

**Calendar No. 713**

103D CONGRESS  
2D SESSION

**H. R. 4944**

**AN ACT**

To authorize the Secretary of the Interior to conduct studies regarding the desalination of water and water reuse, and for other purposes.

OCTOBER 4 (legislative day, SEPTEMBER 12), 1994

Received; read twice and ordered placed on the calendar

**Calendar No. 713**

103<sup>D</sup> CONGRESS  
2<sup>D</sup> SESSION

**H. R. 4944**

---

IN THE SENATE OF THE UNITED STATES

OCTOBER 4 (legislative day, SEPTEMBER 12), 1994

Received; read twice and ordered placed on the calendar

---

**AN ACT**

To authorize the Secretary of the Interior to conduct studies regarding the desalination of water and water reuse, 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 “Water Desalination  
5 Act of 1994”.

6 **SEC. 2. DECLARATION OF POLICY.**

7 In view of the increasing shortage of usable surface  
8 and ground water in the United States and the world and  
9 the importance of finding new sources of supply to meet  
10 present and future water needs and to further the goals

1 of the Colorado River Basin Salinity Control Act of 1974,  
2 the Water Resources Research Act of 1984, Public Law  
3 95–84 (as amended), and Public Law 102–575, it is the  
4 policy of the United States to conduct and sponsor re-  
5 search to develop low-cost alternatives for the desalination  
6 and reuse of water or biologically impaired water and to  
7 provide for the development of practicable low-cost means  
8 of producing water of a quality suitable for environmental  
9 enhancement, agricultural, industrial, municipal, and  
10 other beneficial consumptive or nonconsumptive uses from  
11 saline or biologically impaired waters on a scale sufficient  
12 to determine the feasibility of the development of such  
13 water production and distribution on a large scale for the  
14 purpose of conserving and increasing water resources.

15 **SEC. 3. DEFINITIONS.**

16 As used in this Act:

17 (1) DESALINATION OR DESALTING.—The terms  
18 “desalination” or “desalting” mean the use of any  
19 process or technique for the removal and, when fea-  
20 sible, adaptation to beneficial use, of organic and in-  
21 organic elements and compounds from saline or bio-  
22 logically impaired waters, by itself or in conjunction  
23 with other processes.

1           (2) SALINE WATER.—The term “saline water”  
2           means sea water, brackish water, and other mineral-  
3           ized or chemically impaired water.

4           (3) UNITED STATES.—The term “United  
5           States” means the States of the United States, the  
6           District of Columbia, the Commonwealth of Puerto  
7           Rico, and the territories and possessions of the  
8           United States.

9           (4) USABLE WATER.—The term “usable water”  
10          means water of a high quality suitable for environ-  
11          mental enhancement, agricultural, industrial, munic-  
12          ipal, and other beneficial consumptive or  
13          nonconsumptive uses.

14          (5) SECRETARY.—The term “Secretary” means  
15          the Secretary of the Interior.

16 **SEC. 4. AUTHORIZATION OF RESEARCH AND STUDIES.**

17          (a) IN GENERAL.—In order to determine the most  
18          cost-effective and technologically efficient means by which  
19          usable water can be produced from saline water or water  
20          otherwise impaired or contaminated, the Secretary is au-  
21          thorized to award grants and to enter into contracts, to  
22          the extent provided in advance in appropriation Acts, to  
23          conduct, encourage, and assist in the financing of research  
24          to develop processes for converting saline water or water  
25          otherwise impaired or contaminated into water suitable for

1 beneficial uses. Awards of research grants and contracts  
2 under this section shall be made on the basis of a competi-  
3 tive, merit-reviewed process. Research and study topics  
4 authorized by this section include—

5 (1) investigating desalination processes;

6 (2) ascertaining the optimum mix of investment  
7 and operating costs;

8 (3) determining the best designs for different  
9 conditions of operation;

10 (4) investigating methods of increasing the eco-  
11 nomic efficiency of desalination processes through  
12 dual-purpose co-facilities with other processes involv-  
13 ing the use of water;

14 (5) conducting or contracting for technical  
15 work, including the design, construction, and testing  
16 of pilot systems and test beds, to develop desalting  
17 processes and concepts; and

18 (6) studying methods for the recovery of by-  
19 products resulting from the desalination of water to  
20 offset the costs of treatment and to reduce environ-  
21 mental impacts from those byproducts.

22 (b) PROJECT RECOMMENDATIONS AND REPORTS TO  
23 THE CONGRESS.—As soon as practicable and within three  
24 years after the date of enactment of this Act, the Sec-  
25 retary shall recommend to Congress desalination dem-

1 onstration projects or full-scale desalination projects to  
2 carry out the purposes of this Act and to further evaluate  
3 and implement the results of research and studies con-  
4 ducted under the authority of this section. Recommenda-  
5 tions for projects shall be accompanied by reports on the  
6 engineering and economic feasibility of proposed projects  
7 and their environmental impacts.

8 (c) AUTHORITY TO ENGAGE OTHERS.—In carrying  
9 out research and studies authorized in this section, the  
10 Secretary may engage the necessary personnel, industrial  
11 or engineering firms, Federal laboratories, water resources  
12 research and technology institutes, other facilities, and  
13 educational institutions suitable to conduct investigations  
14 and studies authorized under this section.

15 (d) DESALINATION CONFERENCE.—Within 12  
16 months following the date of enactment of this Act, the  
17 Secretary, in coordination with the United States Agency  
18 for International Development, will plan and host a desali-  
19 nation conference, to include officials and desalination ex-  
20 perts from academia, private industry, financial institu-  
21 tions, and government in the United States and other na-  
22 tions that use or conduct research on desalination. The  
23 conference shall explore promising technologies and meth-  
24 ods for near-term development of affordable desalination

1 and shall propose a research agenda and a plan of action  
2 to guide longer-term desalination development activities.

3 **SEC. 5. DESALINATION DEMONSTRATION AND DEVELOP-**  
4 **MENT.**

5 (a) IN GENERAL.—In order to further demonstrate  
6 the feasibility of desalination processes investigated either  
7 independently or in research conducted pursuant to sec-  
8 tion 4, the Secretary shall administer and conduct a dem-  
9 onstration and development program for water desalina-  
10 tion and related activities, including the following:

11 (1) DESALINATION PLANTS AND MODULES.—  
12 Conduct or contract for technical work, including the  
13 design, construction, and testing of plants and mod-  
14 ules to develop desalination processes and concepts.

15 (2) BYPRODUCTS.—Study methods for the mar-  
16 keting of byproducts resulting from the desalting of  
17 water to offset the costs of treatment and to reduce  
18 environmental impacts of those byproducts.

19 (3) ECONOMIC SURVEYS.—Conduct economic  
20 studies and surveys to determine present and pro-  
21 spective costs of producing water for beneficial pur-  
22 poses in various locations by desalination processes  
23 compared to other methods.

24 (b) COOPERATIVE AGREEMENTS.—Federal participa-  
25 tion in desalination activities may be conducted through

1 cooperative agreements, including cost-sharing agree-  
2 ments, with non-Federal public utilities and State and  
3 local governmental agencies and other entities, in order  
4 to develop recommendations for Federal participation in  
5 processes and plants utilizing desalting technologies for  
6 the production of water.

7 **SEC. 6. PARTICIPATION BY AGENCIES AND INTERESTED**  
8 **PERSONS.**

9 (a) COORDINATION WITH OTHER AGENCIES.—Ac-  
10 tivities undertaken by the Secretary pursuant to this Act  
11 may be coordinated or conducted jointly, as appropriate,  
12 with the National Science Foundation, Department of De-  
13 fense, United States Army Corps of Engineers, National  
14 Aeronautics and Space Administration, and Environ-  
15 mental Protection Agency, and other Federal agencies,  
16 States, local government agencies, water resources re-  
17 search and technology institutes, and private entities.

18 (b) AVAILABILITY OF INFORMATION.—All informa-  
19 tion from studies sponsored or funded under authority of  
20 this Act shall be considered public information.

21 **SEC. 7. TECHNICAL AND ADMINISTRATIVE ASSISTANCE.**

22 The Secretary may—

23 (1) accept technical and administrative assist-  
24 ance from States and public or private agencies in  
25 connection with studies, surveys, location, construc-



1       tion, operation, and other work relating to the  
2       desalting of water, and

3           (2) enter into contracts or agreements stating  
4       the purposes for which the assistance is contributed  
5       and providing for the sharing of costs between the  
6       Secretary and any such agency.

7   **SEC. 8. COST SHARING.**

8       The Federal share of the cost of a research, study,  
9       or demonstration project or a desalination development  
10      project or activity carried out under this Act shall not ex-  
11      ceed 50 percent of the total cost of the project or research  
12      or study activity. The Secretary shall prescribe appro-  
13      priate procedures to implement the provisions of this sec-  
14      tion. Costs of operation, maintenance, repair, and rehabili-  
15      tation of facilities funded under the authority of this Act  
16      shall be non-Federal responsibilities.

17   **SEC. 9. AUTHORIZATION OF APPROPRIATIONS.**

18      (a) SECTION 4.—There are authorized to be appro-  
19      priated to carry out section 4 of this Act \$5,000,000 for  
20      fiscal year 1995 and \$10,000,000 per year for fiscal years  
21      1996 through 1999. Of these amounts, up to \$1,000,000  
22      in each fiscal year may be awarded to institutions of high-  
23      er education for research grants without any cost-sharing  
24      requirement.

1 (b) SECTION 5.—There are authorized to be appro-  
2 priated to carry out section 5 of this Act \$50,000,000 for  
3 fiscal years 1996 through 1999.

4 **SEC. 10. DROUGHT RELIEF FOR MADERA-CHOWCHILLA**  
5 **POWER AUTHORITY HYDROELECTRIC**  
6 **PROJECTS.**

7 Section 103 of the Reclamation States Emergency  
8 Drought Relief Act of 1991 (106 Stat. 55; 43 U.S.C.  
9 2213) is amended—

10 (1) by inserting in the first sentence after “re-  
11 sulting from drought conditions.” the following:  
12 “The Secretary is further authorized to make a loan  
13 to the Madera-Chowchilla Power Authority to assist  
14 in the repayment of financial obligations associated  
15 with hydroelectric facilities that have been adversely  
16 affected by drought conditions.”; and

17 (2) by striking “loan.” at the end of the second  
18 proviso and inserting “loan, except that loans spe-  
19 cifically for the Madera-Chowchilla Power Authority  
20 associated with hydroelectric facilities impacted by  
21 drought shall be under such terms and conditions as  
22 the Secretary deems appropriate.”.

1 **SEC. 11. AMENDMENT TO THE RECLAMATION PROJECTS**  
2 **AUTHORIZATION AND ADJUSTMENT ACT OF**  
3 **1992.**

4 Title XVI of the Reclamation Projects Authorization  
5 and Adjustment Act of 1992 (43 U.S.C. 390h et seq.) is  
6 amended by adding the following section:

7 **“SEC. 1618. ORANGE COUNTY REGIONAL WATER RECLAMA-**  
8 **TION PROJECT.**

9 “(a) The Secretary is authorized to participate with  
10 the Orange County Water District in the State of Califor-  
11 nia, and other appropriate authorities, in the planning, de-  
12 sign and construction of water reclamation projects to  
13 treat up to 100,000 acre feet per year of wastewater efflu-  
14 ent from the county of Orange, in order to provide new  
15 water supplies for ground water replenishment, industrial  
16 applications and other beneficial purposes, to reduce the  
17 demand for imported water, and to reduce sewage effluent  
18 discharged into the ocean near Huntington Beach.

19 “(b) The Secretary’s share of costs associated with  
20 the project described in section (a) shall not exceed 25  
21 percent of the total. The Secretary shall not provide funds  
22 for operation or maintenance of the project.

1       “(c) There are authorized to be appropriated not  
2 more than \$250,000 for the design of projects under this  
3 section.”.

Passed the House of Representatives October 3,  
1994.

Attest:               DONNALD K. ANDERSON,  
*Clerk.*