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SENATE

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### RECLAMATION SAFETY OF DAMS ACT OF 1978 AMENDMENTS

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JULY 31, 2014.—Ordered to be printed

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Ms. LANDRIEU, from the Committee on Energy and Natural Resources, submitted the following

### R E P O R T

[To accompany S. 1946]

The Committee on Energy and Natural Resources, to which was referred the bill (S. 1946) to amend the Reclamation Safety of Dams Act of 1978 to modify the authorization of appropriations, having considered the same, reports favorably thereon with an amendment and recommends that the bill, as amended, do pass.

The amendment is as follows:

On page 1, strike lines 5 through 9 and insert the following:

(a) AUTHORIZATION OF APPROPRIATIONS.—Section 5 of the Reclamation Safety of Dams Act of 1978 (43 U.S.C. 509) is amended—

(1) in the first sentence, by inserting “and, effective October 1, 2014, not to exceed an additional \$1,100,000,000 (October 1, 2014 price levels)” before “, plus or minus”;

(2) in the proviso—

(A) by striking “\$1,250,000” and inserting “\$20,000,000”; and

(B) by striking “Congress” and inserting “Committee on Natural Resources of the House of Representatives and the Committee on Energy and Natural Resources of the Senate”; and

(3) by adding at the end the following: “For modification expenditures between \$1,800,000 and \$20,000,000 (October 1, 2013 price levels), the Secretary of the Interior shall, at least 30 days before the date on which the funds are expended, submit written notice of the expenditures to the Committee on Natural Resources of the House of Representatives and the Committee on Energy and Natural Resources of the Senate that provides a summary of the project, the cost of the project, and any alternatives that were considered.”.

### PURPOSE

The purpose of S. 1946 is to amend the Reclamation Safety of Dams Act of 1978 to authorize additional appropriations.

## BACKGROUND AND NEED

The Safety of Dams Act of 1978 was enacted to enable the Bureau of Reclamation to: “ensure that Reclamation facilities do not present unreasonable risks to the public, public safety, property, and/or the environment.” The original authorization in 1978 set a \$100 million appropriation ceiling, and the ceiling has since been raised by Congress four times (an additional \$650 million in 1983, \$95 million in 2000, \$32 million in 2001, and \$540 million in 2003). The Safety of Dams program evaluates and implements corrective actions to address dam safety concerns. Once the Bureau of Reclamation begins risk modifications to a dam, local partners share 15% of the associated costs.

Reclamation manages 476 dams and dikes currently, 370 of which are listed under the “High” or “Significant Hazard” class, meaning failure of the dam or dike would cause loss of life or significant damages. The challenge of meeting the program’s safety mission is complicated by the strains of aging infrastructure and population growth within dam failure zones. The Safety of Dams program is approaching its appropriation ceiling and enactment of S. 1946 will enable Reclamation to proceed with construction modifications for projects in its queue.

## LEGISLATIVE HISTORY

S. 1946 was introduced by Senators Wyden, Schatz, and Feinstein on January 16, 2014. The Subcommittee on Water and Power held a hearing on S. 1946 (S. Hrg. 113–284) on February 27, 2014. At its business meeting on June 18, 2014, the Senate Energy and Natural Resources Committee ordered S. 1946 favorably reported with amendment.

## COMMITTEE RECOMMENDATION

The Senate Committee on Energy and Natural Resources, in open business session on June 18, 2014, by a voice vote of a quorum present, recommends that the Senate pass S. 1946, if amended as described herein. Senators Lee and Scott asked to be recorded as voting no.

## COMMITTEE AMENDMENT

During its consideration of S. 1946, the committee adopted an amendment to modify section 5 of the Reclamation Safety of Dams Act of 1978 (43 U.S.C. 509) to raise the authorization ceiling an additional \$1.1 billion. The amendment also modifies the reporting requirement, which is explained in greater detail in the section-by-section analysis, below.

## SECTION-BY-SECTION ANALYSIS

*Section 1(a)(1)* amends section 5 of the Reclamation Safety of Dams Act of 1978 (43 U.S.C. 509) by raising the authorization ceiling an additional \$1.1 billion. Subsection (a)(2) requires the Secretary of the Interior to send a report to both the House Committee on Natural Resources and the Senate Energy and Natural Resources Committee if more than \$20,000,000 is spent to modify an existing dam. Subsection (a)(3) requires the Secretary to alert the

Committees when Reclamation spends between \$1,800,000 and \$20,000,000 to modify or repair an existing dam. Subsection (b) makes a conforming amendment to section 4(c) of the Reclamation Safety of Dams Act.

#### COST AND BUDGETARY CONSIDERATIONS

The following estimate of costs of this measure has been provided by the Congressional Budget Office:

*S. 1946—A bill to amend the Reclamation Safety of Dams Act of 1978 to modify the authorization of appropriations*

Summary: S. 1946 would authorize the appropriation of \$1.1 billion (plus additional amounts to account for inflation) for the Secretary of the Interior to carry out projects under the Reclamation Safety of Dams Act. Based on information from the Bureau of Reclamation, and assuming appropriation of necessary amounts, CBO estimates that implementing S. 1946 would cost \$196 million over the 2015–2019 period with additional spending continuing for several subsequent years.

Enacting S. 1946 would not affect direct spending or revenues; therefore, pay-as-you-go procedures do not apply.

S. 1946 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 effect of S. 1946 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—					
	2015	2016	2017	2018	2019	2015–2019
CHANGES IN SPENDING SUBJECT TO APPROPRIATION						
Estimated Authorization Level .....	0	0	64	90	92	246
Estimated Outlays .....	0	0	38	70	87	196

Basis of estimate: For this estimate, CBO assumes that S. 1946 will be enacted near the start of fiscal year 2015 and that the necessary amounts will be appropriated over the next several years. Estimated outlays are based on historical spending patterns for those activities.

Under current law, the bureau is responsible for maintaining the safety and reliability of 476 dams in the western United States. About half of those dams were built before 1950 and many are scheduled to be rehabilitated over the next few years. Based on information from the bureau, \$200 million remains under the current authorization ceiling for the bureau's dam safety program. That amount is insufficient to carry out the rehabilitation of six projects planned for the next 10 to 20 years with total estimated costs of about \$1 billion.

Under the bill, CBO estimates that about \$90 million a year—an amount similar to the program's recent funding levels—would be needed for planned work over the next several years. However, the first \$200 million in funding for that work would come under the existing authorization in law. CBO estimates that imple-

menting S. 1946 would cost \$196 million over the 2015–2019 period and additional amounts in subsequent years.

Pay-As-You-Go considerations: None.

Intergovernmental and private-sector impact: S. 1946 contains no intergovernmental or private-sector mandates as defined in UMR A and would impose no costs on state, local, or tribal governments. Any costs incurred by public entities to match or reimburse the federal funds authorized by this legislation would result from participating in a voluntary federal program.

Estimate prepared by: Federal Costs: Aurora Swanson; Impact on State, Local, and Tribal Governments: Jon Sperl; Impact on the Private Sector: Amy Petz.

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

#### REGULATORY IMPACT EVALUATION

In compliance with paragraph 11(b) of rule XXVI of the Standing Rules of the Senate, the Committee makes the following evaluation of the regulatory impact which would be incurred in carrying out S. 1946.

The bill is not a regulatory measure in the sense of imposing Government-established standards or significant economic responsibilities on private individuals and businesses.

No personal information would be collected in administering the program. Therefore, there would be no impact on personal privacy.

Little, if any, additional paperwork would result from the enactment of S. 1800, as ordered reported.

#### CONGRESSIONALLY DIRECTED SPENDING

S. 1946, as reported, does not contain any congressionally directed spending items, limited tax benefits, or limited tariff benefits as defined in rule XLIV of the Standing Rules of the Senate.

#### EXECUTIVE COMMUNICATIONS

The testimony provided by the Bureau of Reclamation at the February 27, 2014, Subcommittee on Water and Power hearing on S. 1946 follows:

##### STATEMENT OF ROBERT QUINT, SENIOR ADVISOR, BUREAU OF RECLAMATION, DEPARTMENT OF THE INTERIOR

Chairman Schatz and members of the Subcommittee, I am Bob Quint, Senior Advisor at the Bureau of Reclamation (Reclamation). Thank you for the opportunity to provide the views of the Department of the Interior (Department) on S. 1946, a bill to provide permanent authority for appropriations under the Reclamation Safety of Dams Act. While Reclamation has been able to carry out its priority of ensuring the safety and reliability of Reclamation dams under current law, the Department supports this bill which would support Reclamation's efforts in reducing the risk associated with Reclamation's portfolio of dams.

Reclamation's inventory of 476 dams includes 370 classified as "high hazard" dams and dikes, located at 250 water

projects across the 17 Reclamation states. The dam safety program helps to ensure the safety and reliability of these facilities. Approximately 50 percent of Reclamation's dams were built between 1900 and 1950 and approximately 90 percent of the dams were built before current state-of-the-art design and construction practices. Considering the age of Reclamation dams, the ongoing monitoring, facility reviews, analysis, investigations, and emergency management are critical components of the dam safety program. We are proud of our dam safety work, but we also realize we must never take safety for granted.

Some of Reclamation's highest priorities are to deliver water to and generate power for its customers without disruption, while protecting public safety. In its 111-year history, Reclamation has had one dam failure that resulted in loss of life and damage to property. Teton Dam failed in 1976 during initial filling due to a design and construction deficiency. After the Teton Dam disaster Congress enacted the Reclamation Safety of Dams Act in 1978, Public Law 95-578, and Reclamation began its current dam safety program.

The original 1978 statute has been amended four times, beginning in 1984. In the first amendment, Public Law 98-404, Congress increased the authorization for appropriations by \$100 million. The 1984 amendment also instituted a 15 percent non-Federal repayment requirement for modifications made as a result of new hydrologic or seismic information or changes in the state-of-the-art technology. Public Law 98-404 also increased the authorized appropriations ceiling an additional \$650 million, indexed for inflation. Public Law 106-377 in 2000 increased the ceiling another \$95 million, and two years later, Public Law 107-117 added \$32 million. The last amendment, Public Law 108-439, was enacted in 2004 and provided the current program ceiling of \$1.417 billion, indexed from October 2003 price levels. Approximately \$400 million remains available under that ceiling. Apart from changes to the program's authorization ceiling, the 1984 amendments also directed Reclamation to submit to Congress, prior to taking corrective actions, a report on any modifications expected to exceed \$750,000 in actual construction costs. Public Law 108-439 increased the amount to \$1,250,000 (October 1, 2003, price levels), as adjusted to reflect any ordinary fluctuations in construction costs indicated by applicable engineering cost indexes.

The Bureau of Reclamation has developed a dam safety program that effectively implements the Federal Guidelines for Dam Safety and to modifies dams in accordance with the 1978 Act. In 1996, an independent review team comprised of representatives from the Association of Dam Safety Officials assessed the Department of the Interior's Dam Safety Program. In 1997, the team released a comprehensive and independent report finding that the Bureau of Reclamation has "an effective Dam Safety Program" overseen by highly competent staff using state-of-

the-art technical standards and expertise. Reclamation's ability to respond to dam safety issues and to take preventative, corrective actions to reduce the public risks under the authority of the Reclamation Safety of Dams Act was a critical component of this favorable peer review. In addition, outside experts have annually reviewed Reclamation's dam safety activities to ensure that the program has adequate policies and procedures in place to address public safety issues.

Reclamation's Fiscal Year 2014 budget requests lists current modification/construction projects where funds under the program's existing authorized appropriations ceiling have been planned. These include Folsom Dam in California, Glendo and Guernsey Dams in Wyoming, Echo Dam in Utah, and Red Willow Dam in Nebraska. Stamped Dam in California, Nelson Dikes in Montana, Bull Lake Dam in Wyoming, Hyatt Dam in Oregon, Hyrum Dam in Utah, and Altus Dam in Oklahoma are slated to have modification reports submitted to Congress in 2014 and 2015. The current appropriations ceiling would be able to support these projects but would commit all but an estimated \$200 million of the remaining authorization. Six additional dams, including planned work at B.F. Sisk Dam in California and Scoggins Dam in Oregon, are in need of risk reduction action with combined costs currently estimated at \$1 billion. Based on our present knowledge of these upcoming projects, an authorization increase of at least \$1 billion would be needed to allow Reclamation to address these dam safety risks.

Since 1978, when Congress first created the Safety of Dams program, we have carried out 80 risk reduction corrective actions totaling approximately \$1.43 billion. Reclamation has implemented these corrective actions to protect public safety at the lowest feasible cost. In each of these projects, Reclamation's process benefitted from our relationships with the end users of the water and power from these projects. With that in mind, we have formalized requirements for communicating the need for dam safety modifications with our customers in a timely fashion. The Reclamation Manual now contains formal policy and directives which require the development of a plan in cooperation with our water and power contractors to assure continued communication and involvement during the development of alternatives, selection of a preferred alternative, and implementation of the actions required to reduce risk.

However, the nature of any safety program does not always afford the luxury of being able to schedule outlays as precisely as we can in other programs. Sometimes the need for corrective action presents itself with little notice. When sudden unexpected performance of a dam requires a modification to reduce risk, Reclamation must act quickly to protect the project and the downstream public. One example of such successful immediate action is the emergency work we performed in 2006 at Deer Flat Dam in Idaho. We discovered voids beneath the outlet works conduit and em-

bankment material was being removed through cracks in the outlet work conduit that required immediate attention in order to allow for continued operation of the dam and reservoir. Working closely with local project beneficiaries we were able to quickly identify and implement an interim solution to reduce risk to the downstream public without significantly curtailing service to water users. Without the Safety of Dams program authority, we could not have completed the investigation and interim repairs prior to the Spring run-off. The quick response meant the reservoir was ready to store critically needed run-off water for beneficial use later in 2007.

Another example of a successful action was the quick response needed at Red Willow Dam in Nebraska after sinkholes and extensive cracking were discovered in the dam embankment. The reservoir was immediately drawn down to reduce risk to the downstream public. Expedited actions were taken to implement long term modifications to the embankment and return the water supply as quickly as possible.

In closing, S. 1946 removes the ceiling from the program's authorization for appropriations. Under current law, the Department has been able to carry out its priority of ensuring the safety and reliability of Reclamation dams under the Dam Safety program, and has been able to do so through several increases in the ceiling since the program was originally authorized in 1979. S. 1946 would also preserve all of the program's existing provisions, including the ability to respond quickly with limited interim actions, and the obligation to notify Congress and consult with project beneficiaries. Throughout our implementation of these authorities we will continue to evaluate this program for potential changes to improve planning and operations. There are always ways to better serve the taxpayer by clearly delineating between dam safety modifications and other infrastructure improvements, and protect the safety of the people and businesses that rely on Reclamation facilities. Meanwhile, we believe the provisions calling for regular dialogue with our customers assures a fair, transparent program without compromising the Department's ability to maintain dam safety and security.

This concludes my statement. Again, while Reclamation has been able to carry out its priority of ensuring the safety and reliability of Reclamation dams under current law, the Department supports this bill which would support Reclamation's efforts in reducing the risk associated with Reclamation's portfolio of dams. I would be pleased to answer questions at the appropriate time.

#### CHANGES IN EXISTING LAW

In compliance with paragraph 12 of rule XXVI of the Standing Rules of the Senate, changes in existing law made by the bill S. 1946, as ordered 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):

## RECLAMATION SAFETY OF DAMS ACT OF 1978

Public Law 95-578

AN ACT to authorize the Secretary of the Interior to construct, restore, operate, and maintain new or modified features at existing Federal reclamation dams for safety of dams purposes.

\* \* \* \* \*

SEC. 4. (a) Costs heretore or hereafter incurred in the modification of structures under this Act, the cause of which results from age and normal deterioration of the structure or from nonperformance of reasonable and normal maintenance of the structure by the operating entity shall be considered as project costs and will be allocated to the purposes for which the structure was authorized initially to be constructed and will be reimbursable as provided by existing law.

\* \* \* \* \*

(c) Reimbursement of certain modification costs. With respect to the **[additional]** amounts authorized to be appropriated by section 5 (43 USCS § 509), costs incurred in the modification of structures under this Act, the cause of which results from new hydrologic or seismic data or changes in state-of-the-art criteria deemed necessary for safety purposes, shall be reimbursed to the extent provided in this subsection.

\* \* \* \* \*

SEC. 5. There are hereby authorized to be appropriated for fiscal year 1979 and ensuing fiscal years such sums as may be necessary and, effective October 1, 1983, not to exceed an additional \$650,000,000 (October 1, 1983, price levels), and, effective October 1, 2000, not to exceed an additional \$95,000,000 (October 1, 2000, price levels), and, effective October 1, 2001, not to exceed an additional \$32,000,000 (October 1, 2001, price levels), and, effective October 1, 2003, not to exceed an additional \$540,000,000 (October 1, 2003, price levels), *and, effective October 1, 2014, not to exceed an additional \$1,100,000,000 (October 1, 2014 price levels)*, plus or minus such amounts, if any, as may be justified by reason of ordinary fluctuations in construction costs as indicated by engineering cost indexes applicable to the types of construction involved herein, to carry out the provisions of this Act to remain available until expended if so provided by the appropriations Act: Provided, That no funds exceeding **[\$1,250,000]** *\$20,000,000* (October 1, 2003, price levels), as adjusted to reflect any ordinary fluctuations in construction costs indicated by applicable engineering cost indexes, shall be obligated for carrying out actual construction to modify an existing dam under authority of this Act prior to 30 calendar days from the date that the Secretary has transmitted a report on such existing dam to the **[Congress]** *Committee on Natural Resources of the House of Representatives and the Committee on Energy and Natural Resources of the Senate*. The report required to be submitted by this section will consist of a finding by the Secretary of the Interior to the effect that modifications are required to be made to insure the safety of an existing dam. Such finding shall be accompanied

by a technical report containing information on the need for structural modification, the corrective action deemed to be required, alternative solutions to structural modification that were considered, the estimated cost of needed modifications, and environmental impacts if any resulting from the implementation of the recommended plan of modification. *For modification expenditures between \$1,800,000 and \$20,000,000 (October 1, 2013 price levels), the Secretary of the Interior shall, at least 30 days before the date on which the funds are expended, submit written notice of the expenditures to the Committee on Natural Resources of the House of Representatives and the Committee on Energy and Natural Resources of the Senate that provides a summary of the project, the cost of the project, and any alternatives that were considered.*

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