

110TH CONGRESS  
1ST SESSION

# H. R. 3445

To establish the Weather Mitigation Operations and Research Board, and  
for other purposes.

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IN THE HOUSE OF REPRESENTATIVES

AUGUST 3, 2007

Mr. UDALL of Colorado introduced the following bill; which was referred to  
the Committee on Science and Technology

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## A BILL

To establish the Weather Mitigation Operations and  
Research Board, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*  
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Weather Mitigation  
5 Research and Technology Transfer Authorization Act of  
6 2007”.

7 **SEC. 2. PURPOSE.**

8 It is the purpose of this Act to develop and implement  
9 a comprehensive and coordinated national weather mitiga-

1 tion policy and a national cooperative Federal and State  
2 program of weather mitigation research and development.

3 **SEC. 3. DEFINITIONS.**

4 In this Act:

5 (1) BOARD.—The term “Board” means the  
6 Weather Mitigation Advisory and Research Board.

7 (2) EXECUTIVE DIRECTOR.—The term “Execu-  
8 tive Director” means the Executive Director of the  
9 Weather Mitigation Advisory and Research Board.

10 (3) RESEARCH AND DEVELOPMENT.—The term  
11 “research and development” means theoretical anal-  
12 ysis, exploration, experimentation, and the extension  
13 of investigative findings and theories of scientific or  
14 technical nature into practical application for experi-  
15 mental and demonstration purposes, including the  
16 experimental production and testing of models, de-  
17 vices, equipment, materials, and processes.

18 (4) WEATHER MITIGATION.—The term “weath-  
19 er mitigation” means changing or controlling, or at-  
20 tempting to change or control, by artificial methods  
21 the natural development of atmospheric cloud forms  
22 or precipitation forms which occur in the tropo-  
23 sphere. Examples include rain enhancement,  
24 snowpack augmentation, and hail suppression.

1 **SEC. 4. WEATHER MITIGATION ADVISORY AND RESEARCH**  
2 **BOARD ESTABLISHED.**

3 (a) IN GENERAL.—There is established in the De-  
4 partment of Commerce the Weather Mitigation Advisory  
5 and Research Board.

6 (b) MEMBERSHIP.—

7 (1) IN GENERAL.—The Board shall consist of  
8 11 members appointed by the Secretary of Com-  
9 merce, of whom—

10 (A) at least 1 shall be a representative of  
11 the American Meteorological Society;

12 (B) at least 1 shall be a representative of  
13 the American Society of Civil Engineers;

14 (C) at least 1 shall be a representative of  
15 the National Academy of Sciences;

16 (D) at least 1 shall be a representative of  
17 the National Center for Atmospheric Research  
18 of the National Science Foundation;

19 (E) at least 2 shall be representatives of  
20 the National Oceanic and Atmospheric Admin-  
21 istration of the Department of Commerce;

22 (F) at least 1 shall be a representative of  
23 institutions of higher education or research in-  
24 stitutes; and

1 (G) at least 1 shall be a representative of  
2 a State that is currently supporting operational  
3 weather mitigation projects.

4 (2) TENURE.—A member of the Board serves  
5 at the pleasure of the Secretary of Commerce.

6 (3) VACANCIES.—Any vacancy on the Board  
7 shall be filled in the same manner as the original ap-  
8 pointment.

9 (b) ADVISORY COMMITTEES.—The Board may estab-  
10 lish advisory committees to advise the Board and to make  
11 recommendations to the Board concerning legislation, poli-  
12 cies, administration, research, and other matters.

13 (c) INITIAL MEETING.—Not later than 30 days after  
14 the date on which all members of the Board have been  
15 appointed, the Board shall hold its first meeting.

16 (d) MEETINGS.—The Board shall meet at the call of  
17 the Chair.

18 (e) QUORUM.—A majority of the members of the  
19 Board shall constitute a quorum, but a lesser number of  
20 members may hold hearings.

21 (f) CHAIR AND VICE CHAIR.—The Board shall select  
22 a Chair and Vice Chair from among its members.

23 **SEC. 5. DUTIES OF THE BOARD.**

24 (a) PROMOTION OF RESEARCH AND DEVELOP-  
25 MENT.—In order to assist in expanding the theoretical

1 and practical knowledge of weather mitigation, the Board  
2 shall promote and fund research and development, studies,  
3 and investigations with respect to—

4           (1) improved forecast and decisionmaking tech-  
5 nologies for weather mitigation operations, including  
6 tailored computer workstations and software and  
7 new observation systems with remote sensors; and

8           (2) assessments and evaluations of the efficacy  
9 of weather mitigation, both purposeful (including  
10 cloud-seeding operations) and inadvertent (including  
11 downwind effects and anthropogenic effects).

12       (b) FINANCIAL ASSISTANCE.—Unless the use of the  
13 money is restricted or subject to any limitations provided  
14 by law, the Board shall use amounts in the Weather Miti-  
15 gation Research and Development Fund—

16           (1) to pay its expenses in the administration of  
17 this Act; and

18           (2) to provide for research and development  
19 with respect to weather mitigation by grants to, or  
20 contracts or cooperative arrangements with, public  
21 or private agencies.

22       (c) REPORT.—The Board shall submit to the Sec-  
23 retary of Commerce biennially a report on its findings and  
24 research results.

1 **SEC. 6. POWERS OF THE BOARD.**

2 (a) STUDIES, INVESTIGATIONS, AND HEARINGS.—

3 The Board may make any studies or investigations, obtain  
4 any information, and hold any hearings necessary or prop-  
5 er to administer or enforce this Act or any rules or orders  
6 issued under this Act.

7 (b) PERSONNEL.—The Board may employ, as pro-  
8 vided for in appropriations Acts, an Executive Director  
9 and other support staff necessary to perform duties and  
10 functions under this Act.

11 (c) COOPERATION WITH OTHER AGENCIES.—The  
12 Board may cooperate with public or private agencies to  
13 promote the purposes of this Act.

14 (d) COOPERATIVE AGREEMENTS.—The Board may  
15 enter into cooperative agreements with the head of any  
16 department or agency of the United States, an appropriate  
17 official of any State or political subdivision of a State, or  
18 an appropriate official of any private or public agency or  
19 organization for conducting weather mitigation activities  
20 or cloud-seeding operations.

21 (e) CONDUCT AND CONTRACTS FOR RESEARCH AND  
22 DEVELOPMENT.—The Executive Director, with the ap-  
23 proval of the Board, may conduct and may contract for  
24 research and development activities relating to the purpose  
25 described in section 2.

1 **SEC. 7. COOPERATION WITH THE WEATHER MITIGATION**  
2 **OPERATIONS AND RESEARCH BOARD.**

3 The heads of the departments and agencies of the  
4 United States and the heads of any other public or private  
5 agencies and institutions that receive research funds from  
6 the United States shall, to the extent possible, give full  
7 support and cooperation to the Board and to initiate inde-  
8 pendent research and development programs that address  
9 weather mitigations.

10 **SEC. 8. FUNDING.**

11 (a) IN GENERAL.—There is established within the  
12 Treasury of the United States the Weather Mitigation Re-  
13 search and Development Fund, which shall consist of  
14 amounts appropriated pursuant to subsection (b) or re-  
15 ceived by the Board under subsection (c).

16 (b) AUTHORIZATION OF APPROPRIATIONS.—There  
17 are authorized to be appropriated to the Board for the  
18 purposes of carrying out this Act \$10,000,000 for each  
19 of fiscal years 2006 through 2015. Any sums appropriated  
20 under this subsection shall remain available, without fiscal  
21 year limitation, until expended.

22 (c) GIFTS.—The Board may accept, use, and dispose  
23 of gifts or donations of services or property.

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