

is held invalid, the validity of the remainder of this subchapter and of the application of such provision to other persons and circumstances shall not be affected thereby.

(Pub. L. 93-378, §16, as added Pub. L. 94-588, §11, Oct. 22, 1976, 90 Stat. 2958.)

SUBCHAPTER II—RESEARCH

§ 1641. Findings and purpose

(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 rangeland 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 non-commodity 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 lev-

els 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) Relationship to other law

This subchapter shall be deemed to complement the policies and direction set forth in the Forest and Rangeland Renewable Resources Planning Act of 1974 [16 U.S.C. 1600 et seq.].

(c) Purpose

It is the purpose of this subchapter to authorize the Secretary to expand research activities to encompass international forestry and natural resource issues on a global scale.

(Pub. L. 95-307, §2, June 30, 1978, 92 Stat. 353; Pub. L. 101-513, title VI, §611(a)(1), formerly §607(a)(1), Nov. 5, 1990, 104 Stat. 2072, renumbered §611(a)(1), Pub. L. 102-574, §2(a)(1), Oct. 29, 1992, 106 Stat. 4593; Pub. L. 105-185, title II, §253(a), June 23, 1998, 112 Stat. 558.)

REFERENCES IN TEXT

This subchapter, referred to in text, was in the original "this Act", meaning Pub. L. 95-307, June 2, 1978, 92 Stat. 353, as amended, known as the Forest and Rangeland Renewable Resources Research Act of 1978, which enacted this subchapter, repealed sections 581 to 581i of this title, and enacted provisions set out as a note under section 1641 of this title. For complete classification of this Act to the Code, see Short Title note set out under section 1600 of this title and Tables.

The Forest and Rangeland Renewable Resources Planning Act of 1974, referred to in subsec. (b), is Pub. L. 93-378, Aug. 17, 1974, 88 Stat. 476, as amended, which is classified generally to subchapter I (§1600 et seq.) of this chapter. For complete classification of this Act to the Code, see Short Title note set out under section 1600 of this title and Tables.

AMENDMENTS

1998—Pub. L. 105-185 inserted section catchline, added subsec. (a), and struck out former subsec. (a) which read as follows:

"(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 subchapter to authorize the Secretary of Agriculture (hereinafter in this subchapter 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, over-grazing, over-harvesting, and other causes that pose a direct adverse threat to people, the global environment, and the world economy."

1990—Subsecs. (a), (c). Pub. L. 101-513 designated existing provisions of subsec. (a) as par. (1), added par. (2), and added subsec. (c).

EFFECTIVE DATE

Pub. L. 95-307, §9, June 30, 1978, 92 Stat. 357, which provided that Pub. L. 95-307 (enacting this subchapter, repealing sections 581 to 581i of this title, and enacting provisions set out as a note under section 1600 of this

title) is effective Oct. 1, 1978, was amended generally by Pub. L. 101-624 and is classified to section 1648 of this title.

SHORT TITLE

For short title of Pub. L. 95-307, June 30, 1978, 92 Stat. 353, as the Forest and Rangeland Renewable Resources Research Act of 1978, see Short Title of 1978 Amendment note set out under section 1600 of this title.

§ 1642. Investigations, experiments, tests, and other activities

(a) Authorization; scope and purposes of activities

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 subchapter 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, 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; 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 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 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) Development of periodic Renewable Resource Assessment through survey and analysis of conditions; implementation; authorization of appropriations

(1) To ensure the availability of adequate data and scientific information for development of the periodic Renewable Resource Assessment provided for in section 1601 of this title, 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) Program of research and study relative to health and productivity of domestic forest ecosystems; advisory committee; reports

(1) The Secretary, acting through the United States Forest Service, shall establish not later than 180 days after October 24, 1988, 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