

**FOREST AND RANGELAND RENEWABLE RESOURCES RESEARCH  
ACT OF 1978**

*An Act*

*Act of June 30, 1978 (P.L. 95-307, 92 Stat. 353, as amended)*

*Note: The 1978 Research Act replaced the McSweeney-McNary Act of 1928(see Sec. 8) and has been amended by:*

**Forestry Energy Research Act of 1978**

Pub. L., 96-294, title II, § 254, June 30, 1980, 94 Stat. 707 (Title 16, § 1642)

**Pollution Research Act of 1988**

Pub.L., 100-521, § 3, Oct. 24, 1988, 102 Stat. 2601 (Title 16, § 1642)

**Foreign Operations, Export Financing, And Related Programs Appropriations Act, 1991**

Pub.L., 101-513, Title VI § 607(a), Nov. 5, 1990, 104 Stat. 2072 (Title 16 §§ 1641, 1643)

**Food, Agriculture, Conservation, and Trade Act of 1990 (Farm Bill)**

Pub.L., 101-624, Title XII, §§ (1241(a), (b), 1252, 104.Stat 3544, 3553 (Title 16 §§ 1642, 1648, 1649)

**[Agricultural Research, Extension, and Education Reform Act of 1998 \(Farm Bill\)](#)**

[June 13, 1998](#)

SHORT TITLE

SEC.1. This Act may be cited as the “Forest and Rangeland Renewable Resources Research Act of 1978” (16 U.S.C. 1640(note))

PURPOSE

SEC.2. (a) Findings.--Congress finds the following:

- (1) Forests and rangeland, and the resources of forests and rangeland, are of strategic economic and ecological importance to the United States, and the Federal Government has an important and substantial role in ensuring the continued health, productivity, and sustainability of the forests and rangelands of the United States.
- (2) Over 75 percent of the productive commercial forest land in the United States is privately owned, with some 60 percent owned by small nonindustrial private owners. These 10,000,000 nonindustrial private owners are critical to providing both commodity and noncommodity values to the citizens of the United States.
- (3) The National Forest System manages only 17 percent of the commercial timberland of the United States, with over half of the standing softwoods inventory located on that land. Dramatic changes in Federal agency policy during the early 1990's have significantly curtailed the management of this vast timber resource, causing abrupt shifts in the supply of timber from public to private ownership. As a result of these shifts in supply, some 60 percent of total wood production in the United States is now coming from private forest land in the southern United States.
- (4) At the same time that pressures are building for the removal of even more land from commercial production, the Federal Government is significantly reducing its commitment to productivity-related research regarding forests and rangeland, which is critically needed by the private sector for the sustained management of remaining available timber and forage resources for the benefit of all species.
- (5) Uncertainty over the availability of the United States timber supply, increasing regulatory burdens, and the lack of Federal Government support for research is causing domestic wood and paper producers to move outside the United States to find reliable sources of wood supplies, which in turn results in a worsening of the United States trade balance, the loss of employment and infrastructure investments, and an increased risk of infestations of exotic pests and diseases from imported wood products.

(6) Wood and paper producers in the United States are being challenged not only by shifts in Federal Government policy, but also by international competition from tropical countries where growth rates of trees far exceed those in the United States. Wood production per acre will need to quadruple from 1996 levels for the United States forestry sector to remain internationally competitive on an ever decreasing forest land base.

(7) Better and more frequent forest inventorying and analysis is necessary to identify productivity-related forestry research needs and to provide forest managers with the current data necessary to make timely and effective management decisions.

(b) High Priority Forestry and Rangeland Research and Education.--Section 3 of the Forest and Rangeland Renewable Resources Research Act of 1978 (16 U.S.C. 1642) is amended by striking subsection (d) and inserting the following:

(c) It is the purpose of the Act to authorize the Secretary to expand research activities to encompass international forestry and natural resource issues on a global scale.

(d) High Priority Forestry and Rangeland Research and Education.--

(1) In general.--The Secretary may conduct, support, and cooperate in forestry and rangeland research and education that is of the highest priority to the United States and to users of public and private forest land and rangeland in the United States.

(2) Priorities.--The research and education priorities include the following:

- (A) The biology of forest organisms and rangeland organisms.
- (B) Functional characteristics and cost-effective management of forest and rangeland ecosystems.
- (C) Interactions between humans and forests and rangeland.
- (D) Wood and forage as a raw material.
- (E) International trade, competition, and cooperation.

(3) Northeastern states research cooperative.--The Secretary may cooperate with the northeastern States of New Hampshire, New York, Maine, and Vermont, land-grant colleges and universities of those States, natural resources and forestry schools of those States, other Federal agencies, and other interested persons in those States to coordinate and improve ecological and economic research relating to agricultural research, extension, and education, including--

- (A) research on ecosystem health, forest management, product development, economics, and related fields;
- (B) research to assist those States and landowners in those States to achieve sustainable forest management;
- (C) technology transfer to the wood products industry of technologies that promote efficient processing, pollution prevention, and energy conservation;
- (D) dissemination of existing and new information to landowners, public and private resource managers, State forest citizen advisory committees, and the general public through professional associations, publications, and other information clearinghouse activities; and
- (E) analysis of strategies for the protection of areas of outstanding ecological significance or high biological diversity, and strategies for the provision of important recreational opportunities and traditional uses, including strategies for areas identified through State land conservation planning processes."

## RESEARCH AUTHORIZATION

SEC. 3. (a) The Secretary is authorized to conduct, support, and investigate experiments tests, and other activities the Secretary deems necessary to obtain, analyze, develop, demonstrate, and disseminate scientific information about protecting, managing, and utilizing forest and rangeland renewable resources in rural, suburban, and urban areas. The activities conducted, supported, or cooperated in by the Secretary under this Act but not be limited to, the five major areas of renewable resource research identified in Paragraphs (1) through (5) of this subsection.

- (1) Renewable resource management research shall include, as appropriate, research activities related to managing, reproducing planting, and growing vegetation on forests and rangelands for timber, forage,

water, fish and wildlife, esthetics, recreation, wilderness, energy production, activities related to energy conservation, and other purposes including activities for encouraging improved reforestation of forest lands from which timber has been harvested; determining the role of forest and rangeland management in the productive use of forests and rangelands, in diversified agriculture, and in mining, transportation, and other industries; developing alternatives for the management of forests and rangelands that will make possible the most effective use of their multiple products and services.

- (2) Renewable resource environmental research shall include, as appropriate, research activities related to understanding and managing surface and subsurface water flow, preventing and controlling erosion, and restoring damaged or disturbed soils on forest and rangeland watersheds; maintaining and improving wildlife and fish habitats; managing vegetation to reduce air and water pollution, provide amenities, and for other purposes; and understanding, predicting, and modifying weather, climatic and other environmental conditions that affect the protection and management of forests and rangelands.
  - (3) Renewable resource protection research shall include, as appropriate, research activities related to protecting vegetation and other forest and rangeland resources, including threatened and endangered flora and fauna, as well as wood and wood products in storage or use, from fires, insects, diseases, noxious plants, animals, air pollutants, and other agents through biological, chemical, and mechanical control methods and systems; and protecting people, natural resources, and property from fires in rural areas.
  - (4) Renewable resource utilization research shall include, as appropriate, research activities related to harvesting, transporting, processing, marketing, distributing, and utilizing wood and other materials derived from forest and rangeland renewable resources; recycling and fully utilizing wood fiber; producing and conserving energy; and testing forest products, including necessary field work associated therewith.
  - (5) Renewable resource assessment research shall include, as appropriate, research activities related to developing and applying scientific knowledge and technology in support of the survey and analysis of forest and rangeland renewable resources described in subsection (b) of this section.
- (b)(1) To ensure the availability of adequate data and scientific information for development of the periodic Renewable Resource Assessment provided for in section 3 of the Forest and Rangeland Renewable Planning Act of 1974, the Secretary of Agriculture shall make and keep current a comprehensive survey and analysis of the present and prospective conditions of and requirements for renewable resources of the forests and rangelands of the United States and of the supplies of such renewable resources, including a determination of the present and potential productivity of the land, and of such other facts as may be necessary and useful in the determination of ways and means needed to balance the demand for and supply of these renewable resources, benefits, and uses in meeting the needs of the people of the United States. The Secretary shall conduct the survey and analysis under such plans as the Secretary may determine to be fair and equitable and cooperate with appropriate officials of each State and, either through them or directly, with private or other entities.
- (2) In implementing this subsection, the Secretary is authorized to develop and implement improved methods of survey and analysis of forest inventory information, for which purposes there are hereby authorized to be appropriated annually \$10,000,000.
- (c)(1) The Secretary, acting through the United States Forest Service, shall establish not later than 180 days after the date of the enactment of this subsection a 10-year program (hereinafter in this subsection referred to as the 'Program') to—
- (A) increase the frequency of forest inventories in matters that relate to atmospheric pollution and conduct such surveys as are necessary to monitor long-term trends in the health and productivity of domestic forest ecosystems;
  - (B) determine the scope of the decline in the health and productivity of domestic forest ecosystems;

- (C) accelerate and expand existing research efforts (including basic forest ecosystem research) to evaluate the effects of atmospheric pollutants on forest ecosystems and their role in the decline in domestic forest health and productivity;
  - (D) study the relationship between atmospheric pollution and other climatological, chemical, physical, and biological factors that may affect the health and productivity of domestic forest ecosystems;
  - (E) develop recommendations for solving or mitigating problems related to the effects of atmospheric pollution on the health and productivity of domestic forest ecosystems;
  - (F) foster cooperation among Federal, State, and private researchers and encourage the exchange of scientific information on the effects of atmospheric pollutants on forest ecosystems among the United States, Canada, European nations, and other nations;
  - (G) support the long-term funding of research programs and productivity of domestic forest ecosystems and the effects of atmospheric pollutants on the health and productivity of domestic forest ecosystems; and
  - (H) enlarge the Eastern Hardwood Cooperative by devoting additional resources to field analysis of the response of hardwood species to atmospheric pollution, and other factors that may affect the health and productivity of these ecosystems.
- (2) The Secretary shall establish a committee to advise the Secretary in developing and carrying out the Program, which shall be composed of scientists with training and experience in various disciplines, including atmospheric, ecological, and biological sciences. Such scientists shall be selected from among individuals who are actively performing research for Federal or State agencies or for private industries, institutions, or organizations.
- (3) The Secretary shall coordinate the Program with existing research efforts of Federal and State agencies and private industries, institutions, or organizations.
- (4) The Secretary shall submit to the President and to Congress the following reports:
- (A) Not less than 30 days before establishing the Program, the Secretary shall submit an initial program report—
    - (i) discussing existing information about declining health and productivity of forest ecosystems on public and private lands in North America and Europe;
    - (ii) outlining the findings and status of all current research and monitoring efforts in North America and Europe on the causes and effects of atmospheric pollution on the health and productivity of forest ecosystems;
    - (iii) describing the Program; and
    - (iv) estimating the cost of implementing the Program for each fiscal year of its duration.
  - (B) Not later than January 15, 1990, and January 15 of each year thereafter, during which the Program is in operation following the year in which the initial program report is submitted, the Secretary shall submit an annual report—
    - (i) updating information about declining health and productivity of forest ecosystems on public and private North America and Europe;
    - (ii) updating the findings and status of all current research and monitoring efforts in North America and Europe on the causes and effects of atmospheric pollution on the health and productivity of forest ecosystems, including efforts conducted under the Program;
    - (iii) recommending additional research and monitoring efforts to be undertaken under the Program to determine the effects of atmospheric pollution on the health and productivity of domestic forest ecosystems; and
    - (iv) recommending methods for solving or mitigating problems stemming from the effects of atmospheric pollution on the health and productivity of domestic forest ecosystems.
  - (C) Not later than 10 years after the date on which the initial program report is submitted, the Secretary shall submit a final report—
    - (i) reviewing existing information about declining health and productivity of forest ecosystems on public and private lands in North America and Europe;

- (ii) reviewing the nature and findings of all research and monitoring efforts conducted under the Program and any other relevant research and monitoring efforts related to the effects of atmospheric pollution on forest ecosystem; and
  - (iii) making final recommendations for solving or mitigating problems stemming from the effects of atmospheric pollution on the health and productivity of domestic forest ecosystems.
- (d) The Secretary is authorized to conduct, support, and cooperate in studies and other activities the Secretary deems necessary
  - (1) evaluate renewable resource management problems associated with urban-forest interface;
  - (2) assess effects of changes in Federal revenue codes on private forest management and investment; and
  - (3) develop improved delivery systems for information and technical assistance provided to private landowners.
- (e) Forest Inventory and Analysis.--
  - (1) Program required.--In compliance with other applicable provisions of law, the Secretary shall establish a program to inventory and analyze, in a timely manner, public and private forests and their resources in the United States.
  - (2) Annual state inventory.--
    - (A) In general.--Not later than the end of each full fiscal year beginning after the date of enactment of this subsection, the Secretary shall prepare for each State, in cooperation with the State forester for the State, an inventory of forests and their resources in the State.
    - (B) Sample plots.--For purposes of preparing the inventory for a State, the Secretary shall measure annually 20 percent of all sample plots that are included in the inventory program for that State.
    - (C) Compilation of inventory.--On completion of the inventory for a year, the Secretary shall make available to the public a compilation of all data collected for that year from measurements of sample plots as well as any analysis made of the samples.
  - (3) 5 -year reports.--Not more often than every 5 full fiscal years after the date of enactment of this subsection, the Secretary shall prepare, publish, and make available to the public a report, prepared in cooperation with State foresters, that--
    - (A) contains a description of each State inventory of forests and their resources, incorporating all sample plot measurements conducted during the 5 years covered by the report;
    - (B) displays and analyzes on a nationwide basis the results of the annual reports required by paragraph (2); and
    - (C) contains an analysis of forest health conditions and trends over the previous 2 decades, with an emphasis on such conditions and trends during the period subsequent to the immediately preceding report under this paragraph.
  - (4) National standards and definitions.--To ensure uniform and consistent data collection for all forest land that is publicly or privately owned and for each State, the Secretary shall develop, in consultation with State foresters and Federal land management agencies not under the jurisdiction of the Secretary, and publish national standards and definitions to be applied in inventorying and analyzing forests and their resources under this subsection. The standards shall include a core set of variables to be measured on all sample plots under paragraph (2) and a standard set of tables to be included in the reports under paragraph (3).
  - (5) Protection for private property rights.--The Secretary shall obtain authorization from property owners prior to collecting data from sample plots located on private property pursuant to paragraphs (2) and (3).
  - (6) Strategic plan.--Not later than 180 days after the date of enactment of this subsection, the Secretary shall prepare and submit to Congress a strategic plan to implement and carry out this subsection, including the annual updates required by paragraph (2) and the reports required by paragraph (3), that shall describe in detail--
    - (A) the financial resources required to implement and carry out this subsection, including the identification of any resources required in excess of the amounts provided for forest inventorying and analysis in recent appropriations Acts;
    - (B) the personnel necessary to implement and carry out this subsection, including any personnel in addition to personnel currently performing inventorying and analysis functions;

(C) the organization and procedures necessary to implement and carry out this subsection, including proposed coordination with Federal land management agencies and State foresters; (D) the schedules for annual sample plot measurements in each State inventory required by paragraph (2) within the first 5-year interval after the date of enactment of this subsection; (E) the core set of variables to be measured in each sample plot under paragraph (2) and the standard set of tables to be used in each State and national report under paragraph (3); and (F) the process for employing, in coordination with the Secretary of Energy and the Administrator of the National Aeronautics and Space Administration, remote sensing, global positioning systems, and other advanced technologies to carry out this subsection, and the subsequent use of the technologies.

#### RESEARCH FACILITIES AND COOPERATION

Sec.4. (a) In implementing this Act, the Secretary is authorized to establish and maintain a system of experiment stations, research laboratories, experimental areas, and other forest and rangeland research facilities. The Secretary is authorized, with donated or appropriated funds, to acquire by lease, donation, purchase, exchange, or otherwise, land or interests in land within the United States needed to implement this Act, to make necessary expenditures to examine, appraise, and survey such property, and to do all things incident to perfecting title thereto in the United States.

- (b) In implementing this Act, the Secretary is authorized to accept, hold, and administer gifts, donations, and bequests of money, real property or personal property from any source not otherwise provided by law and to use such gifts, donations, and bequests to establish or operate any forest and rangeland research facility within the United States, or (2) perform any forest and rangeland renewable resource research activity authorized by this Act. Such gifts, donations, and bequests, or the proceeds thereof, and money appropriated for these purposes shall be deposited in the Treasury in a special fund. At the request of the Secretary, the Secretary of the Treasury may invest or reinvest any money in the fund that in the opinion of the Secretary is not needed for current operations. Such investments shall be in public debt securities with maturities suitable for the needs of the fund and bearing interest at prevailing market rates. There are hereby authorized to be expended from such fund such amounts as may be specified in annual appropriation Acts, which shall remain available until expended.
- (c) In implementing this Act, the Secretary may cooperate with international, Federal, State, and other governmental agencies, with public or private agencies, institutions, universities, and organizations, and with businesses and individuals in the United States and in other countries. The Secretary may receive money and other contributions from cooperators under such conditions as the Secretary may prescribe. Any money contributions received under this subsection shall be credited to the applicable appropriation or fund to be used for the same purposes and shall remain available until expended as the Secretary may direct for use in conducting research activities authorized by this Act and in making refunds to contributors.
- (d) The paragraph headed "Forest research:" under the center heading "FOREST SERVICE" and the center subheading "SALARIES AND EXPENSES" of title I of the Department of Agriculture Appropriation Act, 1952 (65 Stat. 233; 16 U.S.C. 581a—1), . is amended by inserting a period immediately after the figure "\$5,108 603" and by striking all that follows in that paragraph.

#### COMPETITIVE RESEARCH GRANTS

SEC. 5. (a) Competitive Grant Authority.-- In addition to any grants made under other laws, the Secretary is authorized to make competitive grants that will further research activities authorized by this Act to Federal, State, and other governmental agencies, public or private agencies, institutions, universities, and organizations, and businesses and individuals in the United States. In making these grants, the Secretary shall emphasize basic and applied research activities that are important to achieving the purposes of this Act, and shall obtain, through review by qualified scientists and other methods, participation in research activities by scientists throughout the United States who have expertise in matters related to forest and rangeland renewable resources. Grants under this section shall be made at the discretion of the Secretary

under whatever conditions the Secretary may prescribe, after publicly soliciting research proposals, allowing sufficient time for submission of the proposals, and considering qualitative, quantitative, financial, administrative, and other factors that the Secretary deems important in judging, comparing, and accepting the proposals. The Secretary may reject any or all proposals received under this section if the Secretary determines that it is in the public interest to do so.

- (b) **Emphasis on Certain High Priority Forestry Research.**--The Secretary may use up to 5 percent of the amounts made available for research under section 3 to make competitive grants regarding forestry research in the high priority research areas identified under section 3(d).
- (c) **Emphasis on Certain High Priority Rangeland Research.**--The Secretary may use up to 5 percent of the amounts made available for research under section 3 to make competitive grants regarding rangeland research in the high priority research areas identified under section 3(d).
- (d) **Priorities.**--In making grants under subsections (b) and (c), the Secretary shall give priority to research proposals under which--
  - (1) the proposed research will be collaborative research organized through a center of scientific excellence;
  - (2) the applicant agrees to provide matching funds (in the form of direct funding or in-kind support) in an amount equal to not less than 50 percent of the grant amount; and
  - (3) the proposed research will be conducted as part of an existing private and public partnership or cooperative research effort and involves several interested research partners.

#### GENERAL RESEARCH PROVISIONS

- SEC. 6. (a) The Secretary may make funds available to cooperators and grantees under this Act without regard to the provisions of section 3648 of the Revised Statutes (31 U.S.C. 529), which prohibits advances of public money.
- (b) To avoid duplication, the Secretary shall coordinate cooperative aid and grants under this Act with cooperative aid and grants the Secretary makes under any other authority.
  - (c) The Secretary shall use the authorities and means available to the Secretary to disseminate the knowledge and technology developed from research activities conducted under or supported by this Act. In meeting this responsibility, the Secretary shall cooperate; as the Secretary deems appropriate, with the entities identified in subsection (d) (3) of this section and with others.
  - (d) In implementing this Act, the Secretary; as the Secretary deems appropriate and practical, shall—
    - (1) use, and encourage cooperators and grantees to use, the best available scientific skills from a variety of disciplines within and outside the fields of agriculture and forestry;
    - (2) seek, and encourage cooperators and grantees to seek, a proper mixture of short-term and long-term research and a proper mixture of basic and applied research;
    - (3) avoid unnecessary duplication and coordinate activities under this section among agencies of the Department of Agriculture and with other affected Federal departments and agencies, State Agriculture experiment stations, State extension services, State forester's or equivalent State officials, forestry schools, and private research organizations; and
    - (4) encourage the development, employment, retention, and exchange of qualified scientists and other specialists through postgraduate, postdoctoral, and other training, national and international exchange of scientists, and other incentives and programs to improve the quality of forest and rangeland renewable resources research.
  - (e) This Act shall be construed as supplementing all other laws relating to the Department of Agriculture and shall not be construed as limiting or repealing any existing law or authority of the Secretary except as specifically cited in this Act.
  - (f) For the purposes of this Act, the terms "United States" and "State" shall include each of the several States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands of the United States, the Commonwealth of the Northern Mariana Islands, the Trust Territory of the Pacific Islands, and the territories and possessions of the United States.

## RESEARCH APPROPRIATIONS AUTHORIZATION

SEC. 7. There are hereby authorized to be appropriated annually such sums as may be needed to implement this Act. Funds appropriated under this Act shall remain available until expended.

### REPEAL OF MC SWEENEY-MC NARY ACT; REGULATIONS AND COORDINATION; APPROPRIATIONS

SEC. 8. (a) The Act of May 22, 1928, known as the McSweeney-McNary Act (45 Stat. 699—702, as amended; 16 U.S.C. 581, 581a, 581b-581i), is hereby repealed.

- (b) Contracts and cooperative and other agreements under the McSweeney-McNary Act shall remain in effect until revoked or amended by their own terms or under other provisions of law.
- (c) The Secretary is authorized to issue such rules and regulations the Secretary deems necessary to implement the provisions of this Act and to coordinate this Act with title XIV of the Food and Agriculture Act of 1977.
- (d) Funds appropriated under the authority of the McSweeney-McNary Act shall be available for expenditure for the programs authorized under this Act.

### SEC. 9. RECYCLING RESEARCH.

- (a) FINDINGS.—Congress finds that—
  - (1) the United States is amassing vast amounts of solid wastes, which is presenting an increasing problem for municipalities in locating suitable disposal sites;
  - (2) a large proportion of these wastes consists of paper and other wood wastes;
  - (3) less than one-third of these paper and wood wastes are recycled;
  - (4) additional recycling would result in reduced solid waste landfill disposal and would contribute to a reduced rate of removal of standing timber from forest lands; and
  - (5) additional research is needed to develop technological advances to address barriers to increased recycling of paper and wood wastes and utilization of products consisting of recycled materials.
- (b) RECYCLING RESEARCH PROGRAM.—The Secretary is authorized to conduct, support, and cooperate in an expanded wood fiber recycling research program, including the acquisition of necessary equipment. The Secretary shall seek to ensure that the program includes the cooperation and support of private industry and that program goals include the application of such research to industry and consumer needs.
- (c) AUTHORIZATION OF APPROPRIATIONS.—In addition to any other funds made available to implement section 3 of this Act, for the 5 year period beginning on October 1, 1990, there are authorized to be appropriated annually \$10,000,000 to implement this section.

### SEC. 10. FORESTRY STUDENT GRANT PROGRAM.

- (a) ESTABLISHMENT.—The Secretary shall establish a program, to be known as the 'Forestry Student Grant Program' (hereafter referred to in this section as the 'Program'), to provide assistance to expand the professional education of forestry, natural resources, and environmental scientists.
- (b) STUDENT GRANTS.—Under the Program the Secretary shall provide assistance for the establishment of a competitive grant fellowship program to assist graduate, and undergraduate minority and female, students attending institutions having programs in forestry and natural resources.



- (c) ELIGIBILITY.—The Secretary shall ensure that students concentrating in the following studies shall be eligible for assistance under subsection (b):
- (1) Forestry.
  - (2) Biology and forest organisms.
  - (3) Ecosystem function and management.
  - (4) Human-forest interaction.
  - (5) International trade, competition, and cooperation.
  - (6) Wood as a raw material.
  - (7) Economics and policy.
- (d) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated such sums as may be necessary to carry out this section.

EFFECTIVE DATE

(Original) SEC. 9. The provisions of this Act shall become effective October 1, 1978  
Approved June 30, 1978.