9.	<b>FOREST</b>	AND	RANGELAND	RENEWABLE	RESOURCES	
	RESEARCH ACT OF 1978					

[As amended through December 31, 1996, P.L. 104–333]

# 9. FOREST AND RANGELAND RENEWABLE RESOURCES RESEARCH ACT OF 1978

(Public Law 95-307; Approved June 30, 1978)

AN ACT To direct the Secretary of Agriculture to carry out forest and rangeland renewable resources research, and for other purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That [16 U.S.C. 1641 note] this Act may be cited as the "Forest and Rangeland Renewable Resources Research Act of 1978".

SEC. 2. [16 U.S.C. 1641] (a)(1) Congress finds that scientific discoveries and technological advances must be made and applied to support the protection, management, and utilization of the Nation's renewable resources. It is the purpose of this Act to authorize the Secretary of Agriculture (hereinafter in this Act referred to as the "Secretary") to implement a comprehensive program of forest and rangeland renewable resources research and dissemination of the findings of such research.

(2) Congress further finds that the forest and rangeland renewable resources of the world are threatened by deforestation due to conversion to agriculture of lands better suited to other uses, overgrazing, over-harvesting, and other causes that pose a direct adverse threat to people, the global environment, and the world econ-

omy.

(b) This Act shall be deemed to complement the policies and direction set forth in the Forest and Rangeland Renewable Resources Planning Act of 1974.

(c) It is the purpose of this Act to authorize the Secretary to expand research activities to encompass international forestry and

natural resource issues on a global scale.

# RESEARCH AUTHORIZATION

SEC. 3. [16 U.S.C. 1642] (a) The Secretary is authorized to conduct, support, and cooperate in investigations, 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 shall include, 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, esthet-

ics, 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; and 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 environment research shall include a 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, 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 fieldwork 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 Resources 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 Untied 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 to balance the demand for and supply of these renewable resources, benefits, and uses in meeting the needs of the people of the Untied State. 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 Services, 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 atmosheric pollutants on forest ecosystems among the United States, Canada, European nations, and other nations;

(G) support the long-term funding of research programs and related efforts to determine the causes of declines in the health 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 indus-

tries, 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 with 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

lands in 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 Programs.

(iii) recommending additional research and monitoring efforts to be undertaken under the Program to determine the effects of atmospheric pollution on the health and pro-

ductivity 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 to—

- (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.

### RESEARCH FACILITIES AND COOPERATION

- SEC. 4. [16 U.S.C. 1643] (a) In implementing this Act, the Secretary is authorized to establish and maintain a system of experiment stations, research laboratories, experimental area, 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 prohibited by law and to use such gifts, donations, and bequests to (1) 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 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. [16 U.S.C. 1644] 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.

# GENERAL RESEARCH PROVISIONS

SEC. 6. [16 U.S.C. 1645] (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 agricultural experiment stations, State extension services, State foresters 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. [16 U.S.C. 1646] 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 MCSWENNEY-MCNARY ACT; REGULATIONS AND COORDINATION; APPROPRIATIONS

SEC. 8. [16 U.S.C. 1647] (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 as 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 au-

thorized under this Act.

### SEC. 9. [16 U.S.C. 1648] 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. [16 U.S.C. 1649] 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.