

**Calendar No. 469**108<sup>TH</sup> CONGRESS  
2<sup>D</sup> SESSION**H.R. 2696****[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.

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**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

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**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 Forest  
3 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 Na-  
17 tional Forest System in the interior West are at  
18 high risk of wildfire;

19 (4) an average of 95 percent of the expendi-  
20 tures by the Forest Service for wildfire suppression  
21 during fiscal years 1990 through 1994 were made to  
22 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

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 siliience 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;

1 (ii) the report entitled “Protecting  
2 People and Sustaining Resources in Fire-  
3 Adapted Ecosystems-A Cohesive Strategy”  
4 (65 Fed. Reg. 67480); and

5 (iii) the report entitled “10-Year  
6 Comprehensive Strategy: A Collaborative  
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 re-  
25 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;

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 consultation  
3 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 pro-  
6 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

10 (2) provide assistance to the Institutes to pro-  
11 mote the use of collaborative processes and adaptive  
12 ecosystem management in accordance with para-  
13 graph (1).

14 (b) LOCATION.—

15 (1) EXISTING INSTITUTES.—The Secretary may  
16 designate an institute in existence on the date of en-  
17 actment of this Act to serve as an Institute estab-  
18 lished under this Act.

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

22 (A) the State of Arizona, to be located at  
23 Northern Arizona University;

24 (B) the State of New Mexico, to be located  
25 at New Mexico Highlands University, while en-  
26 gaging 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-

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

4 **SEC. 8. AUTHORIZATION OF APPROPRIATIONS.**

5 (a) IN GENERAL.—There is authorized to be appro-  
6 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 con-  
10 structing any facilities.

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