) in paragraph (12), by striking the period at
11	the end and inserting "; or"; and
12	(3) by adding at the end the following:
13	"(13) if its labeling is in violation of section
14	702 of the Agriculture Resilience Act of 2021.".
15	(d) Egg Products.—Section 7(b) of the Egg Prod-
16	ucts Inspection Act (21 U.S.C. 1036(b)) is amended in
17	the first sentence by inserting "or if its labeling is in viola-
18	tion of section 702 of the Agriculture Resilience Act of
19	2021" before the period at the end.
20	SEC. 704. REGULATIONS.
21	Not later than 2 years after the date of enactment
22	of this Act, the administering Secretaries, acting jointly,
23	shall promulgate final regulations for carrying out this
24	title and the amendments made by this title.

## 1 SEC. 705. DELAYED APPLICABILITY.

2	This title and the amendments made by this title
3	shall apply only with respect to food products that are la-
4	beled on or after the date that is 2 years after the date
5	of promulgation of final regulations under section 704.
6	Subtitle B—Other Provisions
7	SEC. 711. COMPOSTING AS CONSERVATION PRACTICE.
8	(a) Definitions.—Section 1201(a) of the Food Se-
9	curity Act of 1985 (16 U.S.C. 3801(a)) (as amended by
10	section 307(a)) is amended—
11	(1) by redesignating paragraphs (3) through
12	(27) as paragraphs (4) through (28), respectively;
13	and
14	(2) by inserting after paragraph (2) the fol-
15	lowing:
16	"(3) Compositing practice.—The term
17	'composting practice' means—
18	"(A) an activity (including an activity that
19	does not require the use of a composting facil-
20	ity) to produce compost from organic waste
21	that is—
22	"(i) generated on a farm; or
23	"(ii) brought to a farm from a nearby
24	community; and
25	"(B) the use of compost on a farm to im-
26	prove water retention and soil health, subject to

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

note) is amended by striking "encourage" and inserting 2 "require". 3 (b) Definitions.—Section 3 of the Federal Food Donation Act of 2008 (Public Law 110–247; 42 U.S.C. 1792 note) is amended— 6 (1) by redesignating paragraphs (3) and (4) as 7 paragraphs (4) and (5), respectively; and 8 (2) by inserting after paragraph (2) the fol-9 lowing: 10 "(3) Executive agency.—The term 'executive 11 agency' has the meaning given the term in section 12 133 of title 41, United States Code.". 13 (c) Report on Food Waste by Certain Federal 14 Contractors.—Section 4 of the Federal Food Donation 15 Act of 2008 (42 U.S.C. 1792) is amended— 16 (1) by striking subsection (a) and inserting the 17 following: 18 "(a) IN GENERAL.— 19 "(1) REQUIREMENT.—Not later than 180 days 20 after the date of enactment of the Agriculture Resil-21 ience Act of 2021, the Federal Acquisition Regula-22 tion issued in accordance with section 1121 of title 23 41, United States Code, shall be revised to provide 24 that, except as provided in paragraph (2), all con-

tracts greater than \$10,000 for the provision, serv-

1	ice, or sale of food in the United States, or for the
2	lease or rental of Federal property to a private enti-
3	ty for events at which food is provided in the United
4	States, shall include a clause that—
5	"(A) requires the donation of excess, ap-
6	parently wholesome food to nonprofit organiza-
7	tions that provide assistance to food-insecure
8	people in the United States;
9	"(B) states the terms and conditions de-
10	scribed in subsection (b); and
11	"(C) requires the submission of a report,
12	annually if applicable—
13	"(i) in a form and manner specified
14	by the executive agency awarding the con-
15	tract; and
16	"(ii) that describes, for each month of
17	performance of the contract during the pe-
18	riod covered by the report, the weight of
19	apparently wholesome food that was dis-
20	posed of pursuant to the contract by—
21	"(I) donation, organized by the
22	name of the organization receiving the
23	food;
24	"(II) composting or other recy-
25	cling; or

1	"(III) discarding, organized by
2	the reason that the food was dis-
3	carded.
4	"(2) Exception.—Paragraph (1) shall not
5	apply to a contract with an executive agency that
6	has issued a regulation in effect on the date of en-
7	actment of the Agriculture Resilience Act of 2021
8	that prohibits a donation described in paragraph
9	(1)(A)."; and
10	(2) by adding at the end the following:
11	"(c) Application to Congress.—
12	"(1) Contracts.—This Act shall apply to the
13	House of Representatives and the Senate, and to
14	contracts entered into by the House of Representa-
15	tives and the Senate, in the same manner and to the
16	same extent as this Act applies to an executive agen-
17	cy and to contracts entered into by an executive
18	agency pursuant to this Act.
19	"(2) Administration.—For purposes of car-
20	rying out paragraph (1)—
21	"(A) the Chief Administrative Officer of
22	the House of Representatives shall be consid-
23	ered to be the head of the House of Representa-
24	tives; and

1	"(B) the Secretary of the Senate shall be
2	considered to be the head of the Senate.
3	"(d) Reports.—
4	"(1) Report to omb.—Not later than 30 days
5	after the date on which an executive agency receives
6	a report described in subsection (a)(1)(C), the execu-
7	tive agency shall submit a copy of the report to the
8	Director of the Office of Management and Budget.
9	"(2) Report to congress.—The Director of
10	the Office of Management and Budget shall submit
11	to Congress an annual report aggregating the infor-
12	mation in the reports received under paragraph (1)
13	during the year covered by the report to Congress.".
14	(d) AUTHORIZATION OF APPROPRIATIONS.—The
15	Federal Food Donation Act of 2008 (Public Law 110–
16	247; 122 Stat. 2314) is amended by adding at the end
17	the following:
18	"SEC. 5. AUTHORIZATION OF APPROPRIATIONS.
19	"There is authorized to be appropriated to the Sec-
20	retary of Agriculture to carry out this Act \$10,000,000
21	for fiscal year 2022 and each fiscal year thereafter.".

1	SEC. 713. GRANTS FOR COMPOSTING AND ANAEROBIC DI-
2	GESTION FOOD WASTE-TO-ENERGY
3	PROJECTS.
4	(a) In General.—Subtitle G of the Solid Waste Dis-
5	posal Act (42 U.S.C. 6971 et seq.) is amended by adding
6	at the end the following:
7	"SEC. 7011. GRANTS FOR COMPOSTING AND ANAEROBIC DI-
8	GESTION FOOD WASTE-TO-ENERGY
9	PROJECTS.
10	"(a) Definition of State.—In this section, the
11	term 'State' means—
12	"(1) each of the several States;
13	"(2) the District of Columbia;
14	"(3) each territory or possession of the United
15	States; and
16	"(4) each federally recognized Indian Tribe.
17	"(b) Grants.—The Administrator shall establish a
18	grant program to award grants to States eligible to receive
19	the grants under subsection $(c)(1)$ to construct large-scale
20	composting or anaerobic digestion food waste-to-energy
21	projects.
22	"(c) Eligible States.—
23	"(1) Eligibility.—To be eligible to receive a
24	erant under this section a State shall—

1	"(A) have in effect a plan to limit the
2	quantity of food waste that may be disposed of
3	in landfills in the State; and
4	"(B) provide to the Administrator—
5	"(i) a written commitment that the
6	State has read and agrees to comply with
7	the Food Recovery Hierarchy of the Envi-
8	ronmental Protection Agency, particularly
9	as applied to apparently wholesome food
10	(as defined in section 22(b) of the Child
11	Nutrition Act of 1966 (42 U.S.C.
12	1791(b))) that may be provided to or re-
13	ceived by the State; and
14	"(ii) a written end-product recycling
15	plan that provides for the beneficial use of
16	the material resulting from any anaerobic
17	digestion food waste-to-energy operation
18	with respect to which the grant is made, in
19	a manner that meets all applicable Fed-
20	eral, State, and local laws that protect
21	human health and the environment.
22	"(2) Limitation.—A grant under subsection
23	(b) may not be used for an anaerobic digester that
24	uses solely manure as undigested biomass.

1	"(3) Preference.—The Administrator shall
2	give preference to grants under subsection (b) for
3	anaerobic digesters that use primarily nonedible
4	food, crop waste, or nonedible food and crop waste
5	as undigested biomass.
6	"(d) Authorization of Appropriations.—There
7	is authorized to be appropriated to carry out this section
8	\$100,000,000 for each fiscal year.".
9	(b) CLERICAL AMENDMENT.—The table of contents
10	for the Solid Waste Disposal Act (42 U.S.C. 6901 et seq.)
11	is amended by inserting after the item relating to section
12	7010 the following:
	"Sec. 7011. Grants for composting and anaerobic digestion food waste-to-en-
	ergy projects.".
13	
13 14	ergy projects.".
	ergy projects.".  SEC. 714. SCHOOL FOOD WASTE REDUCTION GRANT PRO-
14	ergy projects.".  SEC. 714. SCHOOL FOOD WASTE REDUCTION GRANT PROGRAM.
14 15	ergy projects.".  SEC. 714. SCHOOL FOOD WASTE REDUCTION GRANT PROGRAM.  (a) IN GENERAL.—Section 18 of the Richard B. Rus-
<ul><li>14</li><li>15</li><li>16</li></ul>	ergy projects.".  SEC. 714. SCHOOL FOOD WASTE REDUCTION GRANT PROGRAM.  (a) IN GENERAL.—Section 18 of the Richard B. Russell National School Lunch Act (42 U.S.C. 1769) is
<ul><li>14</li><li>15</li><li>16</li><li>17</li></ul>	ergy projects.".  SEC. 714. SCHOOL FOOD WASTE REDUCTION GRANT PROGRAM.  (a) IN GENERAL.—Section 18 of the Richard B. Russell National School Lunch Act (42 U.S.C. 1769) is amended by inserting before subsection (b) the following:
14 15 16 17 18	ergy projects.".  SEC. 714. SCHOOL FOOD WASTE REDUCTION GRANT PROGRAM.  (a) IN GENERAL.—Section 18 of the Richard B. Russell National School Lunch Act (42 U.S.C. 1769) is amended by inserting before subsection (b) the following:  "(a) SCHOOL FOOD WASTE REDUCTION GRANT Pro-
14 15 16 17 18 19	ergy projects.".  SEC. 714. SCHOOL FOOD WASTE REDUCTION GRANT PROGRAM.  (a) IN GENERAL.—Section 18 of the Richard B. Russell National School Lunch Act (42 U.S.C. 1769) is amended by inserting before subsection (b) the following:  "(a) SCHOOL FOOD WASTE REDUCTION GRANT PROGRAM.—
14 15 16 17 18 19 20	sec. 714. School food waste reduction grant program.  (a) In General.—Section 18 of the Richard B. Russell National School Lunch Act (42 U.S.C. 1769) is amended by inserting before subsection (b) the following:  "(a) School Food Waste Reduction Grant Program.—  "(1) Definition of eligible local edu-
14 15 16 17 18 19 20 21	ergy projects.".  SEC. 714. SCHOOL FOOD WASTE REDUCTION GRANT PROGRAM.  (a) IN GENERAL.—Section 18 of the Richard B. Russell National School Lunch Act (42 U.S.C. 1769) is amended by inserting before subsection (b) the following:  "(a) SCHOOL FOOD WASTE REDUCTION GRANT PROGRAM.—  "(1) DEFINITION OF ELIGIBLE LOCAL EDUCATIONAL AGENCY.—In this subsection, the term 'el-

1	gram established under section 4 of the Child Nutri-
2	tion Act of 1966 (42 U.S.C. 1773).
3	"(2) Establishment.—The Secretary shall
4	carry out a program to make grants, on a competi-
5	tive basis, to eligible local educational agencies to
6	carry out food waste measurement, prevention, and
7	reduction projects.
8	"(3) Regional Balance.—In awarding grants
9	under this subsection, the Secretary shall, to the
10	maximum extent practicable, ensure—
11	"(A) that a grant is awarded to an eligible
12	local educational agency in each region served
13	by the Administrator of the Food and Nutrition
14	Service; and
15	"(B) equitable treatment of rural, urban
16	and tribal communities.
17	"(4) Grants.—
18	"(A) Application.—To be eligible to re-
19	ceive a grant under this subsection, an eligible
20	local educational agency shall submit an appli-
21	cation to the Secretary at such time, in such
22	manner, and containing such information as the
23	Secretary may require.
24	"(B) Priority.—In making grants under
25	this subsection, the Secretary shall give priority

1	to an eligible local educational agency that dem-
2	onstrates in the application submitted under
3	subparagraph (A) that the grant will be used—
4	"(i) to carry out experiential edu-
5	cation activities that encourage children
6	enrolled in the eligible local educational
7	agency to participate in food waste meas-
8	urement and education;
9	"(ii) to prioritize the best use of food
10	in accordance with the Food Recovery Hi-
11	erarchy published by the Administrator of
12	the Environmental Protection Agency;
13	"(iii) with respect to food waste pre-
14	vention and reduction, to collaborate with
15	other eligible local educational agencies,
16	Indian Tribes, nongovernmental and com-
17	munity-based organizations, and other
18	community partners;
19	"(iv) to establish a food waste meas-
20	urement, prevention, and reduction project
21	with long-term sustainability; and
22	"(v) to evaluate the activities de-
23	scribed in clauses (i) through (iv) and
24	make evaluation plans.

1	"(C) USE OF FUNDS.—An eligible local
2	educational agency that receives a grant under
3	this subsection shall use the grant to carry out
4	1 or more of the following activities:
5	"(i) Planning a food waste measure-
6	ment, prevention, and reduction project.
7	"(ii) Implementing a food waste meas-
8	urement, prevention, and reduction project.
9	"(iii) Providing training to support a
10	food waste measurement, prevention, and
11	reduction project.
12	"(iv) Purchasing equipment to sup-
13	port a food waste measurement, preven-
14	tion, and reduction project.
15	"(v) Offering food waste education to
16	students enrolled in the eligible local edu-
17	cational agency.
18	"(D) Cost-sharing.—
19	"(i) In general.—The amount of a
20	grant provided under this subsection shall
21	not exceed 75 percent of the total cost of
22	the project for which the grant is provided.
23	"(ii) Non-federal share.—An eligi-
24	ble local educational agency that receives a
25	grant under this subsection shall use non-

1	Federal funds in the form of cash or in-
2	kind contributions, including facilities,
3	equipment, or services provided by State
4	and local governments, nonprofit organiza-
5	tions, and private sources, to pay for the
6	remaining cost of the project for which the
7	grant is provided.
8	"(5) Evaluation.—
9	"(A) COOPERATION.—As a condition of re-
10	ceiving a grant under this subsection, each eli-
11	gible local educational agency shall agree to co-
12	operate in an evaluation by the Secretary of the
13	project carried out by the eligible local edu-
14	cational agency as part of the evaluation con-
15	ducted by the Secretary under subparagraph
16	(B).
17	"(B) Periodic evaluation.—Not later
18	than 2 years after the date of enactment of the
19	Agriculture Resilience Act of 2021, and every 2
20	years thereafter, the Secretary shall evaluate
21	the grants made under this subsection, includ-
22	ing—
23	"(i) the amount of Federal funds used
24	to award those grants; and

1	"(ii) an evaluation of the outcomes of
2	the projects carried out using those grants.
3	"(C) Report.—The Secretary shall sub-
4	mit to Congress as a report each evaluation car-
5	ried out under subparagraph (B).".
6	(b) Technical Assistance.—Section 21(b) of the
7	Richard B. Russell National School Lunch Act (42 U.S.C.
8	1769b-1(b)) is amended—
9	(1) in paragraph (2), by striking "and" at the
10	end;
11	(2) in paragraph (3), by striking the period at
12	the end and inserting "; and; and
13	(3) by adding at the end the following:
14	"(4) food waste measurement, prevention, and
15	reduction "

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