nology Innovation Act of 1980 (15 U.S.C. 3710a), except that the Secretary may fund up to 50 percent of the cost of each collaborative research and development project undertaken.

"(d) LICENSING OF RESEARCH AND DEVELOPMENT.—The research, development, and use of any technology developed under an agreement entered into pursuant to this section, including the terms under which such technology may be licensed and the resulting royalties may be distributed, shall be subject to the provisions of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3701–3714). In addition, the Secretary may require the non-Federal entity to certify that such research and development will be performed substantially in the United States and that products embodying inventions made under an agreement entered into pursuant to this section or produced through the use of such inventions will be manufactured substantially in the United States.

"(e) AUTHORIZATION OF APPROPRIATIONS.—For purposes of carrying out this section, there is authorized to be appropriated \$1,000,000 for fiscal year 1990 and \$4,000,000 for fiscal year 1991. Such funds shall remain available until expended. No funds are authorized to be appropriated under this section for any fiscal year beginning after September 30, 1991."

"SECRETARY" DEFINED

Secretary means the Secretary of the Army, see section 2 of Pub. L. 100–676, set out as a note under section 2201 of this title.

§ 2313a. Engineering and environmental innovations of national significance

(a) Surveys, plans, and studies

To encourage innovative and environmentally sound engineering solutions and innovative environmental solutions to problems of national significance, the Secretary may undertake surveys, plans, and studies and prepare reports that may lead to work under existing civil works authorities or to recommendations for authorizations.

(b) Funding

(1) Authorization of appropriations

There is authorized to be appropriated to carry out this section \$1,000,000 for each of fiscal years 1997 through 2000.

(2) Funding from other sources

The Secretary may accept and expend additional funds from other Federal agencies, States, or non-Federal entities for purposes of carrying out this section.

(Pub. L. 104–303, title II, §212, Oct. 12, 1996, 110 Stat. 3684.)

CODIFICATION

Section was enacted as part of the Water Resources Development Act of 1996, and not as part of the Water Resources Development Act of 1986 which comprises this chapter.

"SECRETARY" DEFINED

Secretary means the Secretary of the Army, see section 2 of Pub. L. 104–303, set out as a note under section 2201 of this title.

$\S\,2313b.$ Support of Army civil works program

(a) General authority

In carrying out research and development in support of the civil works program of the Department of the Army, the Secretary may utilize contracts, cooperative research and development agreements, cooperative agreements, and grants with non-Federal entities, including State and local governments, colleges and universities, consortia, professional and technical societies, public and private scientific and technical foundations, research institutions, educational organizations, and nonprofit organizations.

(b) Commercial application

With respect to contracts for research and development, the Secretary may include requirements that have potential commercial application and may use such potential application as an evaluation factor where appropriate.

(Pub. L. 104–303, title II, $\S 229$, Oct. 12, 1996, 110 Stat. 3703.)

CODIFICATION

Section was enacted as part of the Water Resources Development Act of 1996, and not as part of the Water Resources Development Act of 1986 which comprises this chapter.

"SECRETARY" DEFINED

Secretary means the Secretary of the Army, see section 2 of Pub. L. 104–303, set out as a note under section 2201 of this title.

§ 2314. Innovative technology

(a) Use

The Secretary shall, whenever feasible, seek to promote long- and short-term cost savings, increased efficiency, reliability, and safety, and improved environmental results through the use of innovative technology in all phases of water resources development projects and programs under the Secretary's jurisdiction. To further this goal, Congress encourages the Secretary to—

- (1) use procurement and contracting procedures that encourage innovative project design, construction, rehabilitation, repair, and operation and maintenance technologies;
- (2) frequently review technical and design criteria to remove or modify unnecessary impediments to innovation:
- (3) increase timely exchange of technical information with universities, private companies, government agencies, and individuals;
 - (4) foster design competition; and
- (5) encourage greater participation by non-Federal project sponsors in the development and implementation of projects.

(b) Accelerated adoption of innovative technologies for management of contaminated sediments

(1) Test projects

The Secretary shall approve an appropriate number of projects to test, under actual field conditions, innovative technologies for environmentally sound management of contaminated sediments.

(2) Demonstration projects

The Secretary may approve an appropriate number of projects to demonstrate innovative technologies that have been pilot tested under paragraph (1).

(3) Conduct of projects

Each pilot project under paragraph (1) and demonstration project under paragraph (2) shall be conducted by a university with proven expertise in the research and development of contaminated sediment treatment technologies and innovative applications using waste materials.

(4) Location

At least 1 of the projects under this subsection shall be conducted in New England by the University of New Hampshire.

(c) Reports

Within 2 years after November 17, 1988, and thereafter at the Secretary's discretion, the Secretary shall provide Congress with a report on the results of, and recommendations to increase, the development and use of innovative technology in water resources development projects under the Secretary's jurisdiction. Such report shall also contain information regarding innovative technologies which the Secretary has considered and rejected for use in water resources development projects under the Secretary's jurisdiction.

(d) "Innovative technology" defined

For the purpose of this section, the term "innovative technology" means designs, methods, or materials, including roller compacted concrete, geosynthetic materials, and advanced composites, that the Secretary determines are appropriate to carry out this section.

(Pub. L. 100-676, §8, Nov. 17, 1988, 102 Stat. 4023; Pub. L. 106-53, title V, §503(b), Aug. 17, 1999, 113 Stat. 337; Pub. L. 113-121, title III, §3021, June 10, 2014, 128 Stat. 1301.)

CODIFICATION

Section was enacted as part of the Water Resources Development Act of 1988, and not as part of the Water Resources Development Act of 1986 which comprises this chapter.

AMENDMENTS

2014—Subsec. (d). Pub. L. 113–121 substituted "methods, or materials, including roller compacted concrete, geosynthetic materials, and advanced composites, that the Secretary determines are appropriate to carry out this section." for "materials, or methods which the Secretary determines are previously undemonstrated or are too new to be considered standard practice."

1999—Subsecs. (b) to (d). Pub. L. 106-53 added subsec. (b) and redesignated former subsecs. (b) and (c) as (c) and (d), respectively.

DESIGN-BUILD CONTRACTING

Pub. L. 106–541, title II, §221, Dec. 11, 2000, 114 Stat. 2596, provided that:

"(a) PILOT PROGRAM.—The Secretary [of the Army] may conduct a pilot program consisting of not more than 5 authorized projects to test the design-build method of project delivery on various authorized civil works projects of the Corps of Engineers, including levees, pumping plants, revetments, dikes, dredging, weirs, dams, retaining walls, generation facilities, mattress laying, recreation facilities, and other water resources facilities.

"(b) DESIGN-BUILD DEFINED.—In this section, the term 'design-build' means an agreement between the Federal Government and a contractor that provides for both the design and construction of a project by a single contract.

"(c) REPORT.—Not later than 4 years after the date of enactment of this Act [Dec. 11, 2000], the Secretary shall transmit to Congress a report on the results of the pilot program."

REVIEW OF INNOVATIVE DREDGING TECHNOLOGIES

Pub. L. 106–53, title V, $\S503(a)$, Aug. 17, 1999, 113 Stat. 337, provided that:

"(1) IN GENERAL.—Not later than June 1, 2001, the Secretary shall complete a review of innovative dredging technologies designed to minimize or eliminate contamination of a water column upon removal of contaminated sediments.

"(2) Testing.—

"(A) SELECTION OF TECHNOLOGY.—After completion of the review under paragraph (1), the Secretary shall select, from among the technologies reviewed, the technology that the Secretary determines will best increase the effectiveness of removing contaminated sediments and significantly reduce contamination of the water column.

"(B) AGREEMENT.—Not later than December 31, 2001, the Secretary shall enter into an agreement with a public or private entity to test the selected technology in the vicinity of Peoria Lakes, Illinois.

"(3) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this subsection \$2.000.000."

BENEFICIAL USE OF WASTE TIRE RUBBER

Pub. L. 106-53, title V, §561, Aug. 17, 1999, 113 Stat. 355, provided that:

"(a) IN GENERAL.—The Secretary shall, when appropriate, encourage the beneficial use of waste tire rubber (including crumb rubber and baled tire products) recycled from tires.

"(b) INCLUDED BENEFICIAL USES.—Beneficial uses under subsection (a) may include marine pilings, underwater framing, floating docks with built-in flotation, utility poles, and other uses associated with transportation and infrastructure projects receiving Federal funds.

"(c) USE OF WASTE TIRE RUBBER.—The Secretary shall encourage the use, when appropriate, of waste tire rubber (including crumb rubber) in projects described in subsection (b)."

"SECRETARY" DEFINED

Secretary means the Secretary of the Army, see section 2 of Pub. L. 100–676, set out as a note under section 2201 of this title.

§ 2314a. Technical assistance program

(a) In general

The Secretary is authorized to provide technical assistance, on a nonexclusive basis, to any United States firm which is competing for, or has been awarded, a contract for the planning, design, or construction of a project outside the United States, if the United States firm provides, in advance of fiscal obligation by the United States, funds to cover all costs of such assistance. In determining whether to provide such assistance, the Secretary shall consider the effects on the Department of the Army civil works mission, personnel, and facilities. Prior to the Secretary providing such assistance, a United States firm must—

(1) certify to the Secretary that such assistance is not otherwise reasonably and expeditiously available; and

(2) agree to hold and save the United States free from damages due to the planning, design, construction, operation, or maintenance of the project.