

One Hundred Fourth Congress
of the
United States of America

AT THE SECOND SESSION

*Begun and held at the City of Washington on Wednesday,
the third day of January, one thousand nine hundred and ninety-six*

An Act

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

*Be it enacted by the Senate and House of Representatives of
the United States of America in Congress assembled,*

SECTION 1. SHORT TITLE.

This Act may be cited as the “Water Desalination Act of 1996”.

SEC. 2. DEFINITIONS.

As used in this Act:

(1) DESALINATION OR DESALTING.—The terms “desalination” or “desalting” mean the use of any process or technique for the removal and, when feasible, adaptation to beneficial use, of organic and inorganic elements and compounds from saline or biologically impaired waters, by itself or in conjunction with other processes.

(2) SALINE WATER.—The term “saline water” means sea water, brackish water, and other mineralized or chemically impaired water.

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

(4) USABLE WATER.—The term “usable water” means water of a high quality suitable for environmental enhancement, agricultural, industrial, municipal, and other beneficial consumptive or nonconsumptive uses.

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

SEC. 3. AUTHORIZATION OF RESEARCH AND STUDIES.

(a) IN GENERAL.—In order to determine the most cost-effective and technologically efficient means by which usable water can be produced from saline water or water otherwise impaired or contaminated, the Secretary is authorized to award grants and to enter into contracts, to the extent provided in advance in appropriation Acts, to conduct, encourage, and assist in the financing of research to develop processes for converting saline water into water suitable for beneficial uses. Awards of research grants and contracts under this section shall be made on the basis of a competitive, merit-reviewed process. Research and study topics authorized by this section include—

(1) investigating desalination processes;

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

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

(4) investigating methods of increasing the economic efficiency of desalination processes through dual-purpose co-facilities with other processes involving the use of water;

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

(6) studying methods for the recovery of byproducts resulting from desalination to offset the costs of treatment and to reduce environmental impacts from those byproducts; and

(7) salinity modeling and toxicity analysis of brine discharges, cost reduction strategies for constructing and operating desalination facilities, and the horticultural effects of desalinated water used for irrigation.

(b) **PROJECT RECOMMENDATIONS AND REPORTS TO THE CONGRESS.**—As soon as practicable and within three years after the date of enactment of this Act, the Secretary shall recommend to Congress desalination demonstration projects or full-scale desalination projects to carry out the purposes of this Act and to further evaluate and implement the results of research and studies conducted under the authority of this section. Recommendations for projects shall be accompanied by reports on the engineering and economic feasibility of proposed projects and their environmental impacts.

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

(d) **ALTERNATIVE TECHNOLOGIES.**—In carrying out the purposes of this Act, the Secretary shall ensure that at least three separate technologies are evaluated and demonstrated for the purposes of accomplishing desalination.

SEC. 4. DESALINATION DEMONSTRATION AND DEVELOPMENT.

(a) **IN GENERAL.**—In order to further demonstrate the feasibility of desalination processes investigated either independently or in research conducted pursuant to section 3, the Secretary shall administer and conduct a demonstration and development program for water desalination and related activities, including the following:

(1) **DESALINATION PLANTS AND MODULES.**—Conduct or contract for technical work, including the design, construction, and testing of plants and modules to develop desalination processes and concepts.

(2) **BYPRODUCTS.**—Study methods for the marketing of byproducts resulting from the desalting of water to offset the costs of treatment and to reduce environmental impacts of those byproducts.

(3) **ECONOMIC SURVEYS.**—Conduct economic studies and surveys to determine present and prospective costs of producing water for beneficial purposes in various locations by desalination processes compared to other methods.

(b) **COOPERATIVE AGREEMENTS.**—Federal participation in desalination activities may be conducted through cooperative agreements, including cost-sharing agreements, with non-Federal public utilities and State and local governmental agencies and other entities, in order to develop recommendations for Federal participation in processes and plants utilizing desalting technologies for the production of water.

SEC. 5. AVAILABILITY OF INFORMATION.

All information from studies sponsored or funded under authority of this Act shall be considered public information.

SEC. 6. TECHNICAL AND ADMINISTRATIVE ASSISTANCE.

The Secretary may—

(1) accept technical and administrative assistance from States and public or private agencies in connection with studies, surveys, location, construction, operation, and other work relating to the desalting of water, and

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

SEC. 7. COST SHARING.

The Federal share of the cost of a research, study, or demonstration project or a desalination development project or activity carried out under this Act shall not exceed 50 percent of the total cost of the project or research or study activity. A Federal contribution in excess of 25 percent for a project carried out under this Act may not be made unless the Secretary determines that the project is not feasible without such increased Federal contribution. The Secretary shall prescribe appropriate procedures to implement the provisions of this section. Costs of operation, maintenance, repair, and rehabilitation of facilities funded under the authority of this Act shall be non-Federal responsibilities.

SEC. 8. AUTHORIZATION OF APPROPRIATIONS.

(a) **SECTION 3.**—There are authorized to be appropriated to carry out section 3 of this Act \$5,000,000 per year for fiscal years 1997 through 2002. Of these amounts, up to \$1,000,000 in each fiscal year may be awarded to institutions of higher education, including United States-Mexico binational research foundations and interuniversity research programs established by the two countries, for research grants without any cost-sharing requirement.

(b) **SECTION 4.**—There are authorized to be appropriated to carry out section 4 of this Act \$25,000,000 for fiscal years 1997 through 2002.

S. 811—4

SEC. 9. CONSULTATION.

In carrying out the provisions of this Act, the Secretary shall consult with the heads of other Federal agencies, including the Secretary of the Army, which have experience in conducting desalination research or operating desalination facilities. The authorization provided for in this Act shall not prohibit other agencies from carrying out separately authorized programs for desalination research or operations.

Speaker of the House of Representatives.

*Vice President of the United States and
President of the Senate.*