

*Note: Chapter 109 - Water Resources Research (42 USC 10301) was amended by the Water Resources Research Act Amendments of 2000 (Public Law 106-374) (114 STAT. 1434). President Clinton signed this Act into law on October 27, 2000.*

**TITLE 42 — THE PUBLIC HEALTH AND WELFARE  
(42 USC Sec. 10301 et. seq.)**

**CHAPTER 109 — WATER RESOURCES RESEARCH**

**Sec. 10301. Congressional findings and declarations**

The Congress finds and declares that -

- (1) the existence of an adequate supply of water of good quality for the production of materials and energy for the Nation's needs and for the efficient use of the Nation's energy and water resources is essential to national economic stability and growth, and to the well-being of the people;
- (2) the management of water resources is closely related to maintaining environmental quality, productivity of natural resources and agricultural systems, and social well-being;
- (3) there is an increasing threat of impairment to the quantity and quality of surface and groundwater resources;
- (4) the Nation's capabilities for technological assessment and planning and for policy formulation for water resources must be strengthened at the Federal, State, and local governmental levels;
- (5) there should be a continuing national investment in water and related research and technology commensurate with growing national needs;
- (6) it is necessary to provide for the research and development of technology for the conversion of saline and other impaired waters to a quality suitable for municipal, industrial, agricultural, recreational, and other beneficial uses;
- (7) the Nation must provide programs to strengthen research and associated graduate education because the pool of scientists, engineers, and technicians trained in fields related to water resources constitutes an invaluable natural resource which should be increased, fully utilized, and regularly replenished; and

(8) long-term planning and policy development are essential to ensure the availability of an abundant supply of high quality water for domestic and other uses; and

(9) the States must have the research and problem-solving capacity necessary to effectively manage their water resources.

*[Source: Pub. L. 98-242, title I, Sec. 102, Mar. 22, 1984, 98 Stat. 97; Pub. L. 104-147, Sec. 1, May 24, 1996, 110 Stat. 1375.]*

*[Amendments: 1996 - Par. (2). Pub. L. 104-147, Sec. 1(1), inserted ", productivity of natural resources and agricultural systems," after "environmental quality". Pars. (8), (9). Pub. L. 104-147, Sec. 1(2)-(4), added pars. (8) and (9).]*

### **Sec. 10302. Congressional declaration of purpose**

It is the purpose of this chapter to assist the Nation and the States in augmenting their water resources science and technology as a way to -

(1) assure supplies of water sufficient in quantity and quality to meet the Nation's expanding needs for the production of food, materials, and energy;

(2) discover practical solutions to the Nation's water and water resources related problems, particularly those problems related to impaired water quality;

(3) assure the protection and enhancement of environmental and social values in connection with water resources management and utilization;

(4) promote the interest of State and local governments as well as private industry in research and the development of technology that will reclaim waste water and to convert saline and other impaired waters to waters suitable for municipal, industrial, agricultural, recreational, and other beneficial uses;

(5) promote more effective coordination of the Nation's water resources research program;

(6) promote the development of a cadre of trained research scientists, engineers, and technicians for future water resources problems; and

(7) encourage long-term planning and research to meet future water management, quality, and supply challenges.

*[Source: Pub. L. 98-242, title I, Sec. 103, Mar. 22, 1984, 98 Stat. 97; Pub. L. 101-397, Sec. 1(a), Sept. 28, 1990, 104 Stat. 852; Pub. L. 104-147, Sec. 2, May 24, 1996, 110 Stat. 1375.]*

*[References In Text: This chapter, referred to in text, was in the original "this Act", meaning Pub. L. 98-242, Mar. 22, 1984, 98 Stat. 97, known as the Water Resources Research Act of 1984. For complete classification of this Act to the Code, see Short Title note set out under section 10301 of this title and Tables.]*

*[Amendments: 1996 - Par. (5). Pub. L. 104-147, Sec. 2(1), struck out "to" before "promote" and "and" after "program;". Par. (6). Pub. L. 104-147, Sec. 2(2), substituted "; and" for period at end. Par. (7). Pub. L. 104-147, Sec. 2(3), added par. (7). 1990 - Par. (5). Pub. L. 101-397 substituted "to promote more effective coordination of" for "coordinate more effectively".]*

### **Sec. 10303. Water resources research and technology institutes**

#### **(a) Establishment; designation of site by State legislature or Governor**

Subject to the approval of the Secretary of the Interior (hereafter in this chapter referred to as the "Secretary") under this section, one water resources research and technology institute, center, or equivalent agency (hereafter in this chapter referred to as the "institute") may be established in each State (as used in this chapter, the term "State" includes the Commonwealth of Puerto Rico, the District of Columbia, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Mariana Islands and the Federated States of Micronesia) at a college or university which was established in accordance with the Act approved July 2, 1862 (12 Stat. 503) (7 U.S.C. 301 et seq.), or at some other institution designated by act of the legislature of the State concerned. If there is more than one such college or university in a State established in accordance with such Act of July 2, 1862, the institute in such State shall, in the absence of a designation to the contrary by act of the legislature of the State, be established at the one such college or university designated by the Governor of the State. Two or more States may cooperate in the establishment of a single institute or regional institute, in which event the sums otherwise allocated to institutes in each of the cooperating States shall be paid to such single or regional institute.

#### **(b) Scope of research; other activities; cooperation and coordination**

Each institute shall -

(1) plan, conduct, or otherwise arrange for competent research that fosters (A) the entry of new research scientists into the water resources fields, (B) the training and education of future water scientists, engineers, and technicians, (C) the preliminary exploration of new ideas that address water problems or expand understanding of water and water-related phenomena, and (D) the dissemination of research results to water managers and the public, and

(2) cooperate closely with other colleges and universities in the State that have demonstrated capabilities for research, information dissemination, and graduate training in order to develop a statewide program designed to resolve State and regional water and related land problems.

Each institute shall also cooperate closely with other institutes and other organizations in the region to increase the effectiveness of the institutes and for the purpose of promoting regional coordination.

(c) Grants; matching funds

From the sums appropriated pursuant to subsection (f) of this section, the Secretary shall make grants to each institute to be matched on a basis of no less than 2 non-Federal dollars for every 1 Federal dollar, such sums to be used only for the reimbursement of the direct cost expenditures incurred for the conduct of the water resources research program.

(d) Submission and approval of water research program; requisite assurances

Prior to and as a condition of the receipt each fiscal year of funds appropriated under subsection (f) of this section, each institute shall submit to the Secretary for his approval a water research program that includes assurances, satisfactory to the Secretary, that such program was developed in close consultation and collaboration with the director of that State's department of water resources or similar agency, other leading water resources officials within the State, and interested members of the public. The program described in the preceding sentence shall include plans to promote research, training, information dissemination, and other activities meeting the needs of the State and Nation, and shall encourage regional cooperation among institutes in research into areas of water management, development, and conservation that have a regional or national character.

(e) Evaluation of water resources research program

The Secretary shall conduct a careful and detailed evaluation of each institute at least once every 5 years to determine that the quality and relevance of its water resources research and its effectiveness as an institution for planning, conducting, and arranging for research warrants its continued support under this section. If, as a result of any such evaluation, the Secretary determines that an institute does not qualify for further support under this section, then no further grants to the institute may be made until the institute's qualifications are reestablished to the satisfaction of the Secretary.

(f) Authorization of appropriations in general

(1) For the purpose of carrying out this section, there is authorized to be appropriated to the Secretary the sum of \$9,000,000 for fiscal year 2001, \$10,000,000 for each of fiscal years 2002 and 2003, and \$12,000,000 for each of fiscal years 2004 and 2005, such sums to remain available until expended.

(2) Any sums appropriated under this subsection but which fail to be obligated by the close of the fiscal year for which they were appropriated shall be transferred by the Secretary and available for obligation during the succeeding fiscal year under the terms of subsection (g) of this section.

(g) Additional appropriations where research focused on water problems of interstate nature

(1) There is further authorized to be appropriated to the Secretary of the Interior the sum of \$3,000,000 for fiscal year 2001, \$4,000,000 for each of fiscal years 2002 and 2003, and \$6,000,000 for each of fiscal years 2004 and 2005 only for reimbursement of the direct cost expenses of additional research or synthesis of the results of research by institutes which focuses on water problems and issues of a regional or interstate nature beyond those of concern only to a single State and which relate to specific program priorities identified jointly by the Secretary and the institutes. Such funds when appropriated shall be matched on a not less than dollar-for-dollar basis by funds made available to institutes or groups of institutes, by States or other non-Federal sources. Funds made available under this subsection shall remain available until expended.

(2) Research funds made available under this subsection shall be made on a competitive basis subject to the merit of the proposal, the need for the information to be produced, and the opportunity such funds will provide for training of water resources scientists or professionals.

(h) Coordination

(1) In general

To carry out this chapter, the Secretary -

(A) shall encourage other Federal departments, agencies (including agencies within the Department of the Interior), and instrumentalities to use and take advantage of the expertise and capabilities that are available through the institutes established by this section, on a cooperative or other basis;

(B) shall encourage cooperation and coordination with other Federal programs concerned with water resources problems and issues;

(C) may enter into contracts, cooperative agreements, and other transactions without regard to section 5 of title 41;

(D) may accept funds from other Federal departments, agencies (including agencies within the Department of the Interior), and instrumentalities to pay for and add to grants made, and contracts entered into, by the Secretary;

(E) may promulgate such regulations as the Secretary considers appropriate; and

(F) may support a program of internships for qualified individuals at the undergraduate and graduate levels to carry out the educational and training objectives of this chapter.

## (2) Report

The Secretary shall report to Congress annually on coordination efforts with other Federal departments, agencies, and instrumentalities under paragraph (1).

## (3) Relationship to State rights

Nothing in this chapter shall preempt the rights and authorities of any State with respect to its water resources or management of those resources.

*[Source: Pub. L. 98-242, title I, Sec. 104, Mar. 22, 1984, 98 Stat. 98; Pub. L. 101-397, Sec. 1(b)-(h), (m), Sept. 28, 1990, 104 Stat. 852, 853; Pub. L. 104-147, Sec. 3-6, May 24, 1996, 110 Stat. 1376.]*

*[References In Text: Act approved July 2, 1862, referred to in subsec. (a), is act July 2, 1862, ch. 130, 12 Stat. 503, as amended, popularly known as the "Morrill Act" and also as the "First Morrill Act", which is classified generally to subchapter I (Sec. 301 et seq.) of chapter 13 of Title 7, Agriculture.]*

*[Amendments: 2000 – Pub. L. 106-374, Section 1 substituted "\$9,000,000 for fiscal year 2001, \$10,000,000 for fiscal years 2002 and 20003, and \$12,000,000 for fiscal years 2004 and 2005, ".]*

*[Amendments: 2000 – Pub. L. 106-374, Section 2 substituted "\$3,000,000 for fiscal year 2001, \$4,000,000 for fiscal years 2002 and 2003, and \$6,000,000 for fiscal years 2004 and 2005 ".]*

*[Amendments: 1996 - Subsec. (c). Pub. L. 104-147, Sec. 3, substituted "2 non-Federal dollars for every 1 Federal dollar" for "one non-Federal dollar for every Federal dollar during the fiscal years ending September 30, 1985, and September 30, 1986, one and one-half non-Federal dollars for each Federal dollar during the fiscal years ending September 30, 1987, and September 30, 1988, and two non-Federal dollars for each Federal dollar during the fiscal year ending September 30, 1989 and thereafter".]*

*Subsec. (f)(1). Pub. L. 104-147, Sec. 4, substituted "of \$5,000,000 for fiscal year 1996, \$7,000,000 for each of fiscal years 1997 and 1998, and \$9,000,000 for each of fiscal years 1999 and 2000" for "of \$10,000,000 for each of the fiscal years ending September 30, 1989, through September 30, 1995,".*

*Subsec. (g)(1). Pub. L. 104-147, Sec. 5, substituted "of \$3,000,000 for each of fiscal years 1996 through 2000" for "of \$5,000,000 for each of the fiscal years 1991, 1992, 1993, 1994, and 1995".*

*Subsec. (h). Pub. L. 104-147, Sec. 6, added subsec. (h). 1990 - Subsec. (a). Pub. L. 101-397, Sec. 1(b), substituted "Federated States of Micronesia" for "Trust Territory of the Pacific Islands".*

*Subsec. (b). Pub. L. 101-397, Sec. 1(c), inserted "promoting" after "for the purpose of" in last sentence.*

*Subsec. (b)(1). Pub. L. 101-397, Sec. 1(d), amended par. (1) generally. Prior to amendment, par. (1) read as follows: "plan, conduct, or otherwise arrange for competent research with respect to water resources, including investigations and experiments of either a basic or practical nature, or both; promote the dissemination and application of the results of these efforts; and provide for the training of scientists and engineers through such research, investigations, and experiments, and".*

*Subsec. (c). Pub. L. 101-397, Sec. 1(e), substituted for period at end "and thereafter, such sums to be used only for the reimbursement of the direct cost expenditures incurred for the conduct of the water resources research program."*

*Subsec. (e). Pub. L. 101-397, Sec. 1(f), amended subsec. (e) generally, substituting provisions directing that evaluation be conducted at least once every 5 years for provisions directing evaluation within two years after establishment of institute and at least once every four years thereafter and striking out provisions relating to composition and function of evaluation team and setting forth criteria for determination.*

*Subsec. (f)(1). Pub. L. 101-397, Sec. 1(g), substituted "September 30, 1989, through September 30, 1995," for "September 30, 1985, through September 30, 1989".*

*Subsec. (f)(2). Pub. L. 101-397, Sec. 1(h), substituted reference to subsec. (g) of this section for reference to section 10305 of this title.*

*Subsec. (g). Pub. L. 101-397, Sec. 1(m), added subsec. (g).]*

## **Sec. 10304. Research concerning water resource-related problems deemed to be in national interest**

### **(a) Grants; matching funds**

(1) In addition to the grants authorized by section 10303 of this title, the Secretary is authorized to make grants, on a dollar-for-dollar matching basis, to the institutes established under such section, as well as other qualified educational institutions, private foundations, private firms, individuals, and agencies of local or State government for research concerning any aspect of a water resource-related problem which the Secretary may deem to be in the national interest. Such grants shall be made with such advice and review by peer or other expert groups of appropriate interdisciplinary composition as the Secretary deems appropriate on the basis of the merits of the project and the need for the knowledge such project is expected to produce upon completion.

(2) Research funded under this section should to the extent possible utilize the best qualified graduate students so the Nation profits from the education and training benefits resulting from the use of the latest in technological developments in solving water problems.

(b) Applications for grants

Each application for a grant under this section shall state the nature of the project to be undertaken, the period during which it will be pursued, the qualifications of the personnel who will direct and conduct it, the importance of the project to the Nation as well as to the region and State concerned, its relation to other research projects previously or currently being pursued, and the extent to which it will provide an opportunity for the training of water resources scientists.

(c) Authorization of appropriations

There is authorized to be appropriated to the Secretary the sum of \$10,000,000 for the purpose of carrying out this section for each of the fiscal years ending September 30, 1985, through September 30, 1995, such sums to remain available until expended.

*[Source: Pub. L. 98-242, title I, Sec. 105, Mar. 22, 1984, 98 Stat. 100; Pub. L. 101-397, Sec. 1(i), (j), Sept. 28, 1990, 104 Stat. 853.]*

*[Amendments: 1990 - Subsec. (a)(3). Pub. L. 101-397, Sec. 1(i), struck out par. (3) which read as follows: "In cases where the Secretary determines, in accordance with criteria established by him, that research under this section is of a basic nature which would not otherwise be undertaken, the Secretary may approve grants under this section with a matching requirement other than that specified in paragraph (1) of this subsection."*

*Subsec. (c). Pub. L. 101-397, Sec. 1(j), substituted "\$10,000,000" for "\$20,000,000" and "1995" for "1989".*

## **Sec. 10305. Development of water-related technology**

(a) Grants; matching funds

(1) The Secretary shall make grants in addition to those authorized under sections 10303 and 10304 of this title for technology development concerning any aspect of water resources including water-related technology which the Secretary may deem to be of State, regional, or national importance. Activities funded under this section may be carried out by educational institutions, private firms, foundations, individuals, or agencies of State or local government. Care shall be taken to



protect proprietary information of private individuals or firms associated with the technology.

(2) The Secretary may establish any condition for the matching of funds by the recipient of any grant or contract under this section which the Secretary considers to be in the best interest of the Nation considering the information transfer and technology needs of the Nation. However, in the case of institutes established by section 10303 of this title no match greater than that required under section 10303 of this title may be required.

(b) Applications for grants

Each application for a grant under this section shall state the nature of the project to be undertaken, the qualifications of the personnel who will direct and conduct it, facilities of the organization performing any technology development, the importance of the project to the Nation, region, and State concerned, and the potential benefit to be accrued.

(c) Authorization of appropriations

There is authorized to be appropriated to the Secretary the sum of \$6,000,000 for the purpose of carrying out this section for each of the fiscal years ending September 30, 1990, through September 30, 1995; such sums to remain available until expended.

*[Source: Pub. L. 98-242, title I, Sec. 106, Mar. 22, 1984, 98 Stat. 100; Pub. L. 101-397, Sec. 1(n), Sept. 28, 1990, 104 Stat. 853.]*

*[Amendments: 1990 - Pub. L. 101-397, in amending section generally, in subsec. (a)(1) struck out provision directing that grant be made on basis of merit and feasibility of project, in subsec. (a)(2) inserted provisions relating to match in the case of institutes established by section 10303 of this title, and in subsec. (c) substituted provisions authorizing \$6,000,000 appropriation for fiscal years 1990 through 1995, for provisions authorizing the same sum for fiscal years 1985 through 1989, and struck out provisions authorizing obligation of funds under this section and par. (1) and (2) designations.]*

**Sec. 10306. Administrative costs**

From the sums appropriated pursuant to this chapter, not more than 15 per centum shall be utilized for administrative costs.

*[Source: Pub. L. 98-242, title I, Sec. 107, Mar. 22, 1984, 98 Stat. 101.]*

**Sec. 10307. Types of research and development**

The type of research and development to be undertaken under the authority of sections 10304 and 10305 of this title and to be encouraged by the institutes established under section 10303 of this title shall include the following:

- (1) Aspects of the hydrologic cycle;
- (2) Supply and demand for water;
- (3) Demineralization of saline and other impaired waters;
- (4) Conservation and best use of available supplies of water and methods of increasing such supplies;
- (5) Water reuse;
- (6) Depletion, contamination, and degradation of groundwater supplies;
- (7) Improvements in the productivity of water when used for agricultural, municipal, and commercial purposes;
- (8) The economic, legal, engineering, social, recreational, biological, geographic, ecological, and other aspects of water quality and quantity problems;
- (9) Scientific information dissemination activities, including identifying, assembling, and interpreting the results of scientific and engineering research on water resources problems; and
- (10) Providing means for improved communication of research results, having due regard for the varying conditions and needs for the respective States and regions.

*[Source: Pub. L. 98-242, title I, Sec. 108, Mar. 22, 1984, 98 Stat. 101; Pub. L. 101-397, Sec. 1(k), (l), Sept. 28, 1990, 104 Stat. 853.]*

*[Amendments: 1990 - Par. (6). Pub. L. 101-397, Sec. 1(k), which directed that ", contamination," be inserted after "depletion", was executed by making the insertion after "Depletion" to reflect the probable intent of Congress. Par. (8). Pub. L. 101-397, Sec. 1(l), inserted "quality and quantity" after "water".]*

### **Sec. 10308. Patent policy**

Notwithstanding any other provision of law, the Secretary shall be governed by the provisions of sections 5908 (except subsections (l) and (n)) and 5909 of this title with respect to patent policy and to the definition of title to and licensing of inventions made or conceived in the course of work performed, or under any contract or grant made,

pursuant to this chapter. Subject to such patent policy, all research or development contracted for, sponsored, cosponsored, or authorized under authority of this chapter shall be provided in such manner that all information, data, and know-how, regardless of their nature or mediums, resulting from such research and development shall (with such exceptions and limitations, if any, as the Secretary may find to be necessary in the interest of national defense) be usefully available for practice by the general public.

*[Source: Pub. L. 98-242, title I, Sec. 109, Mar. 22, 1984, 98 Stat. 101.]*

**Sec. 10309. New spending authority; amounts provided in advance**

Any new spending authority described in subsection (c)(2)(A) or (B) of section 651 of title 2 which is provided under this chapter shall be effective for any fiscal year only to such extent or in such amounts as are provided in advance in appropriations Acts.

*[Source: Pub. L. 98-242, title I, Sec. 111, Mar. 22, 1984, 98 Stat. 101.]*