

## Water Desalination Act of 1996

[P.L. 104–298; 42 U.S.C. 10301 note]

[As Amended Through P.L. 117–58, Enacted November 15, 2021]

【Currency: This publication is a compilation of the text of Public Law 104–298. It was last amended by the public law listed in the As Amended Through note above and below at the bottom of each page of the pdf version and reflects current law through the date of the enactment of the public law listed at <https://www.govinfo.gov/app/collection/comps/>】

【Note: While this publication does not represent an official version of any Federal statute, substantial efforts have been made to ensure the accuracy of its contents. The official version of Federal law is found in the United States Statutes at Large and in the United States Code. The legal effect to be given to the Statutes at Large and the United States Code is established by statute (1 U.S.C. 112, 204).】

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;
- (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; and
- (8) development of metrics to analyze the costs and benefits of desalination relative to other sources of water (including costs and benefits related to associated infrastructure, energy use, environmental impacts, and diversification of water supplies); and
- (9) development of design and siting specifications that avoid or minimize, adverse economic and environmental impacts.

(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.

(e) **PRIORITIZATION.**—In carrying out this section, the Secretary shall prioritize funding for research—

(1) to reduce energy consumption and lower the cost of desalination, including chloride control;

(2) to reduce the environmental impacts of seawater desalination and develop technology and strategies to minimize those impacts;

(3) to improve existing reverse osmosis and membrane technology;

(4) to carry out basic and applied research on next generation desalination technologies, including improved energy recovery systems and renewable energy-powered desalination systems that could significantly reduce desalination costs;

(5) to develop portable or modular desalination units capable of providing temporary emergency water supplies for domestic or military deployment purposes; and

(6) to develop and promote innovative desalination technologies, including chloride control, identified by the Secretary.

#### **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, including modules specifically designed for brine management.

(2) **PROJECTS.**—

(A) **IN GENERAL.**—Subject to the requirements of this subsection, the Secretary of the Interior may participate in an eligible desalination project in an amount equal to not more than 25 percent of the total cost of the eligible desalination project.

(B) **ELIGIBLE DESALINATION PROJECT.**—The term “eligible desalination project” means any project in a Reclamation State, that—

(i) involves an ocean or brackish water desalination facility either constructed, operated and maintained; or sponsored by any State, department of a State, subdivision of a State or public agency organized pursuant to a State law; and

(ii) provides a Federal benefit in accordance with the reclamation laws (including regulations).

(C) **STATE ROLE.**—Participation by the Secretary of the Interior in an eligible desalination project under this subsection shall not occur unless—

(i) the project is included in a state-approved plan or federal participation has been requested by the

Governor of the State in which the eligible desalination project is located; and

(ii) the State or local sponsor determines, and the Secretary of the Interior concurs, that—

(I) the eligible desalination project is technically and financially feasible and provides a Federal benefit in accordance with the reclamation laws;

(II) sufficient non-Federal funding is available to complete the eligible desalination project; and

(III) the eligible desalination project sponsors are financially solvent; and

(iii) the Secretary of the Interior submits to Congress a written notification of these determinations within 30 days of making such determinations.

(D) ENVIRONMENTAL LAWS.—When participating in an eligible desalination project under this subsection, the Secretary shall comply with all applicable environmental laws, including the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.).

(E) INFORMATION.—When participating in an eligible desalination project under this subsection, the Secretary of the Interior—

(i) may rely on reports prepared by the sponsor of the eligible desalination project, including feasibility (or equivalent) studies, environmental analyses, and other pertinent reports and analyses; but

(ii) shall retain responsibility for making the independent determinations described in subparagraph (C).

(F) AUTHORIZATION OF APPROPRIATIONS.—

(i) \$30,000,000 of funding is authorized to remain available until expended; and

(ii) Projects can only receive funding if enacted appropriations legislation designates funding to them by name, after the Secretary recommends specific projects for funding pursuant to this subsection and transmits such recommendations to the appropriate committees of Congress.

(3) 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.

(4) 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.

(c) **PRIORITIZATION.**—In carrying out demonstration and development activities under this section, the Secretary shall prioritize projects—

(1) for the benefit of drought-stricken States and communities;

(2) for the benefit of States that have authorized funding for research and development of desalination technologies and projects;

(3) that can reduce reliance on imported water supplies that have an impact on species listed under the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.); and

(4) that demonstrably leverage the experience of international partners with considerable expertise in desalination, such as the State of Israel.

(d) **WATER PRODUCTION.**—The Secretary shall provide, as part of the annual budget submission to Congress, an estimate of how much water has been produced and delivered in the past fiscal year using processes and facilities developed or demonstrated using assistance provided under sections 3 and 4. This submission shall include, to the extent practicable, available information on a detailed water accounting by process and facility and the cost per acre foot of water produced and delivered.

**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 2021. 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 \$20,000,000 for each of fiscal years 2022 through 2026, in addition to the authorization of appropriations for projects in section 4(a)(2)(F).

**SEC. 9. CONSULTATION AND COORDINATION.**

(a) 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.

(b) COORDINATION OF FEDERAL DESALINATION RESEARCH AND DEVELOPMENT.—The White House Office of Science and Technology Policy shall develop a coordinated strategic plan that—

(1) establishes priorities for future Federal investments in desalination;

(2) coordinates the activities of Federal agencies involved in desalination, including the Bureau of Reclamation, the Corps of Engineers, the United States Army Tank Automotive Research, Development and Engineering Center, the National Science Foundation, the Office of Naval Research of the Department of Defense, the National Laboratories of the Department of Energy, the United States Geological Survey, the Environmental Protection Agency, and the National Oceanic and Atmospheric Administration;

(3) strengthens research and development cooperation with international partners, such as the State of Israel, in the area of desalination technology; and

(4) promotes public-private partnerships to develop a framework for assessing needs for, and to optimize siting and design of, future ocean desalination projects.

(c) OTHER DESALINATION PROGRAMS.—The authorization provided for in this Act shall not prohibit other agencies from carrying out separately authorized programs for desalination research or operations.