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[Report No. 108-252]

To establish Institutes to demonstrate and promote the use of adaptive ecosystem management to reduce the risk of wildfires, and restore the health of fire-adapted forest and woodland ecosystems of the interior West.

### IN THE SENATE OF THE UNITED STATES

FEBRUARY 25, 2004

Received; read twice and referred to the Committee on Energy and Natural Resources

MARCH 29, 2004 Reported by Mr. DOMENICI, without amendment

## **AN ACT**

- To establish Institutes to demonstrate and promote the use of adaptive ecosystem management to reduce the risk of wildfires, and restore the health of fire-adapted forest and woodland ecosystems of the interior West.
  - 1 Be it enacted by the Senate and House of Representa-
  - 2 tives of the United States of America in Congress assembled,

### 1 SECTION 1. SHORT TITLE.

2 This Act may be cited as the "Southwest Forest3 Health and Wildfire Prevention Act of 2004".

### 4 SEC. 2. FINDINGS.

5 Congress finds that—

6 (1) there is an increasing threat of wildfire to
7 millions of acres of forest land and rangeland
8 throughout the United States;

9 (2) forest land and rangeland are degraded as 10 a direct consequence of land management practices, 11 including practices to control and prevent wildfires 12 and the failure to harvest subdominant trees from 13 overstocked stands that disrupt the occurrence of 14 frequent low-intensity fires that have periodically re-15 moved flammable undergrowth;

16 (3) at least 39,000,000 acres of land of the Na17 tional Forest System in the interior West are at
18 high risk of wildfire;

(4) an average of 95 percent of the expenditures by the Forest Service for wildfire suppression
during fiscal years 1990 through 1994 were made to
suppress wildfires in the interior West;

23 (5) the number, size, and severity of wildfires in
24 the interior West are increasing;

25 (6) of the timberland in National Forests in the
26 States of Arizona and New Mexico, 59 percent of
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1	such land in Arizona, and 56 percent of such land
2	in New Mexico, has an average diameter of 9 to $12$
3	inches diameter at breast height;
4	(7) the population of the interior West grew
5	twice as fast as the national average during the
6	1990s;
7	(8) catastrophic wildfires—
8	(A) endanger homes and communities;
9	(B) damage and destroy watersheds and
10	soils; and
11	(C) pose a serious threat to the habitat of
12	threatened and endangered species;
13	(9) a 1994 assessment of forest health in the
14	interior West estimated that only a 15- to 30-year
15	window of opportunity exists for effective manage-
16	ment intervention before damage from uncontrollable
17	wildfire becomes widespread, with 8 years having al-
18	ready elapsed since the assessment;
19	(10) healthy forest and woodland ecosystems—
20	(A) reduce the risk of wildfire to forests
21	and communities;
22	(B) improve wildlife habitat and biodiver-
23	sity;
24	(C) increase tree, grass, forb, and shrub
25	productivity;

1	(D) enhance watershed values;
2	(E) improve the environment; and
3	(F) provide a basis in some areas for eco-
4	nomically and environmentally sustainable uses;
5	(11) sustaining the long-term ecological and
6	economic health of interior West forests and wood-
7	land, and their associated human communities re-
8	quires preventing severe wildfires before the wildfires
9	occur and permitting natural, low-intensity ground
10	fires;
11	(12) more natural fire regimes cannot be ac-
12	complished without the reduction of excess fuels and
13	thinning of subdominant trees (which fuels and trees
14	may be of commercial value);
15	(13) ecologically based forest and woodland eco-
16	system restoration on a landscape scale will—
17	(A) improve long-term community protec-
18	tion;
19	(B) minimize the need for wildfire suppres-
20	sion;
21	(C) improve resource values;
22	(D) improve the ecological integrity and re-
23	silience of these systems;
24	(E) reduce rehabilitation costs;
25	(F) reduce loss of critical habitat; and

1	(G) protect forests for future generations;
2	(14) although landscape scale restoration is
3	needed to effectively reverse degradation, scientific
4	understanding of landscape scale treatments is lim-
5	ited; and
6	(15) rigorous, objective, understandable, and
7	applied scientific information is needed for—
8	(A) the design, implementation, moni-
9	toring, and adaptation of landscape scale res-
10	toration treatments and improvement of wildfire
11	management;
12	(B) the environmental review process; and
13	(C) affected entities that collaborate in the
14	development and implementation of wildfire
15	treatment.
16	SEC. 3. PURPOSES.
17	The purposes of this Act are—
18	(1) to enhance the capacity to develop, transfer,
19	apply, monitor, and regularly update practical
20	science-based forest restoration treatments that will
21	reduce the risk of severe wildfires, and improve the
22	health of dry forest and woodland ecosystems in the
23	interior West;
24	(2) to synthesize and adapt scientific findings
25	from conventional research programs to the imple-

1	mentation of forest and woodland restoration on a
2	landscape scale;
3	(3) to facilitate the transfer of interdisciplinary
4	knowledge required to understand the socioeconomic
5	and environmental impacts of wildfire on ecosystems
6	and landscapes;
7	(4) to require the Institutes established under
8	this Act to collaborate with Federal agencies—
9	(A) to use ecological restoration treatments
10	to reverse declining forest health and reduce the
11	risk of severe wildfires across the forest land-
12	scape; and
13	(B) to design, implement, monitor, and
14	regularly revise representative wildfire treat-
15	ments based on the use of adaptive ecosystem
16	management;
17	(5) to assist land managers in—
18	(A) treating acres with restoration-based
19	applications; and
20	(B) using new management technologies
21	(including the transfer of understandable infor-
22	mation, assistance with environmental review,
23	and field and classroom training and collabora-
24	tion) to accomplish the goals identified in—
25	(i) the National Fire Plan;

 $\overline{7}$ (ii) the report entitled "Protecting 1 2 People and Sustaining Resources in Fire-3 Adapted Ecosystems-A Cohesive Strategy" 4 (65 Fed. Reg. 67480); and (iii) the report entitled "10-Year 5 Comprehensive Strategy: A Collaborative 6 7 Approach for Reducing Wildland Fire 8 Risks to Communities and the Environ-9 ment" of the Western Governors' Associa-10 tion; 11 (6) to provide technical assistance to collabo-12 rative efforts by affected entities to develop, imple-13 ment, and monitor adaptive ecosystem management 14 restoration treatments that are ecologically sound, 15 economically viable, and socially responsible; and 16 (7) to assist Federal and non-Federal land 17 managers in providing information to the public on 18 the role of fire and fire management in dry forest 19 and woodland ecosystems in the interior West. 20 **SEC. 4. DEFINITIONS.** 21 In this Act: 22 (1) Adaptive ecosystem management.—

23 (A) DEFINITION.—The term "adaptive
24 ecosystem management" means a natural re25 source management process under which plan-

1	ning, implementation, monitoring, research,
2	evaluation, and incorporation of new knowledge
3	are combined into a management approach
4	that—
5	(i) is based on scientific findings and
6	the needs of society;
7	(ii) treats management actions as ex-
8	periments;
9	(iii) acknowledges the complexity of
10	these systems and scientific uncertainty;
11	and
12	(iv) uses the resulting new knowledge
13	to modify future management methods and
14	policy.
15	(B) CLARIFICATION.—This paragraph
16	shall not define the term "adaptive ecosystem
17	management" for the purposes of the Forest
18	and Rangeland Renewable Resources Planning
19	Act of 1974 (16 U.S.C. 1600 et seq.).
20	(2) AFFECTED ENTITIES.—The term "affected
21	entities" includes—
22	(A) land managers;
23	(B) stakeholders;
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24 (C) concerned citizens; and

1	(D) the States of the interior West, includ-
2	ing political subdivisions of the States.
3	(3) DRY FOREST AND WOODLAND ECO-
4	SYSTEM.—The term "dry forest and woodland eco-
5	system" means an ecosystem that is dominated by
6	ponderosa pines and associated dry forest and wood-
7	land types.
8	(4) INSTITUTE.—The term "Institute" means
9	an Institute established under section 5(a).
10	(5) INTERIOR WEST.—The term "interior
11	West" means the States of Arizona, Colorado,
12	Idaho, Nevada, New Mexico, and Utah.
13	(6) Land manager.—
14	(A) IN GENERAL.—The term "land man-
15	ager" means a person or entity that practices
16	or guides natural resource management.
17	(B) INCLUSIONS.—The term "land man-
18	ager" includes a Federal, State, local, or tribal
19	land management agency.
20	(7) RESTORATION.—The term "restoration"
21	means a process undertaken to move an ecosystem
22	or habitat toward—
23	(A) a sustainable structure of the eco-
24	system or habitat; or

1	(B) a condition that supports a natural
2	complement of species, natural function, or eco-
3	logical process (such as a low-intensity fire).
4	(8) Secretary.—The term "Secretary" means
5	the Secretary of Agriculture, acting through the
6	Chief of the Forest Service.
7	(9) Secretaries.—The term "Secretaries"
8	means—
9	(A) the Secretary of Agriculture, acting
10	through the Chief of the Forest Service; and
11	(B) the Secretary of the Interior.
12	(10) STAKEHOLDER.—The term "stakeholder"
13	means any person interested in or affected by man-
14	agement of forest or woodland ecosystems.
15	(11) SUBDOMINANT TREES.—Are trees that
16	occur underneath the canopy or extend into the can-
17	opy but are smaller and less vigorous than dominant
18	trees.
19	(12) Overstocked stands.—Where the num-
20	ber of trees per acre exceeds the natural carrying ca-
21	pacity of the site.
22	(13) RESILIENCE.—The ability of a system to
23	absorb disturbance without being pushed into a dif-
24	ferent, possibly less desirable stable state.

### 1 SEC. 5. ESTABLISHMENT OF INSTITUTES.

2 (a) IN GENERAL.—The Secretary, in consultation3 with the Secretary of the Interior, shall—

4 (1) not later than 180 days after the date of
5 enactment of this Act, establish Institutes to pro6 mote the use of adaptive ecosystem management to
7 reduce the risk of wildfires, and restore the health
8 of forest and woodland ecosystems, in the interior
9 West; and

(2) provide assistance to the Institutes to promote the use of collaborative processes and adaptive
ecosystem management in accordance with paragraph (1).

14 (b) LOCATION.—

(1) EXISTING INSTITUTES.—The Secretary may
designate an institute in existence on the date of enactment of this Act to serve as an Institute established under this Act.

19 (2) STATES.—Of the Institutes established
20 under this Act, the Secretary shall establish 1 Insti21 tute in each of—

(A) the State of Arizona, to be located atNorthern 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

1	universities represented in the Institute of Nat-
2	ural Resource Analysis and Management
3	(INRAM); and
4	(C) the State of Colorado.
5	(c) DUTIES.—Each Institute shall—
6	(1) develop, conduct research on, transfer, pro-
7	mote, and monitor restoration-based hazardous fuel
8	reduction treatments to reduce the risk of severe
9	wildfires and improve the health of dry forest and
10	woodland ecosystems in the interior West;
11	(2) synthesize and adapt scientific findings
12	from conventional research to implement restoration-
13	based hazardous fuel reduction treatments on a
14	landscape scale using an adaptive ecosystem man-
15	agement framework;
16	(3) translate for and transfer to affected enti-
17	ties any scientific and interdisciplinary knowledge
18	about restoration-based hazardous fuel reduction
19	treatments;
20	(4) assist affected entities with the design of
21	adaptive management approaches (including moni-
22	toring) for the implementation of restoration-based
23	hazardous fuel reduction treatments; and
24	(5) provide peer-reviewed annual reports.
25	(d) QUALIFICATIONS.—Each Institute shall—

1	(1) develop and demonstrate capabilities in the
2	natural, physical, social, and policy sciences; and
3	(2) explicitly integrate those disciplines in the
4	performance of the duties listed in subsection (c).
5	(e) COOPERATION.—Each Institute may cooperate
6	with—
7	(1) researchers and cooperative extension pro-
8	grams at colleges, community colleges, and univer-
9	sities in the States of Arizona, New Mexico, and Col-
10	orado that have a demonstrated capability to con-
11	duct research described in subsection (c); and
12	(2) other organizations and entities in the inte-
13	rior West (such as the Western Governors' Associa-
14	tion).
15	(f) ANNUAL WORK PLANS.—As a condition of the re-
16	ceipt of funds made available under this Act, for each fis-
17	cal year, each Institute shall develop in consultation with
18	the Secretary, for review by the Secretary, in consultation
19	with the Secretary of the Interior, an annual work plan
20	that includes assurances, satisfactory to the Secretaries,
21	that the proposed work of the Institute will serve the infor-
22	mational needs of affected entities.

23 (g) ESTABLISHMENT OF ADDITIONAL INSTITUTES.— 24 If after 2 years after the date of the enactment of this 25 Act, the Secretary finds that the Institute model estab-

1	lished at the locations named in subsection $(b)(2)$ would
2	be constructive for other interior West States, the Sec-
3	retary may establish 1 institute in each of those States.
4	SEC. 6. COOPERATION BETWEEN INSTITUTES AND FED-
5	ERAL AGENCIES.
6	In carrying out this Act, the Secretary, in consulta-
7	tion with the Secretary of the Interior—
8	(1) to the extent that funds are appropriated
9	for the purpose, shall provide financial and technical
10	assistance to the Institutes to carry out the duties
11	of the Institutes under section 5;
12	(2) shall encourage Federal agencies to use, on
13	a cooperative basis, information and expertise pro-
14	vided by the Institutes;
15	(3) shall encourage cooperation and coordina-
16	tion between Federal programs relating to—
17	(A) ecological restoration;
18	(B) wildfire risk reduction; and
19	(C) wildfire management technologies;
20	(4) notwithstanding chapter 63 of title 31,
21	United States Code, may—
22	(A) enter into contracts, cooperative agree-
23	ments, and interagency personal agreements to
24	carry out this Act; and

1	(B) carry out other transactions under this
2	Act;
3	(5) may accept funds from other Federal agen-
4	cies to supplement or fully fund grants made, and
5	contracts entered into, by the Secretaries;
6	(6) may support a program of internships for
7	qualified individuals at the undergraduate and grad-
8	uate levels to carry out the educational and training
9	objectives of this Act;
10	(7) shall encourage professional education and
11	public information activities relating to the purposes
12	of this Act; and
13	(8) may promulgate such regulations as the
14	Secretaries determine are necessary to carry out this
15	Act.
16	SEC. 7. MONITORING AND EVALUATION.
17	(a) IN GENERAL.—Not later than 5 years after the
18	date of enactment of this Act, and every 5 years there-
19	after, the Secretary, in consultation with the Secretary of
20	the Interior, shall complete and submit to the Committee
21	on Resources and the Committee on Agriculture of the
22	House of Representatives and to the Committee on En-
23	ergy and Natural Resources of the Senate a detailed eval-
24	uation of the programs and activities of each Institute—

1	(1) to ensure, to the maximum extent prac-
2	ticable, that the research, communication tools, and
3	information transfer activities of each Institute are
4	sufficient to achieve the purposes of this Act, includ-
5	ing
6	(A) implementing active adaptive eco-
7	system management practices at the landscape
8	level;
9	(B) reducing unnecessary planning costs;
10	(C) avoiding duplicative and conflicting ef-
11	forts;
12	(D) increasing public acceptance of active
13	adaptive ecosystem management practices; and
14	(E) achieving general satisfaction on the
15	part of affected entities;
16	(2) to determine the extent to which each Insti-
17	tute has implemented its duties under section $5(c)$ ;
18	and
19	(3) to determine whether continued provision of
20	Federal assistance to each Institute is warranted.
21	(b) TERMINATION OF ASSISTANCE.—If, as a result
22	of an evaluation under subsection (a), the Secretary, in
23	consultation with the Secretary of the Interior, determines
24	that an Institute does not qualify for further Federal as-
25	sistance under this Act, the Institute shall receive no fur-

ther Federal assistance under this Act until such time as
 the qualifications of the Institute are reestablished to the
 satisfaction of the Secretaries.

### 4 SEC. 8. AUTHORIZATION OF APPROPRIATIONS.

5 (a) IN GENERAL.—There is authorized to be appro6 priated to carry out this Act \$15,000,000 for each fiscal
7 year.

8 (b) LIMITATION.—No funds made available under
9 subsection (a) shall be used to pay the costs of con10 structing any facilities.

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