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{ REPORT
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THE WATER RESOURCES RESEARCH AMENDMENTS ACT OF 2010

JUNE 18, 2010.—Ordered to be printed

Mrs. BOXER, from the Committee on Environment and Public Works, submitted the following

R E P O R T

[To accompany S. 3363]

[Including cost estimate of the Congressional Budget Office]

The Committee on Environment and Public Works, to which was referred the bill (S. 3363) to amend the Water Resources Research Act of 1984 to reauthorize grants for and require applied water supply research regarding the water resources research and technology institutes established under that Act, having considered the same, reports favorably thereon without amendment and recommends that the bill, do pass.

GENERAL STATEMENT AND BACKGROUND

Water is a critical resource and throughout this nation's history, universities have provided research to help meet the water resource challenges of the day from irrigation to infrastructure development. As the complexity of water resource challenges increased, including environmental impacts of water resources development, Congress authorized the Federal government to take a more vigorous role in sponsoring and coordinating water resources research. In 1964, Congress passed the Water Resources Research Act (WRRRA) which authorized establishment of a water resources research and technology institute or center in each state. The institutes were charged with fostering: (a) improvements in water supply reliability; (b) the exploration of new ideas that address water problems or expand understanding of water and water-related phenomena; (c) the entry of new scientists, engineers and technicians into water resources field; and (d) the dissemination of research to

water managers and the public. Each institute is located at a land grant university or another university designated by the governor. The program is administered by the U.S. Geological Survey.

The Water Resources Research Act was reauthorized and amended in the 98th, 101st, 104th, 106th and 109th Congresses. The program now includes a second competitive research grant program to fund projects of regional or national significance.

S. 3363 reauthorizes the Water Resources Research Act for an additional five years at current funding levels and makes two additional changes. The Committee recognizes continuing challenges to the nation's water infrastructure, water supply and energy supply. S. 3363 amends the Water Resources Research Act of 1984 to note the need for additional research into alternative, less expensive and more efficient approaches to water infrastructure, water supply and energy use including nonstructural infrastructure alternatives; decentralized infrastructure approaches; water use efficiency; and actions to reduce energy consumption or extract energy from wastewater.

The Committee further recognizes the success of the National Water Research Institutes in conducting applied water research, recruiting the next generation of scientists, facilitating technology transfer and leveraging Federal funds with other resources to sponsor needed studies. In the 2004 review of the program, the Department of Interior evaluation panel stated that "the institute program, with its federal-state matching requirement, is an important and significant part of the Nation's water resources research infrastructure." Given this record, the Committee finds that a five-year review cycle provides sufficient accountability and oversight while respecting the limited resources of the National Water Research Institutes and period of time required to demonstrate research outcomes. S. 3363 amends the Water Resources Research Act of 1984 to require the Secretary of the Interior to conduct a careful and detailed evaluation of each institute at least once every 5 years.

OBJECTIVES OF THE LEGISLATION

This bill would amend the Water Resources Research Act of 1984 to reauthorize grants for and require applied water supply research regarding the water resources research and technology institutes established under that Act.

SECTION-BY-SECTION ANALYSIS

Section 1. Short title

Section 1 provides that this Act may be cited as the "Water Resources Research Amendments Act of 2010".

Section 2. Water Resources Research Act Amendments

Section 2 provides for amendments to the Water Resources Research Act. Amends the purposes of the Act to address the need for additional research into alternative methods to improve the effectiveness and efficiency of treatment works. Requires the Secretary of the Interior to conduct a careful and detailed evaluation of each institute at least once every 5 years. Reauthorizes grant programs under the Act for an additional five years at current funding levels.

LEGISLATIVE HISTORY

In the 111th Congress, on May 13, 2010, Senator Cardin introduced S. 3363, which was cosponsored by Senators Crapo, Mikulski and Risch. The bill was received, read twice and referred to the Senate Committee on Environment and Public Works. The full committee met on May 20, 2010 to consider the bill, and ordered S. 3363 to be reported favorably without amendment.

ROLLCALL VOTES

The Committee on Environment and Public Works met to consider S. 3363 on May 20, 2010. The bill was ordered favorably reported by voice vote.

REGULATORY IMPACT STATEMENT

In compliance with section 11(b) of rule XXVI of the Standing Rules of the Senate, the committee finds that S. 3363 does not create any additional regulatory burdens, nor will it cause any adverse impact on the personal privacy of individuals.

MANDATES ASSESSMENT

In compliance with the Unfunded Mandates Reform Act of 1995 (Public Law 104-4), the committee notes that the Congressional Budget Office has found, "S. 3363 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA) and would impose no costs on state, local, or tribal governments."

CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

MAY 28, 2010.

Hon. BARBARA BOXER,
Chairman, Committee on Environment and Public Works,
U.S. Senate, Washington, DC.

DEAR MADAM CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate for S. 3363, the Water Resources Research Amendments Act of 2010.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contact is Jeff LaFave.

Sincerely,

DOUGLAS W. ELMENDORF.

Enclosure.

S. 3363—Water Resources Research Amendments Act of 2010

Summary: S. 3363 would reauthorize grants from the U.S. Geological Survey to colleges and universities to support research related to increasing the effectiveness and efficiency of new and existing water treatment systems. This legislation would authorize the appropriation of \$12 million a year over the 2012–2016 period for such grants. In addition, S. 3363 would authorize the appropriation of \$6 million annually over the 2012–2016 period for the Secretary of the Interior to fund additional research and to synthesize the results of research conducted by colleges and universities on interstate water issues.

Assuming appropriation of the authorized funds, CBO estimates that implementing S. 3363 would cost \$66 million over the 2011–2015 period.

Pay-as-you-go procedures would not apply to this legislation because it would not affect direct spending or revenues.

S. 3363 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA) and would impose no costs on state, local, or tribal governments.

Estimated cost to the Federal Government: The estimated budgetary impact of S. 3363 is shown in the following table. The costs of this legislation fall within budget function 300 (natural resources and environment).

	By fiscal year, in millions of dollars—					
	2011	2012	2013	2014	2015	2011–2015
CHANGES IN SPENDING SUBJECT TO APPROPRIATION						
Research Grants:						
Authorization Level	0	12	12	12	12	48
Estimated Outlays	0	10	11	12	12	45
Funding for Additional Research:						
Authorization Level	0	6	6	6	6	24
Estimated Outlays	0	4	5	6	6	21
Total Changes:						
Authorization Level ^a	0	18	18	18	18	72
Estimated Outlays	0	14	16	18	18	66

^aUnder current law, \$18 million is authorized to be appropriated for the water resources activities that would be reauthorized by S. 3363 in 2011.

Basis of estimate: For this estimate, CBO assumes that S. 3363 will be enacted before the end of 2010 and that the specified amounts will be appropriated for each year starting in 2012. Estimated outlays are based on historical spending patterns for those activities.

Intergovernmental and private-sector impact: S. 3363 contains no intergovernmental or private-sector mandates as defined in UMRA. The bill would benefit institutes of higher education that participate as research and technology centers under the Water Resources Act of 1984. Any costs to those entities would be incurred voluntarily as a condition of receiving federal assistance.

Estimate prepared by: Federal Costs: Jeff LaFave; Impact on State, Local, and Tribal Governments: Ryan Miller; Impact on the Private Sector: Amy Petz.

Estimate approved by: Theresa Gullo, Deputy Assistant Director for Budget Analysis.

CHANGES IN EXISTING LAW

In compliance with section 12 of rule XXVI of the Standing Rules of the Senate, changes in existing law made by the bill as reported are shown as follows: Existing law proposed to be omitted is enclosed in [black brackets], new matter is printed in *italic*, existing law in which no change is proposed is shown in roman:

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WATER RESOURCES RESEARCH ACT OF 1984

SEC. 10301. Congressional findings and declarations

(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;

* * * * *

(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) *additional research is required into increasing the effectiveness and efficiency of new and existing treatment works through alternative approaches, including—*

- (A) nonstructural alternatives;
- (B) decentralized approaches;
- (C) water use efficiency; and
- (D) actions to reduce energy consumption or extract energy from wastewater;

[(7)](8) 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)](9) 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)](10) the States must have the research and problem-solving capacity necessary to effectively manage their water resources.

* * * * *

[(e)] Evaluation of water resources research program—The Secretary shall conduct a careful and detailed evaluation of each institute at least once every 3 years to determine that the quality and relevance of its water resources research and its effectiveness at producing measured results and applied water supply research 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.]

(e) EVALUATION OF WATER RESOURCES RESEARCH PROGRAM.—

(1) IN GENERAL.—The Secretary shall conduct a careful and detailed evaluation of each institute at least once every 5 years to determine—

- (A) the quality and relevance of the water resources research of the institute;*
- (B) the effectiveness of the institute at producing measured results and applied water supply research; and*
- (C) whether the effectiveness of the institute as an institution for planning, conducting, and arranging for research warrants continued support under this section.*

(2) *PROHIBITION ON FURTHER SUPPORT.*—*If, as a result of an evaluation under paragraph (1), the Secretary determines that an institute does not qualify for further support under this section, no further grants to the institute may be provided until the qualifications of the institute are reestablished to the satisfaction of the Secretary.*

* * * * *

(f) Authorization of appropriations in general

(1) There is authorized to be appropriated to carry out this section, to remain available until expended, 12,000,000 [for each of fiscal years 2007 through 2011] for each of fiscal years 2012 through 2016.

* * * * *

(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 6,000,000 [for each of fiscal years 2007 through 2011] for each of fiscal years 2012 through 2016 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.

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