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SENATE

{ REPORT
114-48

WATER RESOURCES RESEARCH AMENDMENTS ACT OF 2015

MAY 18, 2015.—Ordered to be printed

Mr. INHOFE, from the Committee on Environment and Public
Works, submitted the following

R E P O R T

[To accompany S. 653]

[Including cost estimate of the Congressional Budget Office]

The Committee on Environment and Public Works, to which was referred a bill (S. 653) 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

The Water Resources Research Act of 1964, P.L. 88-379, provided for the establishment of a Water Resources Research Institute at the land grant college in each of the fifty states and U.S. territories. The institutes were charged with (1) arranging for competent research that addresses water problems or expands understanding of water and water-related phenomena, (2) aiding the entry of new research scientists into the water resources fields, (3) helping to train future water scientists and engineers, and (4) getting results of sponsored research to water managers and the public. The program is administered by the U.S. Geological Survey as the Water Resources Research Act Program under the general guidance of the Secretary of the Interior.

The Water Resources Research Act of 1984 reauthorized appropriations for the program; it has since been reauthorized in the

101st, 104th, 106th, and 109th Congresses. The most recent authorization expired in FY2011.

The Water Resources Research Amendments Act of 2015 authorizes \$7,500,000 per year for grants to each institute to fund research that fosters: (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 the dissemination of research to water managers and the public. Grants must be matched two-to-one with non-federal funding. In FY 2010, Congress appropriated approximately \$5,500,000 for this grant program resulting in a \$92,335 base grant for each institute.

The Water Resources Research Amendments Act further authorizes a national competitive grant program to address regional water issues that is authorized at \$1,500,000 per year. In FY 2010 approximately \$1,000,000 was appropriated. These competitive grants must be matched one-to-one with non-federal funding.

OBJECTIVES OF THE LEGISLATION

The Water Resources Research Amendments Act of 2015 reauthorizes the Water Resources Research Act of 1984, which provides grant funding to 54 established Water Resources Research Institutes in each state, territory and the District of Columbia for applied water supply research. It reauthorizes both research grant programs for an additional 5 years at the same funding levels. It also adds green infrastructure research and development as an additional focus of the program and expands the existing program reporting requirement to include status reporting on the grant funding matches, and makes other technical improvements.

SECTION-BY-SECTION ANALYSIS

Section 1. Short title

This section provides that the Act may be cited as the ‘Water Resources Research Amendments Act of 2015’.

Section 2. Water Resources Research Act Amendments

Subsection (a) amends 42 U.S.C. 10301 to declare that additional research is required into water-related alternative technologies, including: (1) nonstructural alternatives; (2) decentralized approaches; (3) energy use efficiency; (4) water use efficiency; and (5) actions to extract energy from wastewater.

Subsection (b) amends 42 U.S.C. 10303(b)(1) to clarify the scope of research to be performed by the funded institutes.

Subsection (c) amends 42 U.S.C. 10303(c) to require the Secretary of the Interior to report annually to the Committee on Environment and Public Works and the Committee on the Budget of the United States Senate, and the Committee on Transportation and Infrastructure and Committee on the Budget of the United States House of Representatives, on whether each funding recipient complied with the federal funding matching requirement during the preceding year.

Subsection (d) amends 42 U.S.C. 10303(e) to require the Secretary to conduct a careful and detailed evaluation of the quality,

relevance and effectiveness of the research of each institute at least once every three years. If the evaluation concludes that an institute is not relevant or effective, no further grants to the institute may be provided until the qualifications of the institute are reestablished to the satisfaction of the Secretary.

Subsection (e) amends 42 U.S.C. 10303(f)(1) to authorize appropriations of \$7,500,000 for each of the fiscal years 2015 through 2020.

Subsection (f) amends 42 U.S.C. 10303(g)(1) to authorize appropriations of \$1,500,000 for each of the fiscal years 2015 through 2020 for research focused on water problems of interstate nature.

LEGISLATIVE HISTORY

The Water Resources Research Act was first authorized in 1964, and was most recently authorized in 2006 in PL 109–471, the Water Resources Research Act Amendments of 2006. Nearly identical bills have been reported favorably by voice vote by the Senate Environment and Public Works Committee in the 111th, 112th, and 113th Congresses.

The Committee on Environment and Public Works met to consider S. 653 on April 29, 2015. The bill was approved by voice vote.

HEARINGS

No committee hearings were held on S. 653.

ROLLCALL VOTES

The Committee on Environment and Public Works met to consider S. 653 on April 29, 2015. The bill was ordered favorably reported by voice vote. No rollcall votes were taken.

REGULATORY IMPACT STATEMENT

In compliance with section 11(b) of rule XXVI of the Standing Rules of the Senate, the committee finds that S. 653 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 found, ‘S. 970 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA).’

COST OF LEGISLATION

Section 403 of the Congressional Budget and Impoundment Control Act requires that a statement of the cost of the reported bill, prepared by the Congressional Budget Office, be included in the report. That statement follows:

MAY 5, 2015.

Hon. JIM INHOFE,
Chairman Committee on Environment and Public Works,
U.S. Senate, Washington, DC.

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate for S. 653, the Water Resources Research Amendments Act of 2015.

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

Sincerely,

KEITH HALL.

Enclosure.

S. 653—Water Resources Research Amendments Act of 2015

Summary: S. 653 would authorize appropriations for 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 \$7.5 million a year through 2020 for such grants. In addition, S. 653 would authorize the appropriation of \$1.5 million annually through 2020 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 amounts, CBO estimates that implementing S. 653 would cost \$43 million over the 2016–2020 period and \$2 million after 2020. Because enacting S. 653 would not affect direct spending or revenues, pay-as-you-go procedures do not apply.

S. 653 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA).

Estimated Cost to the Federal Government: The estimated budgetary impact of S. 653 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—					
	2016	2017	2018	2019	2020	2016–2020
CHANGES IN SPENDING SUBJECT TO APPROPRIATION						
Research Grants:						
Authorization Level	8	8	8	8	8	38
Estimated Outlays	6	8	8	8	8	36
Funding for Additional Research:						
Authorization Level	2	2	2	2	2	8
Estimated Outlays	1	2	2	2	2	7
Total Changes:						
Authorization Level	9	9	9	9	9	45
Estimated Outlays	7	9	9	9	9	43

Note: Details do not sum to totals because of rounding.

Basis of estimate: For this estimate, CBO assumes that S. 653 will be enacted near the end of fiscal year 2015 and that the specified amounts will be appropriated for each year. Estimated outlays are based on historical spending patterns for those activities.

Pay-As-You-Go considerations: None.

Intergovernmental and private-sector impact: S. 653 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, including matching contributions, 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: Jon Sperl; Impact on the private sector: Amy Petz.

Estimate approved by: Theresa Gullo, 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:

(42 U.S.C. 10301)

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) *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) energy use efficiency;

(D) water use efficiency; and

(E) actions to 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.

(42 U.S.C. 10303)

SEC. 10303. WATER RESOURCES RESEARCH AND TECHNOLOGY INSTITUTES.

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

(b) Scope of research; other activities; cooperation and coordination Each institute shall—

(1) plan, conduct, or otherwise arrange for competent applied and peer reviewed research that fosters—

(A) improvements in water supply reliability;

(B) the exploration of new ideas that—

(i) address water problems; or

(ii) expand understanding of water and [water-related phenomena] *water resources*;

(D) the dissemination of research results to water managers and the public[.]; and

(c) GRANTS.—; matching funds [From the]

(1) *IN GENERAL.*—*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.*

(2) *REPORT.*—*Not later than December 31 of each fiscal year, the Secretary shall submit to the Committee on Environment and Public Works of the Senate, the Committee on the Budget of the Senate, the Committee on Transportation and Infrastructure of the House of Representatives, and the Committee on the Budget of the House of Representatives a report regarding the compliance of each funding recipient with this subsection for the immediately preceding fiscal year.*

[(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 3 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 **7,500,000** for each of fiscal years 2015 through 2020.

(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 **1,500,000** for each of fiscal years 2015 through 2020 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.