

complete classification of this Act to the Code, see Short Title note set out under section 10301 of this title and Tables.

### § 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.

(Pub. L. 98-242, title I, §108, Mar. 22, 1984, 98 Stat. 101; Pub. L. 101-397, §1(k), (l), Sept. 28, 1990, 104 Stat. 853.)

#### AMENDMENTS

1990—Par. (6). Pub. L. 101-397, §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, §1(l), inserted “quality and quantity” after “water”.

### § 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.

(Pub. L. 98-242, title I, §109, Mar. 22, 1984, 98 Stat. 101.)

#### 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, which is classified principally to this chapter. For complete classification of this Act to the Code, see Short Title note set out under section 10301 of this title and Tables.

### § 10309. New spending authority; amounts provided in advance

Any new spending authority described in subsection (c)(2)(A) or (B) of section 651<sup>1</sup> 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.

(Pub. L. 98-242, title I, §111, Mar. 22, 1984, 98 Stat. 101.)

#### REFERENCES IN TEXT

Section 651 of title 2, referred to in text, was amended by Pub. L. 105-33, title X, §10116(a)(3), (5), Aug. 5, 1997, 111 Stat. 691, by striking out subsec. (c) and redesignating former subsec. (d) as (c).

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, which is classified principally to this chapter. For complete classification of this Act to the Code, see Short Title note set out under section 10301 of this title and Tables.

## CHAPTER 109A—MEMBRANE PROCESSES RESEARCH

Sec.	Findings.
10341.	Findings.
10342.	Research program.
10343.	Goals of research program.
10344.	Coordination with other research.
10345.	Authorization of appropriations.

### § 10341. Findings

The Congress finds that—

(1) there is an increasing threat of impairment to the quantity and quality of the Nation’s water resources due to, among other things, growing national needs, recurring drought in the Western States, point and nonpoint source pollution, and saltwater intrusion into existing groundwater supplies;

(2) many communities in the United States have water supplies containing high salinity levels or contaminants which pose health risks;

(3) the Nation needs to develop economical processes to treat existing water supplies that are contaminated;

(4) it is necessary to provide for research into new techniques to reclaim waste water and to convert saline and other contaminated waters to a quality suitable for municipal, industrial, agricultural, recreational, and other beneficial uses;

(5) there is very little Federal funding being applied to basic research in the field of treatment of contaminated water through membrane processes; and

(6) the treatment of contaminated water through membrane processes will solve a wide

<sup>1</sup> See References in Text note below.

variety of water treatment problems, including compliance with the Federal Water Pollution Control Act [33 U.S.C. 1251 et seq.] and the Safe Drinking Water Act [42 U.S.C. 300f et seq.].

(Pub. L. 102-490, §2, Oct. 24, 1992, 106 Stat. 3142.)

#### REFERENCES IN TEXT

The Federal Water Pollution Control Act, referred to in par. (6), is act June 30, 1948, ch. 758, as amended generally by Pub. L. 92-500, §2, Oct. 18, 1972, 86 Stat. 816, which is classified generally to chapter 26 (§1251 et seq.) of Title 33, Navigation and Navigable Waters. For complete classification of this Act to the Code, see Short Title note set out under section 1251 of Title 33 and Tables.

The Safe Drinking Water Act, referred to in par. (6), is title XIV of act July 1, 1944, as added Dec. 16, 1974, Pub. L. 93-523, §2(a), 88 Stat. 1660, as amended, which is classified generally to subchapter XII (§300f et seq.) of chapter 6A of this title. For complete classification of this Act to the Code, see Short Title note set out under section 201 of this title and Tables.

#### SHORT TITLE

Pub. L. 102-490, §1, Oct. 24, 1992, 106 Stat. 3142, provided that: "This Act [enacting this chapter] may be cited as the 'Membrane Processes Research Act of 1992'."

#### § 10342. Research program

The Director of the National Science Foundation shall establish a basic research program on membranes and membrane processes. Such program may be carried out through awarding grants, entering into contracts or cooperative agreements, or direct research.

(Pub. L. 102-490, §3, Oct. 24, 1992, 106 Stat. 3142.)

#### § 10343. Goals of research program

The goals of the research program established under section 10342 of this title shall be—

- (1) the development of membranes resistant to degradation, bacterial or otherwise, thereby extending the life of such membranes;
- (2) the development of membranes useful for the efficient and cost effective treatment of contaminated water; and
- (3) the development of innovative technologies for membrane processes.

(Pub. L. 102-490, §4, Oct. 24, 1992, 106 Stat. 3142.)

#### § 10344. Coordination with other research

The research program established under section 10342 of this title shall be carried out in coordination with any other related Federal research efforts.

(Pub. L. 102-490, §5, Oct. 24, 1992, 106 Stat. 3143.)

#### § 10345. Authorization of appropriations

There are authorized to be appropriated to the Director of the National Science Foundation, from sums otherwise authorized to be appropriated, \$2,500,000 for fiscal year 1993, for carrying out this chapter.

(Pub. L. 102-490, §6, Oct. 24, 1992, 106 Stat. 3143.)

### CHAPTER 109B—SECURE WATER

Sec.  
10361. Findings.

Sec.  
10362. Definitions.  
10363. Reclamation climate change and water program.  
10364. Water management improvement.  
10365. Hydroelectric power assessment.  
10366. Climate change and water intragovernmental panel.  
10367. Water data enhancement by United States Geological Survey.  
10368. National water availability and use assessment program.  
10369. Research agreement authority.  
10370. Effect.

#### § 10361. Findings

Congress finds that—

(1) adequate and safe supplies of water are fundamental to the health, economy, security, and ecology of the United States;

(2) systematic data-gathering with respect to, and research and development of, the water resources of the United States will help ensure the continued existence of sufficient quantities of water to support—

- (A) increasing populations;
- (B) economic growth;
- (C) irrigated agriculture;
- (D) energy production; and
- (E) the protection of aquatic ecosystems;

(3) global climate change poses a significant challenge to the protection and use of the water resources of the United States due to an increased uncertainty with respect to the timing, form, and geographical distribution of precipitation, which may have a substantial effect on the supplies of water for agricultural, hydroelectric power, industrial, domestic supply, and environmental needs;

(4) although States bear the primary responsibility and authority for managing the water resources of the United States, the Federal Government should support the States, as well as regional, local, and tribal governments, by carrying out—

- (A) nationwide data collection and monitoring activities;
- (B) relevant research; and
- (C) activities to increase the efficiency of the use of water in the United States;

(5) Federal agencies that conduct water management and related activities have a responsibility—

- (A) to take a lead role in assessing risks to the water resources of the United States (including risks posed by global climate change); and
- (B) to develop strategies—

(i) to mitigate the potential impacts of each risk described in subparagraph (A); and

(ii) to help ensure that the long-term water resources management of the United States is sustainable and will ensure sustainable quantities of water;

(6) it is critical to continue and expand research and monitoring efforts—

- (A) to improve the understanding of the variability of the water cycle; and
- (B) to provide basic information necessary—