search 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.

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

Editorial Notes

AMENDMENTS

1990—Subsec. (a)(3). Pub. L. 101–397, §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, \$1(j), substituted "\$10,000,000" for "\$20,000,000" and "1995" for "1989".

§ 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.

(Pub. L. 98-242, title I, §106, Mar. 22, 1984, 98 Stat. 100; Pub. L. 101-397, §1(n), Sept. 28, 1990, 104 Stat. 853.)

Editorial Notes

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.

§ 10306. Administrative costs

From the sums appropriated pursuant to this chapter, not more than 7.5 per centum shall be utilized for administrative costs.

(Pub. L. 98-242, title I, §107, Mar. 22, 1984, 98 Stat. 101; Pub. L. 109-471, §2(f), Jan. 11, 2007, 120 Stat. 3553.)

Editorial Notes

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.

AMENDMENTS

2007—Pub. L. 109-471 substituted "7.5" for "15".

§ 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.)

Editorial Notes

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

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

Editorial Notes

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 651^1 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.)

Editorial Notes

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.

$\S\,10310.$ Produced water research and development

(a) Establishment

As soon as possible after December 27, 2020, the Secretary of Energy (in this section referred to as the "Secretary") shall establish a research and development program on produced water to develop—

- (1) new technologies and practices to reduce the environmental impact; and
- (2) opportunities for reprocessing of produced water at natural gas or oil development sites.

(b) Prioritization

In carrying out the program established under subsection (a), the Secretary shall give priority to projects that develop and bring to market—

- (1) effective systems for on-site management or repurposing of produced water; and
- (2) new technologies or approaches to reduce the environmental impact of produced water on local water sources and the environment.

(c) Conduct of program

In carrying out the program established under subsection (a), the Secretary shall carry out science-based research and development activities to pursue—

- (1) improved efficiency, technologies, and techniques for produced water recycling stations; and
- (2) alternative approaches to treating, reusing, storing, or decontaminating produced water.

(d) Authorization of appropriations

There are authorized to be appropriated to carry out this section \$10,000,000 for each of fiscal years 2021 through 2025.

(Pub. L. 116-260, div. Z, title IV, §4008, Dec. 27, 2020, 134 Stat. 2546.)

Editorial Notes

CODIFICATION

Section was enacted as part of the Energy Act of 2020, and not as part of the Water Resources Research Act of 1984 which comprises this chapter.

CHAPTER 109A—MEMBRANE PROCESSES RESEARCH

Sec.

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;

¹ See References in Text note below.