woodland, and their associated human communities requires preventing severe wildfires before the wildfires occur and permitting natural, low-intensity ground fires;

- (12) more natural fire regimes cannot be accomplished without the reduction of excess fuels and thinning of subdominant trees (which fuels and trees may be of commercial value);
- (13) ecologically based forest and woodland ecosystem restoration on a landscape scale will—
 - (A) improve long-term community protection;
 - (B) minimize the need for wildfire suppression;
 - (C) improve resource values;
 - (D) improve the ecological integrity and resilience of these systems;
 - (E) reduce rehabilitation costs;
 - (F) reduce loss of critical habitat; and
 - (G) protect forests for future generations;
- (14) although landscape scale restoration is needed to effectively reverse degradation, scientific understanding of landscape scale treatments is limited;
- (15) rigorous, objective, understandable, and applied scientific information is needed for—
 - (A) the design, implementation, monitoring, and adaptation of landscape scale restoration treatments and improvement of wildfire management;
 - (B) the environmental review process; and
 - (C) affected entities that collaborate in the development and implementation of wildfire treatment.

(Pub. L. 108-317, §2, Oct. 5, 2004, 118 Stat. 1204.) SHORT TITLE

Pub. L. 108-317, §1, Oct. 5, 2004, 118 Stat. 1204, provided that: "This Act [enacting this chapter] may be cited as the 'Southwest Forest Health and Wildfire Prevention Act of 2004'."

§ 6702. Purposes

The purposes of this chapter are—

- (1) to enhance the capacity to develop, transfer, apply, monitor, and regularly update practical science-based forest restoration treatments that will reduce the risk of severe wildfires, and improve the health of dry forest and woodland ecosystems in the interior West;
- (2) to synthesize and adapt scientific findings from conventional research programs to the implementation of forest and woodland restoration on a landscape scale;
- (3) to facilitate the transfer of interdisciplinary knowledge required to understand the socioeconomic and environmental impacts of wildfire on ecosystems and landscapes;
- (4) to require the Institutes established under this chapter to collaborate with Federal agencies—
- (A) to use ecological restoration treatments to reverse declining forest health and reduce the risk of severe wildfires across the forest landscape; and
- (B) to design, implement, monitor, and regularly revise representative wildfire treatments based on the use of adaptive ecosystem management:

- (5) to assist land managers in—
- (A) treating acres with restoration-based applications; and
- (B) using new management technologies (including the transfer of understandable information, assistance with environmental review, and field and classroom training and collaboration) to accomplish the goals identified in—
 - (i) the National Fire Plan;
 - (ii) the report entitled "Protecting People and Sustaining Resources in Fire-Adapted Ecosystems-A Cohesive Strategy" (65 Fed. Reg. 67480); and
 - (iii) the report entitled "10-Year Comprehensive Strategy: A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment" of the Western Governors' Association;
- (6) to provide technical assistance to collaborative efforts by affected entities to develop, implement, and monitor adaptive ecosystem management restoration treatments that are ecologically sound, economically viable, and socially responsible; and
- (7) to assist Federal and non-Federal land managers in providing information to the public on the role of fire and fire management in dry forest and woodland ecosystems in the interior West.

(Pub. L. 108-317, §3, Oct. 5, 2004, 118 Stat. 1205.)

§ 6703. Definitions

In this chapter:

(1) Adaptive ecosystem management

(A) Definition

The term "adaptive ecosystem management" means a natural resource management process under which planning, implementation, monitoring, research, evaluation, and incorporation of new knowledge are combined into a management approach that—

- (i) is based on scientific findings and the needs of society;
- (ii) treats management actions as experiments:
- (iii) acknowledges the complexity of these systems and scientific uncertainty; and
- (iv) uses the resulting new knowledge to modify future management methods and policy.

(B) Clarification

This paragraph shall not define the term "adaptive ecosystem management" for the purposes of the Forest and Rangeland Renewable Resources Planning Act of 1974 (16 U.S.C. 1600 et seq.).

(2) Affected entities

The term "affected entities" includes—

- (A) land managers;
- (B) stakeholders;
- (C) concerned citizens; and
- (D) the States of the interior West, including political subdivisions of the States.

(3) Dry forest and woodland ecosystem

The term "dry forest and woodland ecosystem" means an ecosystem that is domi-

nated by ponderosa pines and associated dry forest and woodland types.

(4) Institute

The term "Institute" means an Institute established under section 6704(a) of this title.

(5) Interior West

The term "interior West" means the States of Arizona, Colorado, Idaho, Nevada, New Mexico, and Utah.

(6) Land manager

(A) In general

The term "land manager" means a person or entity that practices or guides natural resource management.

(B) Inclusions

The term "land manager" includes a Federal, State, local, or tribal land management agency.

(7) Restoration

The term "restoration" means a process undertaken to move an ecosystem or habitat

- (A) a sustainable structure of the ecosystem or habitat; or
- (B) a condition that supports a natural complement of species, natural function, or ecological process (such as a low-intensity fire).

(8) Secretary

The term "Secretary" means the Secretary of Agriculture, acting through the Chief of the Forest Service.

(9) Secretaries

The term "Secretaries" means—

(A) the Secretary of Agriculture, acting through the Chief of the Forest Service; and (B) the Secretary of the Interior.

(10) Stakeholder

The term "stakeholder" means any person interested in or affected by management of forest or woodland ecosystems.

(11) Subdominant trees

Are trees that occur underneath the canopy or extend into the canopy but are smaller and less vigorous than dominant trees.

(12) Overstocked stands

Where the number of trees per acre exceeds the natural carrying capacity of the site.

(13) Resilience

The ability of a system to absorb disturbance without being pushed into a different, possibly less desirable stable state.

(Pub. L. 108–317, §4, Oct. 5, 2004, 118 Stat. 1206.)

REFERENCES IN TEXT

The Forest and Rangeland Renewable Resources Planning Act of 1974, referred to in par. (1)(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 chapter 36 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.

§ 6704. Establishment of Institutes

(a) In general

The Secretary, in consultation with the Secretary of the Interior, shall—

- (1) not later than 180 days after October 5, 2004, establish Institutes to promote the use of adaptive ecosystem management to reduce the risk of wildfires, and restore the health of forest and woodland ecosystems, in the interior West; and
- (2) provide assistance to the Institutes to promote the use of collaborative processes and adaptive ecosystem management in accordance with paragraph (1).

(b) Location

(1) Existing Institutes

The Secretary may designate an institute in existence on October 5, 2004, to serve as an Institute established under this chapter.

(2) States

- Of the Institutes established under this chapter, the Secretary shall establish 1 Institute in each of—
 - (A) the State of Arizona, to be located at Northern Arizona University;
 - (B) the State of New Mexico, to be located at New Mexico Highlands University, while engaging the full resources of the consortium of universities represented in the Institute of Natural Resource Analysis and Management (INRAM); and
 - (C) the State of Colorado.

(c) Duties

Each Institute shall—

- (1) develop, conduct research on, transfer, promote, and monitor restoration-based hazardous fuel reduction treatments to reduce the risk of severe wildfires and improve the health of dry forest and woodland ecosystems in the interior West;
- (2) synthesize and adapt scientific findings from conventional research to implement restoration-based hazardous fuel reduction treatments on a landscape scale using an adaptive ecosystem management framework;
- (3) translate for and transfer to affected entities any scientific and interdisciplinary knowledge about restoration-based hazardous fuel reduction treatments;
- (4) assist affected entities with the design of adaptive management approaches (including monitoring) for the implementation of restoration-based hazardous fuel reduction treatments; and
 - (5) provide peer-reviewed annual reports.

(d) Qualifications

Each Institute shall—

- (1) develop and demonstrate capabilities in the natural, physical, social, and policy sciences; and
- (2) explicitly integrate those disciplines in the performance of the duties listed in subsection (c).

(e) Cooperation

Each Institute may cooperate with—

(1) researchers and cooperative extension programs at colleges, community colleges, and universities in the States of Arizona, New Mexico, and Colorado that have a demonstrated capability to conduct research described in subsection (c); and