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(Original Signature of Member)

117TH CONGRESS
1ST SESSION

H. R.

To establish forest conservation practices through management, reforestation, and utilization which lead to the sequestration of greenhouse gases, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

Mr. WESTERMAN introduced the following bill; which was referred to the Committee on _____

A BILL

To establish forest conservation practices through management, reforestation, and utilization which lead to the sequestration of greenhouse gases, 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 “Trillion Trees Act”.

6 (b) TABLE OF CONTENTS.—The table of contents for
7 this Act are as follows:

Sec. 1. Short title; table of contents.

Sec. 2. Definitions.

TITLE I—CARBON SEQUESTRATION THROUGH REFORESTATION ACTIVITIES

Subtitle A — Reforestation Goals

Sec. 101. National forest carbon stock targets.

Sec. 102. Trillion Trees Task Force.

Sec. 103. Philanthropic Reforestation Advisory Council.

Sec. 104. Trillion Trees Challenge Fund.

Sec. 105. Renewable resource assessment update and lifecycle analysis.

Sec. 106. Forest inventory and analysis.

Sec. 107. National Forest Foundation activities.

Subtitle B—Regeneration

Sec. 111. Reforestation programs.

Sec. 112. Reforestation trust fund.

Sec. 113. Solving shortages for seedlings.

Sec. 114. Healthy forest reserve program.

Sec. 115. Forestry education and workforce development grant program.

Sec. 116. Civilian Conservation Centers reforestation activities.

Sec. 117. Forest technology enhancements for conservation and habitat improvement.

Subtitle C—Urban Forests

Sec. 121. Urban and community forestry assistance.

Sec. 122. Civilian Conservation Center urban forestry demonstration program.

Sec. 123. Memorandum of understanding to coordinate urban forestry programs.

Subtitle D—International Forests

Sec. 131. Sense of Congress.

Sec. 132. International Forest Foundation.

Sec. 133. International engagement.

Sec. 134. Global climate change program.

Sec. 135. International forestry cooperation.

Sec. 136. Modifications to authorities relating to tropical forests.

TITLE II—CARBON SEQUESTRATION THROUGH IMPROVED FOREST MANAGEMENT ACTIVITIES

Sec. 201. Land use planning; supplements to programmatic environmental impact statements.

Sec. 202. Forest carbon stock on State and private forests.

Sec. 203. Good neighbor authority.

Sec. 204. Research and development programs.

TITLE III—MARKET INCENTIVES FOR CARBON SEQUESTRATION

Sec. 301. Biochar demonstration project and grant program.

Sec. 302. Sustainable building and residence credit.

See. 303. Clarification of research and development program for cellulosic biochemical and bioplastics.

See. 304. Tribal and Alaska Native biomass demonstration project extension.

1 SEC. 2. DEFINITIONS.

2 In this Act:

3 (1) **AFFORESTATION.**—The term
4 “afforestation” means a project or activity con-
5 sistent with the best available science to establish a
6 forest or stand of native trees in an ecosystem where
7 there is not a forest or tree cover.

8 (2) **FOREST CARBON FLUX.**—The term “forest
9 carbon flux” means the net annual change in carbon
10 residing within forest carbon pools and in forest car-
11 bon stock.

12 (3) **FOREST CARBON POOLS.**—The term “forest
13 carbon pools” means the individual, nonoverlapping
14 categories where forest carbon resides and in-
15 cludes—

16 (A) aboveground biomass, belowground
17 biomass, dead wood, litter, and mineral and or-
18 ganic soils in forest ecosystems, woodlands, and
19 trees outside forests including urban trees; and
20 (B) harvested wood products (in use or in
21 solid waste disposal sites).

22 (4) **FOREST CARBON STOCK.**—The term “forest
23 carbon stock” means the absolute quantity of carbon
24 stored within all forest carbon pools.

8 (B) a land and resource management plan
9 prepared by the Forest Service for a unit of the
10 National Forest System pursuant to section 6
11 of the Forest and Rangeland Renewable Re-
12 sources Planning Act of 1974 (16 U.S.C.
13 1604).

24 (8) PUBLIC LANDS.—The term “public lands”
25 has the meaning given that term in section 103 of

1 the Federal Land Policy and Management Act of
2 1976 (43 U.S.C. 1702).

3 (9) REFORESTATION.—The term “reforestation”
4 means the act of renewing tree cover by es-
5 tablishing young trees through natural regeneration,
6 natural regeneration with site preparation, or plant-
7 ing.

8 (10) SECRETARY.—The term “Secretary”
9 means the Secretary of Agriculture.

10 (11) SECRETARY CONCERNED.—The term
11 “Secretary concerned” means—

12 (A) the Secretary of Agriculture, with re-
13 spect to National Forest System lands; and

14 (B) the Secretary of the Interior, with re-
15 spect to public lands.

16 (12) SECRETARIES.—The term “Secretaries”
17 means the Secretary of Agriculture and the Sec-
18 retary of Interior.

19 **TITLE I—CARBON SEQUESTRA- 20 TION THROUGH REFOREST- 21 ATION ACTIVITIES**

22 **Subtitle A — Reforestation Goals**

23 **SEC. 101. NATIONAL FOREST CARBON STOCK TARGETS.**

24 (a) IN GENERAL.—Not later than 2 years after the
25 date of the enactment of this Act, the Secretary shall set

1 targets for increased forest carbon stock for the purposes
2 of sequestering and storing carbon while meeting other re-
3 source management objectives. Such targets shall—

4 (1) be based on the best available scientific in-
5 formation;

6 (2) consider both natural and artificial regen-
7 eration, with an emphasis on the regeneration of na-
8 tive species;

9 (3) be established at levels, consistent with
10 other statutory management purposes on Federal
11 lands, which represent the optimal feasible and sus-
12 tainable increase in the forest carbon stock private,
13 State, Tribal, and Federal landowners can achieve
14 by January 1, 2030, and every 10 years thereafter
15 through January 1, 2100;

16 (4) be informed by the report provided by the
17 Trillion Trees Task Force established in section 102;

18 (5) incorporate data from the forest inventory
19 and analysis program under section 3(e) of the For-
20 est and Rangeland Renewable Resources Research
21 Act of 1978 (16 U.S.C. 1642(e)) and other applica-
22 ble Federal agency data;

23 (6) be consistent with multiple use and sus-
24 tained yield requirements, policies, and objectives on

1 National Forest, State, Tribal, and other public or
2 private land;

3 (7) be consistent with other benefits related to
4 forest function and health including soil health and
5 productivity, wildlife habitat and biodiversity, im-
6 proved air and water quality, job creation, outdoor
7 recreation, and forest products and byproducts;

8 (8) be established at levels that account for—
9 (A) long-term and short-term carbon se-
10 questration and storage;

11 (B) forest carbon flux; and
12 (C) assessments of existing forested acres,
13 considering variations in landscape;

14 (9) incorporate input from State, Tribal, and
15 local stakeholders and members of the public; and

16 (10) be published in the Federal Register, to-
17 gether with a statement of the basis and justification
18 for such targets.

19 (b) NATURAL REGENERATION.—In this subsection,
20 the term “natural regeneration” means the establishment
21 of a tree or tree age class from natural seedling, sprouting,
22 or suckering, in accordance with the management objec-
23 tives of an applicable forest plan.

1 (c) CLARIFICATION.—Nothing in this section shall be
2 construed to establish any requirements with respect to
3 private landowners.

4 SEC. 102. TRILLION TREES TASK FORCE.

5 (a) ESTABLISHMENT.—Not later than 6 months after
6 the date of the enactment of this section, the Secretary
7 shall establish the Trillion Trees Task Force (in this sec-
8 tion referred to as the “task force”) to assist the Secretary
9 with meeting the targets and purposes established under
10 section 101(a).

11 (b) DUTIES OF THE TASK FORCE.—

12 (1) REPORT.—Not later than 1 year after the
13 date the task force is established under subsection
14 (a), the task force shall submit to the Secretary a
15 report that includes—

16 (A) recommendations for the national for-
17 est carbon stock targets established under sec-
18 tion 101;

19 (B) plant growth targets, including long-
20 term growth targets, required to achieve the na-
21 tional forest carbon stock targets established
22 under section 101, taking into account—

23 (i) forest carbon flux;

24 (ii) multiple use and sustained yield
25 requirements, policies, and objectives;

6 (C) program and policy recommendations
7 designed to achieve the national forest carbon
8 stock targets established under section 101,
9 while—

10 (i) still maintaining sustainable levels
11 of board feet harvested from public lands;

12 (ii) promoting forest products mar-
13 kets, including for new and innovative for-
14 est products and byproducts; and

15 (iii) improving the natural regeneration
16 of public and private forests (with an
17 emphasis on the regeneration of native spe-
18 cies) through active forest management.

1 (A) yearly reports on the progress made
2 towards achieving the national forest carbon
3 stock targets established under section 101; and

4 (B) ongoing program and policy rec-
5 ommendations designed to achieve the national
6 forest carbon stock targets established under
7 section 101.

10 (A) submit to Congress a copy of the re-
11 port under paragraph (1); and

12 (B) not later than 2 years after the report
13 under paragraph (1) is submitted to the Sec-
14 retary and Congress, and every 5 years there-
15 after, submit a report to Congress on the imple-
16 mentation of, and progress towards meeting,
17 the targets set under section 101.

18 (c) MEMBERSHIP.—

22 (A) EX OFFICIO MEMBERS.—The Presi-
23 dent shall appoint 15 representatives from the
24 executive branch.

1 (B) DISCRETIONARY MEMBERS.—The Sec-
2 retary shall appoint 1 discretionary member
3 from each of the following:

4 (i) A State land management agency.

5 (ii) A private forest landowner with
6 total land holdings of greater than
7 1,000,000 acres.

11 (iv) A family forest landowner.

12 (v) A pulp or paper manufacturer
13 which receives wood fiber directly or indi-
14 rectly from Federal timber for a portion of
15 their fiber supply.

16 (vi) A sawmill or engineered wood
17 producer which relies on the sale of Fed-
18 eral timber for at least 25 percent of their
19 fiber supply.

20 (vii) An energy company, cooperative,
21 pellet fuel producer, or utility which pro-
22 vides customers with energy at least par-
23 tially derived from the combustion of wood
24 biomass.

1 (viii) A land conservation nonprofit
2 with previous experience in collaborative
3 forestland restoration projects greater than
4 100,000 acres.

5 (ix) A Tribal land management agen-
6 cy or resource management organization
7 with previous experience managing Tribal
8 timberland.

9 (x) A wildlife conservation nonprofit
10 with previous experience in collaborative
11 forestland restoration projects greater than
12 100,000 acres.

13 (xi) An entity with experience in wild-
14 life habitat restoration projects less than
15 100,000 acres.

16 (xii) An urban or community resource
17 conservation organization, with previous
18 experience in urban and community refor-
19 estation projects.

20 (xiii) An organization with previous
21 experience in projects of any size that in-
22 crease public access or outdoor recreation
23 opportunities on National Forest System
24 lands.

1 (xiv) A company or organization with
2 experience in sustainable buildings or mass
3 timber construction.

4 (xv) An academic or scientific institu-
5 tion with experience researching forest car-
6 bon stock in domestic forests.

7 (2) DISCRETIONARY MEMBER TERMS.—

12 (B) VACANCY.—A discretionary member
13 that is removed under subparagraph (A) shall
14 be replaced not later than 6 months after such
15 removal.

16 (3) QUORUM.—

17 (A) IN GENERAL.—A quorum shall consist
18 of 10 ex officio members and 10 discretionary
19 members of the task force

20 (B) DECISIONS.—Decisions of the task
21 force shall be made by majority vote, a quorum
22 being present.

23 (4) PRESERVATION OF PUBLIC ADVISORY STA-
24 TUS.—No individual may be appointed to the task
25 force as a discretionary member under paragraph

1 (1)(B) while serving as an officer or employee of the
2 Federal Government.

3 (5) PAY AND EXPENSES.—

4 (A) COMPENSATION.—

5 (i) FEDERAL EMPLOYEE MEMBERS.—

6 All members of the task force who are officers
7 or employees of the United States shall serve without compensation in addition
8 to that received for their services as
9 officers or employees of the United States.

10 (ii) NON-FEDERAL EMPLOYEE MEMBERS.—All members of the task force not
11 described in clause (i) shall serve without
12 compensation.

13 (B) REIMBURSEMENT.—A member of the
14 task force may be reimbursed for travel and
15 lodging incurred while attending a meeting of
16 the task force or any other meeting of members
17 approved for reimbursement by the task force
18 in the same amounts and under the same conditions
19 as Federal employees under section 5703
20 of title 5, United States Code.

21 (C) EXPENSES.—The expenses of the task
22 force that the Secretary determines to be rea-

1 sonable and appropriate shall be paid by the
2 Secretary.

10 (d) FEDERAL ADVISORY COMMITTEE ACT.—The
11 Federal Advisory Committee Act (5 U.S.C. App.) shall not
12 apply to the task force.

13 SEC. 103. PHILANTHROPIC REFORESTATION ADVISORY
14 COUNCIL.

15 (a) ESTABLISHMENT.—There is hereby established
16 the Philanthropic Reforestation Advisory Council (in this
17 section referred to as the “Advisory Council”) to advise
18 the Secretary on—

19 (1) increasing private charitable investment in
20 reforestation and afforestation activities; and

21 (2) tracking private charitable reforestation and
22 afforestation pledges and metrics.

23 (b) DUTIES OF THE ADVISORY COUNCIL.—

24 (1) REPORT.—Not later than 1 year after the
25 date of the enactment of this section, the Advisory

1 Council shall submit to the Secretary a report that
2 includes recommendations for—

3 (A) increasing and encouraging private
4 charitable investments in reforestation and
5 afforestation activities; and

6 (B) developing a platform to track private
7 charitable tree planting pledges and metrics.

8 (2) CONSULTATION.—The Secretary shall con-
9 sult with the Advisory Council when developing the
10 list of projects to be funded from the Trillion Trees
11 Challenge Fund established under section 104.

12 (3) REPORTS TO CONGRESS.—The Advisory
13 Council shall annually submit to Congress—

14 (A) a copy of the report under paragraph
15 (1); and

16 (B) a list of projects the Advisory Council
17 recommended be funded under paragraph (2)
18 and whether or not those projects were funded.

19 (c) MEMBERSHIP.—

20 (1) APPOINTMENT.—The Advisory Council shall
21 consist of 2 ex officio members and 15 discretionary
22 members.

23 (A) EX OFFICIO MEMBERS.—The ex officio
24 members of the Advisory Council, or their des-
25 ignees, are—

- 1 (i) the Secretary of Agriculture; and
- 2 (ii) the Secretary of the Interior.

3 (B) DISCRETIONARY MEMBERS.—The Sec-
4 retary shall appoint discretionary members
5 from each of the following:

(i) One from each of not more than 5 companies or corporations that have made public charitable tree planting pledges.

9 (ii) One from each of not more than
10 5 philanthropic organizations with experi-
11 ence in financing reforestation and
12 afforestation activities.

13 (iii) One from each of not more than
14 5 non-profit organizations with experience
15 in reforestation and afforestation activities.

20 (3) QUORUM.—

21 (A) IN GENERAL.—A quorum shall consist
22 of 12 members of the Advisory Council.

23 (B) DECISIONS.—Decisions of the Advi-
24 sory Council shall be made by majority vote, a
25 quorum being present.

6 (5) PAY AND EXPENSES.—

7 (A) COMPENSATION.—

15 (ii) NON-FEDERAL EMPLOYEE MEM-
16 BERS.—All members of the Advisory Coun-
17 cil not described in clause (i) shall serve
18 without compensation.

19 (B) REIMBURSEMENT.—A member of the
20 Advisory Council may be reimbursed for travel
21 and lodging incurred while attending a meeting
22 of the Advisory Council or any other meeting of
23 members approved for reimbursement by the
24 Advisory Council in the same amounts and
25 under the same conditions as Federal employees

1 under section 5703 of title 5, United States
2 Code.

3 (C) EXPENSES.—The expenses of the Ad-
4 visory Council that the Secretary determines to
5 be reasonable and appropriate shall be paid by
6 the Secretary.

7 (6) ADMINISTRATIVE SUPPORT, TECHNICAL
8 SERVICES, AND STAFF SUPPORT.—The Secretary
9 shall make personnel of the Department of Agri-
10 culture available to the Advisory Council for admin-
11 istrative support, technical services, and staff sup-
12 port that the Secretary determines necessary to
13 carry out this section.

14 (7) FEDERAL ADVISORY COMMITTEE ACT.—The
15 Federal Advisory Committee Act (5 U.S.C. App.)
16 shall not apply to Advisory Council.

17 **SEC. 104. TRILLION TREES CHALLENGE FUND.**

18 (a) ESTABLISHMENT.—

19 (1) IN GENERAL.—There is established in the
20 Treasury a fund to be known as the “Trillion Trees
21 Challenge Fund”.

22 (2) DEPOSITS.—For each of fiscal years 2021
23 through 2030, there is appropriated, out of any
24 money in the Treasury not otherwise appropriated,
25 \$10,000,000, which shall be deposited into the Tril-

1 lion Trees Challenge Fund and remain available
2 until expended.

3 (3) USE OF FUNDS.—Amounts deposited into
4 the Trillion Trees Challenge Fund—

5 (A) shall be used by the Secretary to make
6 grants, in consultation with the Philanthropic
7 Reforestation Advisory Council, to eligible enti-
8 ties to carry out eligible projects described in
9 subsection (b)(1); and

10 (B) may only be used if matched by the el-
11 igible entity carrying out the eligible project, on
12 at least a 1-to-1 basis, by non-Federal funds.

13 (4) PUBLIC DONATIONS.—

14 (A) IN GENERAL.—For purposes of mak-
15 ing grants under this section, the Secretary
16 may accept cash or in-kind donations.

17 (B) CREDITS TO FUND.—Any cash dona-
18 tion accepted pursuant to subparagraph (A)
19 shall be credited to, and form a part of, the
20 Fund.

21 (b) ELIGIBLE PROJECTS.—

22 (1) IN GENERAL.—An eligible project described
23 in this paragraph is an activity carried out by an eli-
24 gible entity related to reforestation or conserving,
25 managing, maintaining, and monitoring trees on

1 State, Tribal, municipal, or private lands for the
2 purpose of increasing forest carbon stock.

3 (2) LIST.—The Secretary shall—

4 (A) annually develop a list of eligible
5 projects to be funded from the Trillion Trees
6 Challenge Fund, in consultation with the Phil-
7 anthropic Reforestation Advisory Council; and

8 (B) submit the list developed pursuant to
9 subparagraph (A) to—

10 (i) the Committees on Agriculture,
11 Nutrition, and Forestry and Energy and
12 Natural Resources of the Senate; and

13 (ii) the Committees on Agriculture
14 and Natural Resources of the House of
15 Representatives; and

16 (C) publish such list annually in the Fed-
17 eral Register.

18 (3) UPDATES.—The Secretary may add an eli-
19 gible project to the list described in subparagraph
20 (A) of paragraph (2) and submit such addition in
21 accordance with subparagraph (B) of such para-
22 graph.

23 (4) PROPOSALS.—To be eligible to receive fund-
24 ing under this section, an eligible entity shall submit
25 to the Secretary a proposal at such time, in such

1 manner, and containing such information as the Sec-
2 retary may require.

3 (c) SUMMARY TO CONGRESS.—The Secretary shall
4 include in the budget materials submitted to Congress in
5 support of the President’s annual budget request (sub-
6 mitted to Congress pursuant to section 1105 of title 31,
7 United States Code) for each fiscal year a summary of
8 the status and funding of eligible projects under this sec-
9 tion.

10 (d) DEFINITIONS.—In this section

11 (1) ELIGIBLE ENTITY.—The term “eligible enti-
12 ty” means—

13 (A) a State, local, or Tribal government;
14 (B) a non-profit organization or edu-
15 cational institution;
16 (C) an individual; or
17 (D) other non-Federal entities, as deter-
18 mined by the Secretary.

19 (2) PHILANTHROPIC REFORESTATION ADVISORY
20 COUNCIL.—The term “Philanthropic Reforestation
21 Advisory Council” means to the Advisory Council es-
22 tablished under section 103 of the Trillion Trees
23 Act.

1 **SEC. 105. RENEWABLE RESOURCE ASSESSMENT UPDATE**2 **AND LIFECYCLE ANALYSIS.**

3 (a) RENEWABLE RESOURCE ASSESSMENT.—Section
4 3 of the Forest and Rangeland Renewable Resources Plan-
5 ning Act of 1974 (16 U.S.C. 1601) is amended—

6 (1) in subsection (a)—

7 (A) in paragraph (5), by striking “and” at
8 the end;

9 (B) by striking paragraph (6) and insert-
10 ing the following:

11 “(6) an analysis of the rural and urban forestry
12 opportunities to mitigate the buildup of atmospheric
13 carbon, reduce the risk of global climate change,
14 capture and store atmospheric carbon, and optimize
15 forest carbon stock (as defined in section 2 of the
16 Trillion Trees Act) in domestic forests; and”;

17 (C) by adding at the end the following:

18 “(7) an analysis of the forest carbon stock (as
19 defined in section 2 of the Trillion Trees Act) poten-
20 tial of domestic forests based upon the lifecycle anal-
21 ysis established under section 105(c) of the Trillion
22 Trees Act.”;

23 (2) in subsection (c)—

24 (A) in paragraph (2), by striking “and” at
25 the end;

1 (B) in paragraph (3), by striking the pe-
2 riod at the end and inserting “; and”; and

3 (C) by adding at the end the following

4 “(4) the potential to increase forest carbon
5 stock (as defined in section 2 of the Trillion Trees
6 Act) through the utilization of harvested wood prod-
7 ucts, including recommendations to Congress for ac-
8 tions which would lead to increased forest carbon
9 stock through the utilization of such materials.”;

10 and

11 (3) in the first subsection (d), by inserting “and
12 other stakeholders” after “agencies”.

13 (b) RENEWABLE RESOURCE PROGRAM.—Section 4 of
14 the Forest and Rangeland Renewable Resources Planning
15 Act of 1974 (16 U.S.C. 1602) is amended—

16 (1) in the first sentence—

17 (A) by inserting “Nation’s forests, includ-
18 ing the” before “National Forest System”;

19 (B) by inserting “and Congress” after
20 “transmitted to the President”; and

21 (C) by inserting “and development pro-
22 grams” after “for research”;

23 (2) by striking the “The Program shall include,
24 but not be limited to” and inserting “The Program
25 shall be prepared and transmitted to the President

1 and Congress not later than 2 years after the date
2 of the enactment of the Trillion Trees Act and every
3 2 years thereafter, and shall include, but not be lim-
4 ited to”;

5 (3) by amending paragraph (1) to read as fol-
6 lows:

7 “(1) an inventory of specific investment needs
8 and opportunities for both public and private pro-
9 gram investments that—

10 “(A) differentiates between—

11 “(i) activities which are of a capital
12 nature and those which are of an oper-
13 ational nature; and

14 “(ii) investments required to support
15 existing policies and programs and those
16 required to create and implement new poli-
17 cies and programs; and

18 “(B) identifies—

19 “(i) Federal and State policies that, if
20 left unchanged in the succeeding 50 years,
21 would create undesirable impacts on for-
22 ests and communities; and

23 “(ii) alternatives to the policies de-
24 scribed in clause (i) that if implemented in

the 10 succeeding years would mitigate such undesirable impacts.”;

3 (4) in paragraph (2)—

4 (A) by inserting “and policy options” after
5 “Program outputs”;

6 (B) by inserting “or State governments”
7 after “Federal Government”;

8 (5) in paragraph (3), by inserting “and imple-
9 mentation of identified policy options” after “Pro-
10 gram opportunities”;

11 (6) in paragraph (5)—

12 (A) in the matter preceding subparagraph
13 (A), by inserting “and policy options” before
14 “which”;

15 (B) in subparagraph (B), by inserting
16 “and services” after “products”;

17 (C) in subparagraph (D), by striking
18 “state national goals” and inserting “State na-
19 tional goals that the policy options are intended
20 to achieve and”;

21 (D) in subparagraph (E), by striking
22 “and” at the end;

23 (E) in subparagraph (F)—

24 (i) by inserting “the health and resil-
25 iency of forests, forest carbon stock (as de-

4 (ii) by striking the period and insert-
5 ing “; and”; and

6 (F) by adding at the end the following:

7 “(G) account for the effects of trees in
8 urban and community areas in addition to for-
9 ests in rural areas.”.

10 (c) LIFECYCLE ANALYSIS.—

17 (A) evaluate the lifecycle forest carbon
18 stock potential associated with domestic
19 forestland; and

(B) provide projections, scenario planning, and policy options associated with such models.

22 (2) CONSIDERATIONS.—In developing the model
23 under paragraph (1), the Secretary shall consider—

24 (A) the best available science;

1 (B) data collected through the forest in-
2 ventory and analysis program under section
3 3(e) of the Forest and Rangeland Renewable
4 Resources Research Act of 1978 (16 U.S.C.
5 1642(e));

6 (C) forest carbon stock and the rate of car-
7 bon storage and sequestration in forest carbon
8 pools;

9 (D) the net carbon storage and sequestra-
10 tion of active forest management;

11 (E) the rate of carbon storage and seque-
12 stration in varying forests based on the climate
13 the forest is located in, the average age of
14 stands, and rate of tree mortality;

15 (F) the net amount of carbon released
16 through catastrophic wildfire, disease and insect
17 infestations, and other disturbances that result
18 in tree mortality;

19 (G) the net carbon stored and sequestered
20 through the manufacture of harvested wood
21 products;

(H) the net carbon stored and sequestered through a sustainable cycle of harvest and regeneration;

25 (I) forest carbon flux; and

(J) other factors as determined by the Secretary.

3 (3) VALIDATION PROGRAM.—

8 (B) REQUIREMENTS.—In carrying out the
9 validation program under subparagraph (A),
10 the Secretary shall—

11 (i) regularly perform retrospective as-
12 sessments comparing model predictions to
13 field data on the carbon stored in forests;
14 and

15 (ii) require independent evaluation
16 and comparison of lifecycle models devel-
17 oped under paragraph (1) against existing
18 models, and enable empirical testing of
19 hypotheses regarding the net effects on
20 land and atmospheric carbon stocks and
21 other greenhouse gas impacts.

22 (4) REPORT.—Not later than 2 years after the
23 date of enactment of this Act, and every 2 years
24 thereafter, the Secretary shall submit to Congress a
25 report that includes—

12 SEC. 106. FOREST INVENTORY AND ANALYSIS.

13 (a) 5-YEAR REPORTS.—Section 3(e)(3) of the Forest
14 and Rangeland Renewable Resources Research Act of
15 1978 (16 U.S.C. 1642(e)(3)) is amended—
16 (1) in subparagraph (B), by striking “and” at
17 the end;
18 (2) in subparagraph (C), by inserting “, forest
19 carbon,” after “forest health conditions and trends”;
20 (3) in subparagraph (C), by striking the period
21 and inserting “paragraph; and”; and
22 (4) by adding at the end the following:
23 “(D) demonstrates the Agency’s efforts
24 to—

1 “(i) conduct a strategic national forest
2 inventory by measuring a statistically de-
3 signed consistent historical series of field
4 plots in combination with advanced tech-
5 nology to improve data, information, and
6 estimates of precision; and

7 “(ii) use advanced geospatial tech-
8 nologies to improve such area and volume
9 estimates, especially for sub-State regions
10 and smaller areas.”.

11 (b) MEMORANDA OF UNDERSTANDING.—In pre-
12 paring, publishing, and making available reports under
13 section 3(e)(3) of the Forest and Rangeland Renewable
14 Resources Research Act of 1978 (16 U.S.C. 1642(e)(3)),
15 as amended by subsection (a), the Secretary may enter
16 into memorandums of understanding with other Federal
17 agencies or departments to improve the use and integra-
18 tion of advanced remote sensing and geospatial tech-
19 nologies in the forest inventory and analysis program
20 under such section.

21 **SEC. 107. NATIONAL FOREST FOUNDATION ACTIVITIES.**

22 (a) ADDING FOREST CARBON STOCK TO THE PUR-
23 POSES OF THE NATIONAL FOREST FOUNDATION.—The
24 National Forest Foundation Act (16 U.S.C. 583j et seq.)
25 is amended—

1 (1) in section 402(b)—

2 (A) in paragraph (2), by striking “and” at
3 the end;

4 (B) in paragraph (3), by striking the pe-
5 riod at the end and inserting a semicolon; and

6 (C) by adding at the end the following:

7 “(4) encourage, accept, and administer private
8 gifts of money and of real and personal property for
9 the benefit of, or in connection with, the targets for
10 optimizing forest carbon stock established under sec-
11 tion 101 of the ‘Trillion Trees Act’; and

12 “(5) carry out the National Medal for Forest
13 Restoration under section 410.”;

14 (2) in section 405—

15 (A) in subsection (a), by striking “410”
16 and inserting “412”; and

17 (B) in subsection (b), by striking “410”
18 and inserting “412”;

21 (4) by inserting after section 409 the following:

22 "SEC. 410. NATIONAL MEDAL FOR FOREST RESTORATION.

23 "(a) ESTABLISHMENT.—The Foundation shall, in
24 consultation with the Secretary of Agriculture, establish
25 an award to be known as the 'National Medal for Forest

1 Restoration' to recognize outstanding contributions in do-
2 mestic reforestation (as defined in section 2 of the Trillion
3 Trees Act) activities carried out by individuals, commu-
4 nities, nonprofit organizations, and corporations.

5 “(b) NUMBER OF AWARDS.—The Foundation shall
6 award the National Medal for Forest Restoration at least
7 once a year.

8 “(c) LEVELS OF AWARDS.—The Foundation shall, in
9 consultation with Secretary of Agriculture, establish mul-
10 tiple levels of awards reflecting the considerations speci-
11 fied in subsection (e).

12 “(d) ADMINISTRATION OF AWARD.—The Foundation
13 shall administer the awards under this section, including
14 by—

15 “(1) developing a website and media presence
16 to highlight recipients of such awards; and

17 “(2) tracking the contribution of such recipients
18 towards the targets for increased forest carbon stock
19 established under section 101 of the Trillion Trees
20 Act.

21 “(e) CONSIDERATIONS.—In awarding the National
22 Medal for Forest Restoration under this section to an enti-
23 ty described in subsection (a), the Foundation shall con-
24 sider—

1 “(1) the number of acres planted or restored by
2 such entity;

3 “(2) the total increase in forest carbon stock
4 (as defined in section 2 of the Trillion Trees Act) re-
5 sulting from reforestation (as defined in section 2 of
6 the Trillion Trees Act) activities of such entity;

7 “(3) the educational impact of the reforestation
8 (as defined in section 2 of the Trillion Trees Act)
9 activities of such entity; and

10 “(4) the total value of any donations by such
11 entity to the Foundation.”.

12 (b) FIFTH GRADE FORESTRY CHALLENGE.—The
13 National Forest Foundation Act (16 U.S.C. 583j et seq.),
14 as amended by subsection (a), is further amended by in-
15 serting after section 410 the following:

16 **“SEC. 411. FIFTH GRADE FORESTRY CHALLENGE.**

17 “(a) ESTABLISHMENT.—The Foundation shall estab-
18 lish an educational grant program, in consultation with
19 the Secretary, to be known as the ‘5th Grade Forestry
20 Challenge’ to make grants to eligible recipients to—

21 “(1) provide 5th grade students with a seedling
22 to plant;

23 “(2) educate students about forestry, forest
24 management, active stewardship, and carbon stor-
25 age; and

1 “(3) encourage, accept, and administer private
2 gifts of money, technical expertise, and of real and
3 personal property for the benefit of this program.

4 “(b) ELIGIBLE RECIPIENTS.—The following entities
5 are eligible to receive a grant under this section:

6 “(1) A local educational agency.

7 “(2) A nonprofit entity that the Secretary de-
8 termines has a demonstrated history of community
9 engagement and education on natural resource
10 issues.

11 “(3) Other recipients as the Secretary deter-
12 mines to be appropriate.

13 “(c) COORDINATION.—In carrying out the program
14 required by this section, the Foundation may coordinate
15 on an ongoing basis with appropriate Federal, State, Trib-
16 al, and local resource management departments, local edu-
17 cational agencies, nonprofit organizations, private citizens,
18 and corporations to—

19 “(1) identify lands suitable for reforestation (as
20 defined in section 2 of the Trillion Trees Act);

21 “(2) encourage, accept, and administer private
22 gifts of money, technical expertise, and of real and
23 personal property for the benefit of such program;

24 “(3) manage and maintain reforested lands;
25 and

1 “(4) further educate students and the public
2 about forestry and forest carbon stock (as defined in
3 section 2 of the Trillion Trees Act).

4 “(d) REPORT REQUIRED.—Not later than 2 years
5 after the date on which the Foundation establishes the
6 grant program under this section, the Secretary shall sub-
7 mit to the relevant committees a report on the determina-
8 tion of the Secretary as to whether the grant program is
9 a financially effective means to educate students in the
10 fields described in subsection (a)(2).

11 “(e) DEFINITIONS.—In this subsection:

12 “(1) LOCAL EDUCATIONAL AGENCY.—The term
13 ‘local educational agency’ has the meaning given
14 that term in section 8101 of the Elementary and
15 Secondary Education Act of 1965 (20 U.S.C. 7801).

16 “(2) RELEVANT COMMITTEES.—The term ‘rel-
17 evant committees’ means—

18 “(A) the Committee on Natural Resources
19 of the House of Representatives;

20 “(B) the Committee on Agriculture of the
21 House of Representatives;

22 “(C) the Committee on Energy and Nat-
23 ural Resources of the Senate; and

24 “(D) the Committee on Agriculture, Nutri-
25 tion, and Forestry of the Senate.”.

1 **Subtitle B—Regeneration**

2 **SEC. 111. REFORESTATION PROGRAMS.**

3 (a) NATIONAL FOREST COVER POLICY.—

4 (1) IN GENERAL.—Section 3 of the Forest and
5 Rangeland Renewable Resources Planning Act of
6 1974 (16 U.S.C. 1601), as amended by section 105,
7 is further amended—

8 (A) by redesignating subsection (e) as sub-
9 section (f);

10 (B) by redesignating the second subsection
11 (d) (relating to the policy of Congress regarding
12 forested land in the National Forest System) as
13 subsection (e); and

14 (C) in subsection (e), as so redesignated—

15 (i) in paragraph (2)—

16 (I) in the first sentence—

17 (aa) by striking “eight years
18 following the enactment of this
19 subsection” and inserting “10
20 years following the date of enact-
21 ment of the ‘Trillion Trees Act’”;

22 and

23 (bb) by striking “eight-year
24 period” and inserting “10-year
25 period”;

(II) in the second sentence, by striking “such eight-year period” and inserting “the 10-year period”; and

(III) in the third sentence, by striking “1978” and inserting “2021”;

7 (ii) by redesignating paragraph (3) as
8 paragraph (4);

9 (iii) in the first sentence of paragraph
10 (4), as so redesignated, by striking “sub-
11 section (d)” and inserting “subsection”;
12 and

13 (iv) by inserting after paragraph (2)
14 the following:

15 “(3) REFORESTATION PRIORITIZATION.—

1 “(I) primarily take place on pri-
2 ority land;

3 “(II) promote reforestation (as
4 defined in section 2 of the Trillion
5 Trees Act) on priority land;

6 “(III) deliver measurable
7 progress and cost-effective results;

8 “(IV) increase forest carbon
9 stock (as defined in section 2 of the
10 Trillion Trees Act) in a sustainable
11 manner; and

12 “(V) provide additional benefits
13 relating to forest function and health,
14 soil health and productivity, wildlife
15 habitat and biodiversity, improved air
16 and water quality, job creation, en-
17 hanced outdoor recreation, and forest
18 products and byproducts.

19 “(B) PRIORITY LAND DEFINED.—In this
20 paragraph, the term ‘priority land’ means Na-
21 tional Forest System land that, due to an un-
22 planned adverse disturbance (including a wild-
23 fire, ice storm, blowdown, flooding, insect infes-
24 tation, disease, volcanic activity, or seismic
25 event)—

1 “(i) does not meet the conditions for
2 appropriate forest cover described in para-
3 graph (1);
4 “(ii) requires reforestation (as defined
5 in section 2 of the Trillion Trees Act) to
6 meet the objectives of an applicable forest
7 plan; and
8 “(iii) is unlikely to experience natural
9 regeneration without assistance.”.

10 (2) CONFORMING AMENDMENTS.—

11 (A) COOPERATIVE FORESTRY ASSISTANCE
12 ACT OF 1978.—Section 9 of the Cooperative
13 Forestry Assistance Act of 1978 (16 U.S.C.
14 2105) is amended in the matter following para-
15 graph (5) of subsection (g)—
16 (i) by striking “section 3(d)” and in-
17 serting “subsection (e) of section 3”; and
18 (ii) by striking “1601(d)” and insert-
19 ing “1601”.

20 (B) REFORESTATION TRUST FUND.—Sec-
21 tion 303 of the Act of October 14, 1980 (Public
22 Law 96-451; 16 U.S.C. 1606a) is amended in
23 subsection (d)(1)—

24 (i) by striking “section 3(d)” and in-
25 serting “subsection (e) of section 3”; and

1 (ii) by striking “1601(d)” and insert-
2 ing “1601”.

3 (C) STEWARDSHIP END RESULT CON-
4 TRACTING PROJECTS.—Section 604(c) of the
5 Healthy Forests Restoration Act of 2003 (16
6 U.S.C. 6591c(c)) is amended by adding at the
7 end the following:

8 “(8) Reforestation (as defined in section 2 of
9 the Trillion Trees Act), except the Chief shall give
10 priority to reforestation projects in accordance with
11 the priorities specified in subsection (e)(3)(A)(ii) of
12 section 3 of the Forest and Rangeland Renewable
13 Resources Planning Act of 1974 (16 U.S.C. 1601).”.

14 (b) TARGET YEAR FOR NATIONAL FOREST SYS-
15 TEM.—Section 9 of the Forest and Rangeland Renewable
16 Resources Planning Act of 1974 (16 U.S.C. 1607) is
17 amended by striking “2000” and inserting “2031”.

18 SEC. 112. REFORESTATION TRUST FUND.

19 Section 303 of the Act of October 14, 1980 (Public
20 Law 96-451; 16 U.S.C. 1606a) is amended in subsection
21 (b)(2), by striking “\$30,000,000” and inserting
22 “\$180,000,000”.

23 SEC. 113. SOLVING SHORTAGES FOR SEEDLINGS.

24 (a) IN GENERAL.—Not later than 1 year after the
25 date of the enactment of this section, the Secretary, acting

1 through the Chief of the Forest Service, shall develop and
2 implement a national strategy to increase the capacity of
3 Federal, State, Tribal, and private nurseries to address
4 the nationwide shortage of tree seedlings.

5 (b) ELEMENTS.—The strategy required under sub-
6 section (a) shall—

7 (1) be based on the best available science and
8 data; and

9 (2) identify and address—

10 (A) regional seedling shortages of bareroot
11 and container tree seedlings;

12 (B) regional reforestation opportunities
13 and the seedling supply necessary to fulfill such
14 opportunities;

15 (C) opportunities to enhance seedling di-
16 versity and close gaps in seed inventories; and

17 (D) barriers to expanding, enhancing, or
18 creating new infrastructure to increase nursery
19 capacity.

20 (c) FEDERAL NURSERIES.—Section 2 of the Act of
21 June 9, 1930 (16 U.S.C. 576a; commonly known as the
22 “Knutson-Vadenberg Act”), is amended by striking
23 “each fiscal year after year ending June 30, 1934, not
24 to exceed \$400,000,” and inserting “each of fiscal years
25 2021 through 2030, \$25,000,000.”.

1 (d) LOAN PROGRAM FOR STATE, TRIBAL, AND PRI-
2 VATE NURSERIES.—

3 (1) IN GENERAL.—The Secretary shall carry
4 out a loan program to make or guarantee qualified
5 nursery loans to eligible entities under this sub-
6 section.

7 (2) APPLICATION.—To be eligible to receive a
8 qualified nursery loan or loan guarantee under this
9 subsection, an eligible entity shall submit to the Sec-
10 retary an application at such time, in such manner,
11 and containing such information as the Secretary
12 may require, including a plan to maintain the ge-
13 netic and physical quality of seedlings of the eligible
14 entity.

15 (3) PRIORITY.—In making qualified nursery
16 loans or loan guarantees under this subsection, the
17 Secretary shall give priority to eligible entities
18 that—

19 (A) are small businesses, in particular
20 small businesses located in rural areas;

21 (B) create or support jobs, particularly in
22 rural areas; and

23 (C) serve regions with high demand for re-
24 forestation.

4 (A) develop, expand, enhance, or improve
5 nursery capacity or infrastructure;
6 (B) establish nurseries; or
7 (C) develop or implement quality control
8 measures at nurseries.

9 (5) LOAN AND LOAN GUARANTEE TERMS.—

15 (B) REPAYMENT.—The period of repayment
16 for a loan made under this subsection
17 shall not exceed 20 years.

18 (6) ADMINISTRATIVE PROVISIONS.—

23 (B) DISTRIBUTION.—The Secretary shall
24 ensure, to the maximum extent practicable, that
25 loans made or guaranteed under this subsection

1 are distributed across diverse geographic re-
2 gions.

3 (7) DEFINITIONS.—In this subsection:

4 (A) ELIGIBLE ENTITY.—The term “eligible
5 entity” means—

6 (i) a State, Tribal, or local govern-
7 ment; or

8 (ii) a domestic private, non-profit, or
9 cooperative organization.

10 (B) NURSERY.—The term “nursery”
11 means a State, Tribal, or local government or
12 privately-owned facility that grows, stores, ex-
13 tracts, or monitors bareroot or container tree
14 seedlings.

15 (C) QUALIFIED NURSERY LOAN.—The
16 term “qualified nursery loan” means a low-in-
17 terest loan, the proceeds of which are used to
18 cover the costs to the borrower of carrying out
19 a qualified nursery project described in para-
20 graph (4).

21 (8) AUTHORIZATION OF APPROPRIATIONS.—
22 There is authorized to be appropriated to carry out
23 this subsection such sums as may be necessary.

1 SEC. 114. HEALTHY FOREST RESERVE PROGRAM.

2 (a) ESTABLISHMENT.—Section 501(a) of the Healthy
3 Forests Restoration Act of 2003 (16 U.S.C. 6571(a)) is
4 amended—

5 (1) in paragraph (3), by striking “and” at the
6 end;

7 (2) in paragraph (4), by striking the period at
8 the end and inserting “; and”; and

9 (3) by adding at the end the following:

10 “(5) to promote the management and conserva-
11 tion of existing forests and regeneration of addi-
12 tional trees in pursuit of the targets for increased
13 forest carbon stock established under section 101 of
14 the Trillion Trees Act.”.

15 (b) ENROLLMENT PRIORITY.—Section 502(f)(1) of
16 the Healthy Forests Restoration Act of 2003 (16 U.S.C.
17 6572) is amended to read as follows:

18 (1) IN GENERAL.—The Secretary of Agri-
19 culture shall give priority to the enrollment of land
20 that—

21 (A) provides the greatest conservation
22 benefit to—

23 (i) primarily, species listed as endan-
24 gered or threatened under section 4 of the
25 Endangered Species Act of 1973 (16
26 U.S.C. 1533); and

1 “(ii) secondarily, species that—
2 “(I) are not listed as endangered
3 or threatened under section 4 of the
4 Endangered Species Act of 1973 (16
5 U.S.C. 1533); but
6 “(II)(aa) are candidates for such
7 listing, State-listed species, or special
8 concern species; or
9 “(bb) are deemed a species of
10 greatest conservation need under a
11 State wildlife action plan; or
12 “(B) promotes the restoration of marginal
13 farmland or degraded forestland into healthy
14 forest ecosystems.”.

15 (c) RESTORATION PLANS.—Section 503(b)(4) of the
16 Healthy Forests Restoration Act of 2003 (16 U.S.C.
17 6573(b)) is amended to read as follows:

18 “(4) Practices to increase forest carbon stock
19 (as defined in section 2 of the Trillion Trees Act)
20 over a period of at least 20 years, including through
21 reforestation of degraded forestland and
22 afforestation (as such terms are defined in such sec-
23 tion) of marginal farmland.”.

1 (d) COST SHARING.—Section 504 of the Healthy
2 Forests Restoration Act of 2003 (16 U.S.C. 6574) is
3 amended by adding at the end the following:

4 “(e) COST-SHARE PERMITTED.—In the case of land
5 enrolled in the healthy forest reserve program for the pur-
6 pose of promoting the restoration of marginal farmland
7 or degraded forestland into healthy forest ecosystems, the
8 Secretary of Agriculture may pay up to 75 percent for the
9 cost of practices determined necessary for restoration or
10 afforestation (as defined in section 2 of the Trillion Trees
11 Act) of such land.”.

12 **SEC. 115. FORESTRY EDUCATION AND WORKFORCE DEVELOPMENT GRANT PROGRAM.**

14 (a) IN GENERAL.—The Secretary shall establish a
15 competitive grant program to make grants to eligible insti-
16 tutions to carry out forestry education and workforce de-
17 velopment programs to prepare students for careers in for-
18 estry.

19 (b) PROPOSAL.—To be eligible to receive a grant
20 under this section, an eligible institution shall submit to
21 the Secretary a proposal at such time, in such manner,
22 and containing such information as the Secretary may re-
23 quire.

24 (c) EQUITABLE AWARDS.—For each fiscal year for
25 which grants are awarded under this section, the amount

1 of grant funds awarded to eligible institutions described
2 in paragraph (1) of subsection (f) shall be equal to the
3 amount of grant funds awarded to eligible institutions de-
4 scribed in paragraphs (2) and (3) of such subsection.

5 (d) USE OF GRANT FUNDS.—

6 (1) IN GENERAL.—Grants made under this sec-
7 tion shall be used to—

8 (A) award scholarships to students enrolled
9 in the eligible institution and pursuing degrees
10 in forestry, including students historically
11 underrepresented in the field of forestry;

12 (B) expand, enhance, or improve forestry
13 educational capacities of the eligible institution,
14 including libraries, curriculum, faculty, and sci-
15 entific instrumentation;

16 (C) recruit and retain—

17 (i) secondary school or undergraduate
18 students to pursue certifications in forestry
19 or acquire training in technical forestry
20 skills, including students historically
21 underrepresented in the field of forestry; or

22 (ii) undergraduate and graduate stu-
23 dents to pursue degrees in forestry, includ-
24 ing students historically underrepresented
25 in the field of forestry;

16 (e) PAYMENT OF NON-FEDERAL SHARE.—As a con-
17 dition of receiving a grant under this section, the Sec-
18 retary shall require the recipient of the grant to provide
19 funds or in-kind support from non-Federal sources in an
20 amount that is specified by the Secretary and based on
21 assessed institutional needs.

22 (f) ELIGIBLE INSTITUTION DEFINED.—In this sec-
23 tion, the term “eligible institution” means—
24 (1) a land grant college or university, including
25 an institution eligible to receive funding under—

15 (g) AUTHORIZATION OF APPROPRIATIONS.—There
16 are authorized to be appropriated to the Secretary
17 \$20,000,000 for each of fiscal years 2021 through 2030
18 to carry out this section.

19 SEC. 116. CIVILIAN CONSERVATION CENTERS REFOREST-
20 ATION ACTIVITIES.

21 Section 147(d) of the Workforce Innovation and Op-
22 portunity Act (29 U.S.C. 3197(d)) is amended by adding
23 at the end the following:

24 “(4) REFORESTATION ACTIVITIES.—Enrollees
25 in Civilian Conservation Centers may provide assist-

1 ance in carrying out priority reforestation (as de-
2 fined in section 2 of the Trillion Trees Act) projects
3 in accordance with subsection (e)(3)(A)(ii) of section
4 3 of the Forest and Rangeland Renewable Resources
5 Planning Act of 1974 (16 U.S.C.1601).”.

6 **SEC. 117. FOREST TECHNOLOGY ENHANCEMENTS FOR CON-**
7 **SERVATION AND HABITAT IMPROVEMENT.**

8 (a) **ESTABLISHMENT OF PILOT PROGRAM.**—Not
9 later than 180 days after the date of the enactment of
10 this section, the Secretary, in consultation with the Sec-
11 retary of the Interior, shall either establish a research, de-
12 velopment, and testing pilot program or expand an appli-
13 cable existing program to—

14 (1) assess new technologies, including un-
15 manned aircraft system, geospatial, or remote sens-
16 ing technologies, across all reforestation activities;

17 (2) accelerate the deployment and integration of
18 such technologies into the operations of the Secre-
19 taries; and

20 (3) collaborate and cooperate with State, Trib-
21 al, and private geospatial information system organi-
22 zations with respect to such technologies.

23 (b) **EXPANDING USE OF UNMANNED AIRCRAFT SYS-**
24 **TEMS.**—Not later than 1 year after the date of enactment
25 of this section, the Secretaries shall enter into an agree-

1 ment to develop consistent protocols and plans for the use
2 of unmanned aircraft system technologies for reforestation
3 activities.

4 (c) DOMESTIC MANUFACTURE REQUIREMENT.—Any
5 unmanned aircraft system technology or component of un-
6 manned aircraft system technology used under this section
7 shall be made and manufactured in the United States.

8 (d) RULE OF CONSTRUCTION.—Nothing in this sec-
9 tion shall be construed as prohibiting the Secretary of Ag-
10 riculture from using unmanned aircraft systems tech-
11 nologies in effect on the date of the enactment of this sec-
12 tion.

13 (e) UNMANNED AIRCRAFT SYSTEM DEFINED.—In
14 this section, the term “unmanned aircraft system” has the
15 meaning given the term in section 44801 of title 49,
16 United States Code.

17 (f) SUNSET.—The authority to carry out this section
18 shall terminate on the date that is 5 years after the date
19 of the enactment of this section.

20 **Subtitle C—Urban Forests**

21 **SEC. 121. URBAN AND COMMUNITY FORESTRY ASSISTANCE.**

22 (a) TREE CITY USA GRANT PROGRAM.—Section 9
23 of the Cooperative Forestry Assistance Act of 1978 (16
24 U.S.C. 2105) is amended—

(1) by redesignating subsections (h) and (i) as subsections (j) and (k), respectively; and

3 (2) by inserting after subsection (g) the fol-
4 lowing;

5 "(h) TREE CITY USA GRANT PROGRAM.—

6 “(1) IN GENERAL.—The Secretary shall estab-
7 lish a grant program to be known as the ‘Tree City
8 USA Grant Program’ to provide competitive grants
9 to eligible entities to enhance and maintain urban
10 forests.

11 “(2) APPLICATION.—

12 “(A) IN GENERAL.—To be eligible to be
13 awarded a grant under paragraph (1), an eligi-
14 ble entity shall submit an application to the
15 Secretary at such time, in such manner, and
16 containing such information as the Secretary
17 may require, including a proposal to enhance
18 and maintain urban forests.

19 “(B) APPLICATION ASSISTANCE.—A non-
20 profit organization that partners with an eligible
21 entity may submit an application under sub-
22 paragraph (A) on behalf of such eligible entity.

23 “(3) PRIORITY.—In awarding grants under
24 paragraph (1), the Secretary shall give priority to el-

1 igible entities that submit proposals under para-
2 graph (2)(A) that—

3 “(A) enhance, maintain, or improve access
4 to urban forests in—

5 “(i) typically underserved areas; or
6 “(ii) areas with low tree or environ-
7 mental equity;

8 “(B) further a statewide assessment or
9 local government initiative to enhance and
10 maintain urban forests;

11 “(C) include a plan to mitigate risks from
12 insects, disease, and non-native invasive species;
13 and

14 “(D) include a plan to monitor and main-
15 tain new and existing trees.

16 “(4) TECHNICAL ASSISTANCE.—The Secretary
17 may provide technical assistance to local govern-
18 ments to assist such local governments with—

19 “(A) becoming eligible entities; and

20 “(B) proposals under paragraph (2)(A).

21 “(5) MATCHING FUNDS.—An eligible entity
22 that receives a grant under this subsection shall con-
23 tribute an amount of non-Federal funds (in cash or
24 in kind) that is at least equal to the amount of the
25 Federal funds received.

1 “(6) PREMIER TREE CITY.—Not later than 1
2 year after the date of the enactment of the Trillion
3 Trees Act, and annually through 2030 thereafter,
4 the Secretary shall designate as a ‘Premier Tree
5 City’ one eligible entity awarded a grant under this
6 subsection to recognize the superior efforts of such
7 eligible entity in enhancing and maintaining urban
8 forests.

9 “(7) AUTHORIZATION OF APPROPRIATIONS.—In
10 addition to the amounts authorized under subsection
11 (k), there are authorized to be appropriated
12 \$1,000,000 for each of fiscal years 2021 through
13 2030 to carry out this subsection.

14 “(8) ELIGIBLE ENTITY DEFINED.—In this sub-
15 section, the term ‘eligible entity’ means a local gov-
16 ernment that—

17 “(A) serves an urban and community area;
18 and

19 “(B) a tree planting non-profit organiza-
20 tion recognizes as having—

21 “(i) a tree board or department;

22 “(ii) a tree care ordinance;

23 “(iii) a community forestry program
24 with an annual budget of at least \$2 per
25 capita; and

1 “(iv) an Arbor Day observance and
2 proclamation.”.

3 (b) COOPERATIVE AGREEMENTS FOR URBAN WOOD
4 UTILIZATION.—Section 9 of the Cooperative Forestry As-
5 sistance Act of 1978 (16 U.S.C. 2105), as amended by
6 subsection (a), is further amended by inserting after sub-
7 section (h) the following:

8 “(i) PILOT PROJECT FOR COOPERATIVE AGREE-
9 MENTS FOR URBAN WOOD UTILIZATION.—

10 “(1) COOPERATIVE AGREEMENTS.—The Sec-
11 retary may enter into cooperative agreements with
12 State and local governments, institutions of higher
13 education, private or non-profit organizations, and
14 other entities that support projects that create wood
15 products from dead and fallen trees in urban and
16 community areas.

17 “(2) PRIORITIZATION.—The Secretary shall
18 prioritize entering into cooperative agreements
19 that—

20 “(A) support local job creation;

21 “(B) are located in typically underserved
22 areas or areas with low tree or environmental
23 equity;

24 “(C) develop new uses for dead and fallen
25 trees; and

1 “(D) improve urban forest health and re-
2 siliency.

3 “(3) TECHNICAL AND FINANCIAL ASSIST-
4 ANCE.—The Secretary may provide technical or fi-
5 nancial assistance to entities that enter into a coop-
6 erative agreement under paragraph (1) to facili-
7 tate—

8 “(A) research on new uses for dead and
9 fallen trees in urban and community areas; and

10 “(B) market expansion opportunities for
11 products made from dead and fallen trees in
12 urban and community areas.

13 “(4) REPORT.—Not later than 1 year after the
14 date of the enactment of the Trillion Trees Act, the
15 Secretary shall provide a report to the relevant com-
16 mittees on—

17 “(A) the implementation of this subsection;
18 and

19 “(B) recommendations to encourage eco-
20 nomic development and job creation by creating
21 new markets for wood products made from
22 urban timber sources.

23 “(5) DEFINITIONS.—In this subsection—

24 “(A) DEAD AND FALLEN TREES.—The
25 term ‘dead and fallen trees’ means trees that—

1 “(i) are dying or have died;
2 “(ii) have partially or completely fall-
3 en over; or
4 “(iii) have been negatively impacted
5 by insects, disease, or weather-related dis-
6 turbances.

7 “(B) RELEVANT COMMITTEES.—The term
8 ‘relevant committees’ means—

9 “(i) the Committees on Natural Re-
10 sources and Agriculture of the House of
11 Representatives; and
12 “(ii) the Committees on Energy and
13 Natural Resources and Agriculture, Nutri-
14 tion, and Forestry of the Senate.”.

15 (c) PROGRAM OF EDUCATION AND TECHNICAL AS-
16 SISTANCE CLARIFICATION FOR CARBON STORAGE.—Sec-
17 tion 9(d)(3) of the Cooperative Forestry Assistance Act
18 of 1978 (16 U.S.C. 2105(d)(3)) is amended—

19 (1) in subparagraph (C), by striking “and”
20 after the semicolon;

21 (2) in subparagraph (D), by inserting “and”
22 after the semicolon; and

23 (3) by inserting at the end the following new
24 subparagraph:

1 “(E) identifying opportunities to increase
2 carbon storage through afforestation (as de-
3 fined in section 2 of the Trillion Trees Act) and
4 scientific urban and community forestry man-
5 agement;”.

6 (d) NATIONAL URBAN AND COMMUNITY FORESTRY
7 ADVISORY COUNCIL.—Section 9(g) of the Cooperative
8 Forestry Assistance Act of 1978 (16 U.S.C. 2105(g)) is
9 amended—

10 (1) in paragraph (2), by adding at the end the
11 following new subparagraph:

12 “(F) MEETINGS.—The Council established
13 under this subsection shall meet not less than
14 twice annually.”; and

15 (2) by adding at the end the following new
16 paragraph:

17 “(7) RENEWAL OF COUNCIL.—

18 “(A) IN GENERAL.—Not later than 30
19 days after the date of the enactment of the
20 Trillion Trees Act, the Secretary shall renew
21 the Council.

22 “(B) TERMINATION.—The Council shall
23 not terminate except as provided by an Act of
24 Congress.”.

1 (e) URBAN AND COMMUNITY FORESTRY ACTION
2 PLAN CLARIFICATION FOR CARBON STORAGE.—Section
3 9(g)(3) of the Cooperative Forestry Assistance Act of
4 1978 (16 U.S.C. 2105(g)(3)) is amended by adding at the
5 end the following:

6 “(G) Recommendations for identifying op-
7 portunities to increase carbon storage through
8 afforestation (as defined in section 2 of the
9 Trillion Trees Act) and scientific urban and
10 community forestry management.”.

11 (f) AUTHORIZATION OF APPROPRIATIONS.—Sub-
12 section (k) of section 9 of the Cooperative Forestry Assist-
13 ance Act of 1978 (16 U.S.C. 2105), as redesignated by
14 subsection (a), is amended—

15 (1) by striking “\$30,000,000” and inserting
16 “\$50,000,000”; and

17 (2) by striking “fiscal years 1991 through
18 1995” and inserting “fiscal years 2021 through
19 2025”.

20 **SEC. 122. CIVILIAN CONSERVATION CENTER URBAN FOR-
21 ESTRY DEMONSTRATION PROGRAM.**

22 Section 147(d) of the Workforce Innovation and Op-
23 portunity Act (29 U.S.C. 3197(d)), as amended by section
24 116, is further amended by adding at the end the fol-
25 lowing:

1 “(5) URBAN FORESTRY.—

2 “(A) ESTABLISHMENT.—Not later than 1
3 year after the date of the enactment of this
4 paragraph, the Secretary of Agriculture and the
5 Secretary of Labor shall jointly establish Civil-
6 ian Conservation Centers in urban and commu-
7 nity areas (as defined in subsection (j) of sec-
8 tion 9 of the Cooperative Forestry Assistance
9 Act of 1978 (16 U.S.C. 2105)).

10 “(B) FOCUS.—In addition to the training
11 and skills required under paragraph (1), the Ci-
12 vilian Conservation Centers established pursu-
13 ant to subparagraph (A) shall provide training
14 on urban forestry issues, including urban forest
15 conservation, management, maintenance, and
16 monitoring.”.

17 **SEC. 123. MEMORANDUM OF UNDERSTANDING TO COORDI-**
18 **NATE URBAN FORESTRY PROGRAMS.**

19 Not later than 120 days after the date of the enact-
20 ment of this Act, the Secretary shall enter into a memo-
21 randum of understanding with the Secretaries of Health
22 and Human Services, Housing and Urban Development,
23 Interior, Labor, and Transportation and the Adminis-
24 trator of the Environmental Protection Agency to—

(2) coordinate existing urban forestry pro-
grams;

6 (3) conduct research on the benefits of urban
7 forests for air quality, heat island mitigation, energy
8 burden reduction, and enhanced shading for heat-re-
9 silient housing and active transit; and

10 (4) conduct research on improving coordination
11 between the agencies to address insects, disease, and
12 non-native invasive species in urban and community
13 areas.

14 Subtitle D—International Forests

15 SEC. 131. SENSE OF CONGRESS.

16 It is the sense of Congress that—

17 (1) the Trillion Trees Initiative established by
18 the World Economic Forum should be supported;

19 (2) under such Trillion Trees Initiative, coun-
20 tries, corporations, and individuals around the globe
21 will contribute to conserving, restoring, and growing
22 one trillion trees;

23 (3) one trillion new trees globally would seque-
24 ter a significant amount of atmospheric carbon and

1 constitute a pragmatic step towards addressing glob-
2 al carbon emissions; and

3 (4) under this Act, the United States will—

4 (A) take a leadership role in conserving,
5 restoring, and growing one trillion trees glob-
6 ally;

7 (B) use the vast natural assets, robust for-
8 est products market, and technical expertise of
9 the United States, to conserve, regenerate,
10 manage, and utilize domestic forestland; and

11 (C) incentivize the use of sustainable build-
12 ing products to store carbon.

13 **SEC. 132. INTERNATIONAL FOREST FOUNDATION.**

14 (a) **ESTABLISHMENT.**—The Administrator of the
15 United States Agency for International Development may
16 enter into an agreement with a non-profit organization to
17 establish an “International Forest Foundation” (in this
18 section referred to as the “Foundation”), which shall not
19 be an agency or instrumentality of the United States Gov-
20 ernment.

21 (b) **PURPOSES.**—The purposes of the Foundation
22 shall be—

23 (1) to encourage, accept, and administer private
24 gifts of money and of real and personal property for
25 the benefit of, or in connection with, the activities

1 and services carried out by the United States Agency
2 for International Development to promote reforestation,
3 afforestation, and the prevention of deforestation around the world;

5 (2) to use private funds to support, undertake,
6 and conduct activities that further the goals established
7 under section 101; and

8 (3) to undertake, conduct, and encourage educational,
9 technical, and other assistance and other activities that support international goals to increase
10 global carbon capture and storage through the promotion of healthy forests and responsible forest
11 management.

14 (c) TRANSFER OF FUNDS; LIABILITY.—

15 (1) TRANSFER OF FUNDS.—The Administrator
16 may authorize, pursuant to an agreement entered
17 into in accordance with this section, the transfer of
18 funds of the United States Agency for International
19 Development to a nonprofit organization for the purpose
20 of offsetting any administrative costs of the
21 Foundation.

22 (2) LIABILITY.—The United States shall not be
23 liable for any debts, defaults, acts, or omissions of
24 the Foundation. The full faith and credit of the

1 United States shall not extend to any obligations of
2 the Foundation.

3 **SEC. 133. INTERNATIONAL ENGAGEMENT.**

4 (a) IN GENERAL.—To the maximum extent practicable, the Administrator of the United States Agency for
5 International Development shall prioritize programs to
6 support reforestation and afforestation, and to prevent deforestation, in developing countries and in regions that
7 have experienced significant levels of deforestation or
8 whose biodiversity, local economy, and stability would be
9 significantly impacted by deforestation or loss of forest
10 canopy cover around the world.

11 (b) COORDINATION.—In carrying out the programs
12 prioritized in accordance with subsection (a), the Administrator shall, to the maximum extent practicable, make use
13 of public-private partnerships to facilitate engagement by
14 nonprofit organizations and industry partners.

15 **SEC. 134. GLOBAL CLIMATE CHANGE PROGRAM.**

16 (a) FORESTRY INCLUDED.—Section 2402(c)(2) of
17 the Global Climate Change Prevention Act of 1990 (7
18 U.S.C. 6701(c)(2)) is amended by inserting “and for-
19 estry” after “agriculture”.

20 (b) STUDY OF GLOBAL CLIMATE CHANGE, AGRI-
21 CULTURE, AND FORESTRY.—Section 2403(b) of the Glob-

1 al Climate Change Prevention Act of 1990 (7 U.S.C.

2 6702(b)) is amended—

3 (1) in the first proviso, by striking “The Sec-
4 retary shall conduct a study” and inserting the fol-
5 lowing:

6 “The Secretary shall, not later than 2 years after the
7 date of enactment of the Trillion Trees Act, conduct a
8 study and submit a report to Congress”;

9 (2) in paragraph (2), by striking “and” at the
10 end;

11 (3) in paragraph (3), by striking the period at
12 the end and inserting “; and”; and

13 (4) by adding at the end the following:

14 “(5) identify and address programs which could
15 lead to increased forest carbon stock (as defined in
16 section 2 of the Trillion Trees Act) globally, healthy
17 international forest ecosystems, and a globally sus-
18 tainable forest products market.”.

19 (c) OFFICE OF INTERNATIONAL FORESTRY.—Section
20 2405(c) of the Global Climate Change Prevention Act of
21 1990 (7 U.S.C. 6704(c)) is amended—

22 (1) in paragraph (2), by striking the “and” at
23 the end;

24 (2) in paragraph (3), by striking the period at
25 the end and inserting “; and”; and

1 (3) by adding at the end the following:

2 “(4) identify and implement programs which
3 lead to—

4 “(A) increased forest carbon stock (as de-
5 fined in section 2 of the Trillion Trees Act)
6 globally;

7 “(B) healthy international forest eco-
8 systems; and

11 (d) AUTHORIZATION OF APPROPRIATIONS.—Section
12 2412 of the Global Climate Change Prevention Act of
13 1990 (7 U.S.C. 6710) is amended by striking “1991
14 through 1997” and inserting “2021 through 2025”.

15 SEC. 135. INTERNATIONAL FORESTRY COOPERATION.

16 Section 602(b)(1) of the International Forestry Co-
17 operation Act of 1990 (16 U.S.C. 4501(b)(1)) is amend-
18 ed—

19 (1) in subparagraph (G), by striking “and” at
20 the end;

21 (2) in subparagraph (H), by inserting "and" at
22 the end; and

23 (3) by adding at the end the following:

24 “(I) activities that increase forest carbon
25 stock (as defined in section 2 of the Trillion

1 Trees Act), including reforestation and
2 afforestation (as such terms are defined in such
3 section) programs.”.

4 **SEC. 136. MODIFICATIONS TO AUTHORITIES RELATING TO**
5 **TROPICAL FORESTS.**

6 Section 118 of the Foreign Assistance Act of 1961
7 (22 U.S.C. 2151p–1) is amended as follows:

8 (1) In subsection (a)(2), by inserting “, includ-
9 ing by reducing global forest carbon stock (as de-
10 fined in section 2 of the Trillion Trees Act)” before
11 the period at the end.

12 (2) In subsection (c)(1), by inserting “, refor-
13 estation (as defined in section 2 of the Trillion Trees
14 Act),” after “conservation”.

15 (3) In subsection (c)(2)(A), by inserting “and
16 impact on global carbon emissions” after “irrevers-
17 ible losses”.

18 (4) In subsection (c)(6), by inserting “(includ-
19 ing projects to increase forest carbon stock)” after
20 “sustainable forestry projects and practices”.

21 (5) In subsection (c)(8), by inserting “increas-
22 ing forest carbon stock (as defined in section 2 of
23 the Trillion Trees Act),” after “soil conservation.”.

24 (6) In subsection (f), by inserting “and a study
25 on the total carbon sequestered through increases in

1 tropical forest carbon stock (as defined in section 2
2 of the Trillion Trees Act) globally as a result of pro-
3 grams, projects, and activities carried out under this
4 section" before the period at the end.

5 **TITLE II—CARBON SEQUESTRA-
6 TION THROUGH IMPROVED
7 FOREST MANAGEMENT AC-
8 TIVITIES**

9 **SEC. 201. LAND USE PLANNING; SUPPLEMENTS TO PRO-**

10 **GRAMMATIC ENVIRONMENTAL IMPACT**
11 **STATEMENTS.**

12 (a) PRIORITY AREAS.—

13 (1) AREAS IDENTIFIED.—The Secretary shall
14 designate a landscape-level area on covered land as
15 a priority area if—

16 (A) the Secretary has identified such area
17 as having a high or very high risk of wildfire;

18 (B) the completion of covered projects in
19 such area would reduce the risk of carbon emis-
20 sions as a result of wildfire or tree mortality;

21 and

22 (C) the area is covered by an existing pro-
23 grammatic environmental impact statement ap-
24 plicable to such covered projects.

9 (A) in the case of priority areas for water-
10 shed protection projects, critical infrastructure
11 protection projects, or wildlife habitat restora-
12 tion projects, not later than 60 days after the
13 date of the enactment of this section; and

14 (B) in the case of priority areas for
15 wildland-urban interface protection projects, not
16 later than 60 days after the programmatic envi-
17 ronmental impact statement required under
18 subsection (b) is completed.

19 (4) REVIEW AND MODIFICATION.—

20 (A) IN GENERAL.—Except with respect to
21 areas subject to review under subparagraph
22 (B), not later than 5 years after the date of the
23 enactment of this section and not less than once
24 every 5 years thereafter, the Secretary shall re-
25 view the priority areas established under para-

1 graph (1) and modify, add, or remove such pri-
2 ority areas.

3 (B) WILDLAND-URBAN INTERFACE PRO-
4 TECTION PRIORITY AREAS.—Not later than 5
5 years after the date on which the programmatic
6 environmental impact statement required by
7 subsection (b) is complete and not less than
8 once every 5 years thereafter, the Secretary
9 shall review the priority areas established under
10 paragraph (1) and covered by such statement
11 and modify, add, or remove such priority areas.

12 (b) PROGRAMMATIC ENVIRONMENTAL IMPACT
13 STATEMENT FOR WILDLAND-URBAN INTERFACE PROTEC-
14 TION PROJECTS.—Not later than 5 years after the date
15 of the enactment of this section, the Secretary shall com-
16 plete a programmatic environmental impact statement in
17 accordance with section 102(2)(C) of the National Envi-
18 ronmental Policy Act of 1969 (42 U.S.C. 4332(2)(C)) for
19 wildland-urban interface protection on public lands, in-
20 cluding with respect to—

21 (1) lands classified as high or very high risk of
22 wildfire; and

23 (2) areas with at-risk communities (as defined
24 in section 101 of the Healthy Forest Restoration Act
25 of 2003 (16 U.S.C. 6511)).

1 (c) COMPLIANCE WITH THE NATIONAL ENVIRON-
2 MENTAL POLICY ACT.—

3 (1) IN GENERAL.—The requirements of section
4 102(2)(C) of National Environmental Policy Act of
5 1969 (42 U.S.C. 4332(2)(C) with respect to a major
6 Federal action taken under this section shall be
7 deemed to be met—

8 (A) for wildland-urban interface protection
9 projects proposed after the date of completion
10 of the programmatic environmental impact
11 statement required by subsection (b), by
12 supplementing such programmatic environ-
13 mental impact statement and incorporating rel-
14 evant additional regional analyses that have
15 been completed by Federal agencies since such
16 statement was finalized;

17 (B) for watershed protection projects, by
18 supplementing the programmatic environmental
19 impact statement entitled “National Forest
20 System Land Management Planning” published
21 in January 2012 and incorporating relevant ad-
22 ditional regional analyses that have been com-
23 pleted by Federal agencies since such statement
24 was finalized;

1 (C) for critical infrastructure protection
2 projects, by supplementing the programmatic
3 environmental impact statement entitled “Des-
4 ignation of Energy Corridors on Federal Land
5 in the 11 Western States (DOE/EIS-0386)”
6 published on November 28, 2008 and incor-
7 porating relevant additional regional analyses
8 that have been completed by Federal agencies
9 since such statement was finalized; and

10 (D) for wildlife habitat restoration
11 projects, by supplementing the programmatic
12 environmental impact statement entitled “Na-
13 tional Forest System Land Management Plan-
14 ning” published in January 2012 and incor-
15 porating relevant additional regional analyses
16 that have been completed by Federal agencies
17 since such statement was finalized.

22 (A) appropriate State, Tribal, and local
23 governments;

1 (B) transmission infrastructure and water
2 infrastructure owners, operators, and devel-
3 opers; and

4 (C) other appropriate entities.

5 (d) ENVIRONMENTAL REVIEW IN PRIORITY
6 AREAS.—

1 such Act in analyzing the potential impacts of the
2 proposed covered project.

3 (e) REPORTS TO CONGRESS.—Not later than Feb-
4 ruary 1 of the first fiscal year beginning after the date
5 of the enactment of this section, and each February 1
6 thereafter, the Secretary shall submit to the relevant com-
7 mittees a report that includes—

8 (1) a description, with respect to the preceding
9 year, of the progress of covered projects in priority
10 areas established under this section; and

11 (2) projections for how such covered projects
12 will reduce the risk and severity of carbon emissions
13 from wildfires and tree mortality.

14 (f) DEFINITIONS.—In this section:

15 (1) COVERED LAND.—The term “covered land”
16 means National Forest System lands that are not
17 excluded from forest management activities as a re-
18 sult of—

19 (A) an applicable forest plan;

20 (B) inclusion in the National Wilderness
21 Preservation System;

22 (C) inclusion within a National or State-
23 specific inventoried roadless area established by
24 the Secretary, unless—

1 (i) the forest management activity to
2 be carried out is consistent with the forest
3 plan applicable to the area; and

4 (ii) the Secretary, or their designee,
5 determines the forest management activity
6 is allowed under the roadless rule gov-
7 erning such lands; or

8 (D) any other Federal law.

18 (A) reducing the risk of wildfire ignition
19 within or adjacent to—

20 (i) a utility infrastructure right-of-
21 way; or

22 (ii) public transportation infrastruc-
23 ture;

24 (B) protecting public infrastructure from
25 wildfire; or

(C) removing hazard trees and or other hazardous fuels from a utility infrastructure right-of-way.

4 (4) RELEVANT COMMITTEES.—The term “re-
5 evant committees” means—

6 (A) the Committee on Agriculture, Nutri-
7 tion, and Forestry of the Senate;

10 (C) the Committee on Agriculture of the
11 House of Representatives; and

12 (D) the Committee on Natural Resources
13 of the House of Representatives.

18 (A) protecting a municipal or Tribal water
19 source from damage or destruction caused by
20 wildfire;

21 (B) improving, maintaining, or restoring
22 water quality or yield; or

(C) any combination of the purposes specified in subparagraphs (A) through (B).

19 SEC. 202. FOREST CARBON STOCK ON STATE AND PRIVATE
20 FORESTS.

21 (a) ADDING INCREASING FOREST CARBON STOCK AS
22 A PRIORITY.—Section 2(b) of the Cooperative Forestry
23 Assistance Act of 1978 (16 U.S.C. 2101) is amended—

4 (2) by inserting after paragraph (5) the fol-
5 lowing:

6 “(6) the encouragement of afforestation (as de-
7 fined in section 2 of the Trillion Trees Act), refor-
8 estation , management, and related optimizations of
9 forest carbon stock (as such terms are defined in
10 such section) for climate and other ecological bene-
11 fits;”.

12 (b) SUPPORT FOR STATE ASSESSMENTS AND STRAT-
13 EGIES FOR FOREST RESOURCES WHEN CONSIDERING
14 CARBON EMISSIONS.—Section 2A(a)(1) of the Cooper-
15 tive Forestry Assistance Act of 1978 (16 U.S.C.
16 2101a(a)(1)) is amended—

17 (1) by redesignating subparagraph (C) and (D)
18 as subparagraphs (D) and (E), respectively; and

21 “(C) the current amount of forest carbon
22 stock (as defined in section 2 of the Trillion
23 Trees Act) on State lands and opportunities for
24 increased forest carbon stock;”.

1 (c) INCREASING FOREST CARBON STOCK THROUGH
2 THE FOREST STEWARDSHIP PROGRAM.—Section 5(d)(1)
3 of the Cooperative Forestry Assistance Act of 1978 (16
4 U.S.C. 2103a(d)) is amended by inserting “carbon seque-
5 tration and storage” before “and the aesthetic”.

6 (d) INCREASING FOREST CARBON STOCK THROUGH
7 THE COMMUNITY FOREST AND OPEN SPACE CONSERVA-
8 TION PROGRAM.—Section 7A(c)(1)(B)(ii) of the Coopera-
9 tive Forestry Assistance Act of 1978 (16 U.S.C.
10 2103d(c)(1)(B)(ii)) is amended by inserting “increasing
11 forest carbon stock (as defined in section 2 of the Trillion
12 Trees Act) and promoting,” after “including”.

13 (e) INCREASING FOREST CARBON STOCK THROUGH
14 THE PROMOTION OF FOREST HEALTH.—Section 8(a) of
15 the Cooperative Forestry Assistance Act of 1978 (16
16 U.S.C. 2104(a)) is amended—

17 (1) by redesignating paragraphs (4) through
18 (6) as paragraphs (5) through (7); and
19 (2) by inserting after paragraph (3) the fol-
20 lowing:

21 “(4) protect or enhance forest carbon stock (as
22 defined in section 2 of the Trillion Trees Act) on
23 healthy forestland;”.

24 (f) INCREASING FOREST CARBON STOCK THROUGH
25 THE REDUCTION OF CATASTROPHIC WILDFIRE.—Section

1 10A(b)(1) of the Cooperative Forestry Assistance Act of
2 1978 (16 U.S.C. 2106c(b)(1)) is amended—

3 (1) in subparagraph (C), by striking “and” at
4 the end;

5 (2) in subparagraph (D), by striking the period
6 and inserting “and” at the end; and

7 (3) by inserting at the end the following:

8 “(E) to educate the public about the car-
9 bon stored in healthy forests and carbon emit-
10 ted through wildfire and forest decline.”.

11 (g) INCREASING FOREST CARBON STOCK THROUGH
12 THE STATE AND PRIVATE FOREST LANDSCAPE-SCALE
13 RESTORATION.—Section 13A of the Cooperative Forestry
14 Assistance Act of 1978 (16 U.S.C. 2109a) is amended—

15 (1) in subsection (e)—

16 (A) in paragraph (6), by striking “and” at
17 the end;

18 (B) by redesignating paragraph (7) as
19 paragraph (8); and

20 (C) by inserting after paragraph (6) the
21 following:

22 “(7) to improve the potential to increase forest
23 carbon stock (as defined in section 2 of the Trillion
24 Trees Act); and”;

3 “(3) AUTHORIZATION OF APPROPRIATIONS.—

4 There is authorized to be appropriated to the Fund
5 \$25,000,000 for each fiscal year beginning with the
6 first full fiscal year after the date of the enactment
7 of the Trillion Trees Act through fiscal year 2025,
8 to remain available until expended.”.

9 SEC. 203. GOOD NEIGHBOR AUTHORITY.

10 Section 8206 of the Agricultural Act of 2014 (16
11 U.S.C. 2113a) is amended—

12 (1) in subsection (a)(4)(A)—

13 (A) in clause (ii), by striking “and” at the
14 end:

15 (B) by redesignating clause (iii) as clause
16 (iv):

17 (C) by inserting after clause (ii) the fol-
18 lowing:

23 (D) in clause (iv), as so redesignated, by
24 striking the period at the end and inserting “;
25 or”; and

1 (E) by adding at the end the following:

4 (2) in subsection (b)(1), by adding at the end
5 of the following:

17 “(C) TREATMENT OF REVENUE.—Funds
18 received from the sale of timber by a Governor
19 of a State under a good neighbor agreement
20 shall be retained and used by the Governor—

21 “(i) to carry out authorized restora-
22 tion services under such good neighbor
23 agreement; and

1 carry out authorized restoration services
2 within the State under other good neighbor
3 agreements.”.

4 SEC. 204. RESEARCH AND DEVELOPMENT PROGRAMS.

5 Section 3 of the Forest and Rangeland Renewable
6 Resources Research Act of 1978 (16 U.S.C. 1642) is
7 amended—

8 (1) in subsection (a), by adding at the end the
9 following:

10 “(6) Renewable resource assessment research
11 shall also include, as appropriate, research activities
12 related to the sequestration of carbon, including the
13 increased carbon storage through afforestation (as
14 defined in section 2 of the Trillion Trees Act), refor-
15 estation (as defined in such section), forest and
16 rangeland management, and the utilization of wood
17 and other materials derived from forest and range-
18 land renewable resources to store carbon in building
19 materials, industrial and consumer products.”; and

20 (2) in subsection (d)(2), by adding at the end
21 the following:

22 “(F) Carbon sequestration.”.

1 **TITLE III—MARKET INCENTIVES**
2 **FOR CARBON SEQUESTRATION**

3 **SEC. 301. BIOCHAR DEMONSTRATION PROJECT AND GRANT**

4 **PROGRAM.**

5 (a) **DEMONSTRATION PROJECTS.—**

6 (1) **ESTABLISHMENT.—**

7 (A) **IN GENERAL.—**Not later than 2 years
8 after the date of the enactment of this section,
9 the Secretaries shall establish a program to
10 enter into partnerships with eligible entities to
11 carry out demonstration projects to support the
12 development and commercialization of biochar
13 in accordance with this subsection.

14 (B) **LOCATION OF DEMONSTRATION**
15 PROJECTS.—The Secretaries shall, to the max-
16 imum extent practicable, establish at least one
17 biochar demonstration project in each Forest
18 Service region.

19 (2) **PROPOSALS.—**To be eligible to enter into a
20 partnership to carry out a biochar demonstration
21 project under paragraph (1)(A), an eligible entity
22 shall submit to the Secretaries a proposal at such
23 time, in such manner, and containing such informa-
24 tion as the Secretaries may require.

(A) have the most carbon sequestration potential;

8 (B) will create new jobs and contribute to
9 local economies, particularly in rural areas;

10 (C) will demonstrate—

11 (i) new and innovative uses of biochar;
12 (ii) viable markets for cost effective
13 biochar-based products;

14 (iii) the ecosystem services of biochar;

15 (iv) the benefits of biochar to restore

16 forest heath and resiliency, including for

17 forest soils and watersheds; or

18 (v) any combination of purposes speci-
19 fied in clauses (i) through (iv);

20 (D) are located in local markets that have
21 the greatest need for the biochar production
22 units due to—

23 (i) nearby lands identified as having
24 high or very high or extreme risk of wild-
25 fire:

12 (A) acquire and test various feedstocks and
13 their efficacy;

14 (B) develop and optimize commercially and
15 technologically viable biochar production units,
16 including mobile and permanent units;

17 (C) demonstrate the production of biochar
18 from forest residues and the use of biochar to
19 restore forest health and resiliency;

20 (D) build, expand, or establish biochar fa-
21 cilities;

22 (E) conduct research on new and innova-
23 tive uses of biochar or demonstrate cost-effic-
24 tive market opportunities for biochar and
25 biochar-based products;

1 (F) carry out any other activities the Sec-
2 retaries determine appropriate; or

(G) any combination of the purposes specified in subparagraphs (A) through (F).

13 (6) REVIEW OF BIOCHAR DEMONSTRATION.—

14 (A) IN GENERAL.—The Secretaries shall
15 conduct regionally-specific research, including
16 economic analyses and life-cycle assessments, on
17 the biochar produced from the demonstration
18 projects under this subsection, including—

19 (i) the effects of such biochar on—

20 (I) forest health and resiliency;

(II) carbon capture and sequestration, including increasing soil carbon in the short-term and long-term;

(III) productivity, reduced input costs, and water retention in agricultural practices;

4 (IV) soil and grassland health for
5 grazing activities, including grazing
6 activities on Federal land;

7 (V) environmental remediation
8 activities, including abandoned mine
9 land remediation; and

10 (VI) other ecosystem services of
11 biochar;

12 (ii) the efficacy of biochar as a co-
13 product of biofuels or in biochemicals; and

14 (iii) whether biochar can effectively be
15 used to produce any other technologically
16 and commercially viable outcome.

17 (B) COORDINATION.—The Secretaries
18 shall, to the maximum extent practicable, pro-
19 vide data, analysis, and other relevant informa-
20 tion collected under subparagraph (A) to eligi-
21 ble institutions conducting research and devel-
22 opment activities on biochar pursuant to receiv-
23 ing a grant under subsection (b).

24 (7) LIMITATION ON FUNDING FOR ESTAB-
25 LISHING BIOCHAR FACILITIES.—In the case of an el-

1 igible entity that enters in to a partnership to carry
2 out a biochar demonstration project under this sub-
3 section and seeks to establish a biochar facility
4 under such demonstration project, the Secretaries
5 may not provide funding to such eligible entity in an
6 amount greater than 35 percent of the capital cost
7 of establishing such biochar facility.

8 (b) BIOCHAR RESEARCH AND DEVELOPMENT GRANT

9 PROGRAM.—

10 (1) ESTABLISHMENT.—The Secretary of Agri-
11 culture shall establish an applied biochar research
12 and development grant program to make competitive
13 grants to eligible institutions to carry out the activi-
14 ties described in paragraph (3).

15 (2) APPLICATIONS.—To be eligible to receive a
16 grant under this subsection, an eligible entity shall
17 submit to the Secretary a proposal at such time, in
18 such manner, and containing such information as
19 the Secretary may require.

20 (3) USE OF FUNDS.—An eligible institution
21 that receives a grant under this subsection shall use
22 the grant funds to conduct applied research on—

23 (A) the effect of biochar on forest health
24 and resiliency, accounting for variations in
25 biochar, soil, climate, and other factors;

1 (B) the effect of biochar on soil health and
2 water retention, accounting for variations in
3 biochar, soil, climate, and other factors;

4 (C) the long-term carbon sequestration po-
5 tential of biochar;

6 (D) the best management practices of
7 biochar and biochar based-products to—
8 (i) maximize carbon sequestration
9 benefits; and
10 (ii) maximize the commercial viability
11 and application of such products in for-
12 estry, agriculture, environmental remedi-
13 ation, water quality improvement, and
14 other uses;

15 (E) the regional uses of biochar to increase
16 productivity and profitability, including—
17 (i) uses in agriculture and environ-
18 mental remediation; and
19 (ii) use as a co-product in fuel produc-
20 tion;

21 (F) new and innovative uses from biochar
22 byproducts; and
23 (G) opportunities to expand markets for
24 biochar and create jobs, particularly in rural
25 areas.

1 (c) REPORTS.—

2 (1) REPORT TO CONGRESS.—Not later than 2
3 years after the date of the enactment of this section,
4 the Secretaries shall submit a report to Congress
5 that—6 (A) includes policy and program rec-
7 ommendations to improve the widespread use of
8 biochar;9 (B) identifies the areas of research needed
10 to advance biochar commercialization; and11 (C) identifies barriers to further biochar
12 commercialization, including permitting and
13 siting considerations.

14 (2) PRESIDENT'S ANNUAL BUDGET REQUEST.—

15 Beginning 2 years after the date of the enactment
16 of this section and annually until the date described
17 in subsection (d), the Secretaries shall include in the
18 budget materials submitted to Congress in support
19 of the President's annual budget request (submitted
20 to Congress pursuant to section 1105 of title 31,
21 United States Code) for each fiscal year a report on
22 the status of the demonstration projects carried out
23 under subsection (a) and the research and develop-
24 ment grants carried out under subsection (b).

1 (d) SUNSET.—The authority to carry out this section
2 shall terminate on the date that is 10 years after the date
3 of the enactment of this section.

4 (e) DEFINITIONS.—In this section:

5 (1) BIOCHAR.—The term “biochar” means car-
6 bonized biomass produced by converting feedstock
7 through reductive thermal processing for non-fuel
8 uses.

9 (2) ELIGIBLE ENTITY.—The term “eligible enti-
10 ty” means—

11 (A) State, local, and Tribal governments;
12 (B) eligible institutions; and
13 (C) private, non-private, or cooperative en-
14 tities.

15 (3) ELIGIBLE INSTITUTION.—The term “eli-
16 gible institution” means land-grant colleges and uni-
17 versities, including institutions eligible for funding
18 under the—

19 (A) Act of July 2, 1862;
20 (B) Act of August 30, 1890, including
21 Tuskegee University;
22 (C) Public Law 87-788 (commonly known
23 as the “McIntire-Stennis Act of 1962”); or
24 (D) Equity in Educational Land-Grant
25 Status Act of 1994 (7 U.S.C. 301 note).

(B) the Secretary of Energy, acting through the Director of the Office of Science.

11 (f) AUTHORIZATION OF APPROPRIATIONS.—There is
12 authorized to be appropriated \$50,000,000 for each of fis-
13 cal years 2021 through 2023 to carry out this section.

14 SEC. 302. SUSTAINABLE BUILDING AND RESIDENCE CRED-

15 IT.

16 (a) IN GENERAL.—Subpart B of part IV of sub-
17 chapter A of chapter 1 of the Internal Revenue Code of
18 1986 is amended by adding at the end the following new
19 section:

20 "SEC. 30E. SUSTAINABLE BUILDING AND RESIDENCE CRED-

21 IT.

22 "(a) IN GENERAL.—There shall be allowed as a cred-
23 it against the tax imposed by this chapter for the taxable
24 year an amount equal to the sustainability percentage of—

1 “(1) the taxpayer’s purchase price of a qualifi-
2 fying building or residence, and

3 “(2) the taxpayer’s remodeling price of a build-
4 ing or structure described in subsection (c)(3)(B).

5 “(b) SUSTAINABILITY PERCENTAGE.—For purposes
6 of this section:

7 “(1) IN GENERAL.—

8 “(A) PURCHASE PRICE.—The sustainability
9 percentage with respect to the purchase
10 price of any qualifying building or residence
11 shall be a percentage equal to the lesser of—

12 “(i) the percentage by which the sus-
13 tainability score for such qualifying build-
14 ing or residence exceeds the average sus-
15 tainability score for the class to which such
16 building or residence belongs, or

17 “(ii) 25 percent.

18 “(B) REMODELING PRICE.—The sustainability
19 percentage with respect to the remod-
20 eling price of a building or structure shall be a
21 percentage equal to the lesser of—

22 “(i) the percentage by which, after re-
23 modeling, the sustainability score for such
24 building or structure exceeds the average

4 “(2) SUSTAINABILITY SCORING.—

17 “(B) FACTORS FOR SCORE.—Such score
18 shall at least take into account the following
19 factors:

1 “(iii) The amount of carbon retained
2 by the building, taking into account build-
3 ing construction materials and processes
4 and continuing use or disposal of carbon in
5 connection with the use of the building.

6 “(iv) The climate in which the build-
7 ing is located.

8 “(C) AVERAGE SUSTAINABILITY.—The
9 classes for which average sustainability scores
10 are determined shall at least take into account
11 the following distinguishing characteristics:

12 “(i) Residential and commercial build-
13 ings.

14 “(ii) Multi-family and single-family
15 residential.

16 “(iii) The size, volume, and intended
17 use of the building.

18 “(D) UPDATES.—The Secretary (in con-
19 sultation with the Secretary of Energy) shall
20 update the sustainability scoring and the sus-
21 tainability score averages established under sub-
22 paragraph (A) not less frequently than once
23 every 5 calendar years.

24 “(E) ADVISORY BOARD.—The Secretary
25 shall establish a volunteer board that advises

1 the Secretary on the sustainability score devel-
2 opment and updates. Such board shall be ap-
3 pointed at the discretion of the Secretary and
4 shall include experts in relevant fields, including
5 energy, construction, transportation, agri-
6 culture, and labor.

7 “(c) OTHER DEFINITIONS AND SPECIAL RULES.—

8 “(1) PURCHASE PRICE.—The term ‘purchase
9 price’ means so much of the adjusted basis of the
10 property as is not attributable to land.

11 “(2) REMODELING PRICE.—The term ‘remod-
12 eling price’ means the price of remodeling or expan-
13 sion of a property, as defined by the Secretary after
14 consultation with the Secretary of Energy.

15 “(3) QUALIFYING BUILDING OR RESIDENCE.—
16 The term ‘qualifying building or residence’ means,
17 with respect to a taxpayer—

18 “(A) any dwelling unit first used as a resi-
19 dence by the taxpayer, or

20 “(B) any other building or structure of a
21 character subject to the allowance for deprecia-
22 tion and first placed in service by the taxpayer.

23 “(4) CONSTRUCTION.—Any qualifying building
24 or residence constructed by the taxpayer shall be
25 treated as purchased by the taxpayer on the date the

1 taxpayer first occupies the residence, or places such
2 building in service, as the case may be.

3 **“(5) TRANSFER OF CREDIT.—**

4 **“(A) IN GENERAL.—**If a taxpayer elects
5 the application of this paragraph for any tax-
6 able year, the amount of credit determined
7 under this section for such year which would
8 (but for this paragraph) be allowable to the tax-
9 payer shall be allowable to the person des-
10 gnated by the taxpayer. The person so des-
11 gnated shall be treated as the taxpayer for pur-
12 poses of this title.

13 **“(B) TREATMENT OF AMOUNTS PAID FOR**
14 **ASSIGNMENT.—**If any amount is paid to the
15 person who assigns the credit determined under
16 this section, then no portion of such amount
17 shall be includable in such person's gross in-
18 come.

19 **“(6) BASIS ADJUSTMENT.—**For purposes of
20 this subtitle, if a credit is allowed under this section
21 with respect to any qualified building or residence,
22 the basis of such building or residence shall be re-
23 duced by the amount of the credit so allowed.

24 **“(7) APPLICATION WITHOUT CREDITS.—**

1 “(A) BUSINESS CREDIT TREATED AS PART
2 OF GENERAL BUSINESS CREDIT.—So much of
3 the credit which would be allowed under sub-
4 section (a) for any taxable year (determined
5 without regard to this paragraph) that is attrib-
6 utable to property of a character subject to an
7 allowance for depreciation shall be treated as a
8 credit listed in section 38(b) for such taxable
9 year (and not allowed under subsection (a)).

10 “(B) PERSONAL CREDIT.—For purposes of
11 this title, the credit allowed under subsection
12 (a) for any taxable year (determined after ap-
13 plication of subparagraph (A)) shall be treated
14 as a credit allowable under subpart A for such
15 taxable year.

16 “(8) CARBON STORAGE CERTIFICATION.—
17 Under the certification process established under
18 subsection (b)(2)(A), the Secretaries shall addition-
19 ally establish a process for certifying to the taxpayer
20 the amount of carbon dioxide stored by a building or
21 residence as determined under (b)(2)(B)(iii).”.

22 (b) CLERICAL AMENDMENT.—The table of sections
23 for subpart B of part IV of subchapter A of chapter 1
24 of such Code is amended by adding at the end the fol-
25 lowing new item:

“Sec. 30E. Sustainable building and residence credit.”.

1 (c) EFFECTIVE DATE.—The amendments made by
2 this section shall apply to property purchased after De-
3 cember 31, 2020.

4 SEC. 303. CLARIFICATION OF RESEARCH AND DEVELOP-
5 MENT PROGRAM FOR CELLULOSIC BIO-
6 CHEMICAL AND BIOPLASTICS.

7 (a) IN GENERAL.—The Secretary, acting through the
8 Research and Development deputy area and the State and
9 Private Forestry deputy area of the Forest Service, shall
10 conduct performance-driven research and development and
11 provide for education and technical assistance for the pur-
12 pose of facilitating the use of cellulosic biochemical and
13 bioplastics products in the United States.

14 (b) ACTIVITIES.—In carrying out subsection (a), the
15 Secretary shall—

16 (1) after collaboration with the forest products
17 industry, conservation organizations, and institutions
18 of higher education, conduct research and develop-
19 ment and provide for education and technical assist-
20 ance at the Forest Products Laboratory or through
21 the State and Private Forestry deputy area that
22 meets measurable performance goals for the achieve-
23 ment of the priorities listed in subsection (c); and

24 (2) after coordination and collaboration with
25 the entities referred to in paragraph (1), make com-

1 petitive grants to institutions of higher education for
2 such institutions to conduct research and develop-
3 ment and carry out educational programs and pro-
4 vide technical assistance.

5 (c) PRIORITIES.—In awarding grants under sub-
6 section (b)(2), the Secretary shall give priority to applica-
7 tions from institutions of higher education proposing
8 projects—

9 (1) to address ways to improve the commer-
10 cialization of cellulosic biochemical and bioplastics
11 products;

12 (2) for the conduct of applied research, includ-
13 ing projects designed—

14 (A) to bring products from benchtop to
15 production scale; and

16 (B) for end-of-life reuse, recycling, and dis-
17 posal of the project;

18 (3) which, based upon the lifecycle analysis of
19 forest carbon stock developed under section 105(c),
20 will lead to an increase in forest carbon stock
21 through the extraction of raw materials through the
22 manufacture of biochemical and bioplastics products;
23 or

24 (4) to address one or more other research areas
25 identified by the Secretary, in consultation with con-

1 servation organizations, institutions of higher edu-
2 cation, and the forest products industry.

3 (d) TIMEFRAME.—To the maximum extent prac-
4 ticable, the measurable performance goals for the research
5 and development, education, and technical assistance
6 under subsection (a) shall be achievable within 5 years.

7 (e) DEFINITIONS.—In this section:

8 (1) CELLULOSIC BIOCHEMICAL PRODUCT.—The
9 term “cellulosic biochemical product” means any
10 biochemical, including bioethanol and its derivatives,
11 that is derived from wood or plant cellulose fiber.

12 (2) CELLULOSIC BIOPLASTICS PRODUCT.—The
13 term “cellulosic bioplastics product” means any bio-
14 plastic that is derived from wood or plant cellulose
15 fiber.

16 (3) INSTITUTION OF HIGHER EDUCATION.—The
17 term “institution of higher education” has the
18 meaning given such term in of sections 101 and 102
19 of the Higher Education Act of 1965 (20 U.S.C.
20 1001 and 1002).

21 **SEC. 304. TRIBAL AND ALASKA NATIVE BIOMASS DEM-**
22 **ONSTRATION PROJECT EXTENSION.**

23 (a) TRIBAL BIOMASS.—Section 3(a) of the Tribal
24 Forest Protection Act of 2004 (25 U.S.C. 3104 note) is

1 amended by striking “fiscal years 2017 through 2021”
2 and inserting “fiscal years 2021 through 2025”.

3 (b) ALASKA NATIVE BIOMASS.—Section 202(c)(2) of
4 the Indian Tribal Energy Development and Self-Deter-
5 mination Act Amendments of 2017 (25 U.S.C. 3104 note)
6 is amended by striking “fiscal years 2017 through 2021”
7 and inserting “fiscal years 2021 through 2025”.