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Statement of the
ASSOCIATION OF STATE DAM SAFETY OFFICIALS
On The Water Resources Development Act
United States Senate
Committee on Environment and Public Works
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The Association of State Dam Safety Officials (ASDSO) is pleased to offer this testimony concerning the condition of the nation's dams and levees; and the critical role that the federal government has in assuring the safety and security of these structures.

ASDSO is a national non-profit organization of more than 3,000 state, federal and local dam safety professionals and private sector individuals dedicated to improving dam safety through research, education and communications. We represent the dam safety programs of the states and our goal simply is to save lives, prevent damage to property and maintain the benefits of dams by preventing dam failures. The state dam safety programs regulate approximately 80% percent of the 84,000 dams in the United States.

A. Reauthorize a National Dam Safety Program

The states and these programs look to Congress and the Federal government for their continuing leadership and support. The eyes of the nation were focused on dam safety in the 1970s when several dramatic dam failures occurred, resulting in catastrophic consequences. The federally owned Teton Dam failed in 1976, causing 14 deaths and over \$1 billion in damages. Failures like Teton are a constant reminder of the potential consequences associated with dams and the obligations to assure that dams are properly constructed, operated and maintained.

After the Teton failure and other deadly failures in the late 1970s, President Carter realized that federal programs were needed to address the dam safety issue. Based on his administration's

groundwork, the federal government has been leading the way by example with the dams they own and regulate.

The National Dam Safety Program Act of 1996 (PL 104-303) created a national program that focused on improving the safety of the nation's dams. Congress reauthorized the program in 2002 and 2006 and made modest increases in the authorized funds. However, the most recent reauthorization bill expired in September 2011. This small, yet critical program provides much needed assistance to the state dam safety programs in the form of grants, and training and research; and through facilitating the exchange of technical information between federal dam safety partners and the states.

The Association of State Dam Safety Officials respectfully requests that this Committee recognize the federal responsibility toward reducing the risk to public safety caused by dam failures. We request your support to include the Dam Safety Act of 2012 in a new Water Resources Development Act.

The Committee should add S. 3362, the Dam Safety Act of 2012 as a separate title in WRDA 2012. The bipartisan bill introduced by Senators Akaka, Boozman, Whitehouse, and Crapo would reauthorize the National Dam Safety Program through 2016 providing grants to improve state dam safety programs through training, technical assistance, inspection, and research.

The National Inventory of Dams, counts more than 84,000 dams in the United States. These dams are a vital part of our nation's aging infrastructure and provide enormous benefits to the majority of Americans including drinking water, flood protection, renewable hydroelectric power, navigation, irrigation, and recreation. Yet these critical daily benefits provided by the nation's dams are inextricably linked to the potential consequences of a dam failure if the dam is not inspected or maintained.

Only about 11 percent of the nation's dams are owned, operated, or regulated by the federal government. State governments are responsible for ensuring the safety of most dams. Unfortunately, many state programs are underfunded and understaffed. This legislation recognizes that the federal government plays a vital role in maintaining and inspecting dams wherever they may be located. Under FEMA's leadership, the National Dam Safety Program is dedicated to protecting the lives and property of American citizens from the risks associated with dams.

The Dam Safety Act of 2012, S. 3362 as introduced, would provide \$13.9 million per year and may be used to best suit the individual state's needs. The funding can be used for several purposes including:

- \$9.2 million per year split among the states, based on the relative number of dams per state, to make improvements in programs identified in the National Dam Safety Program Act;
- \$1.45 million per year in research funds to identify more effective techniques to assess, construct, and monitor dams;
- \$1 million per year for a nationwide public awareness and outreach program;

- \$750,000 per year in training assistance to state engineers; and
- \$500,000 per year for the National Inventory of Dams.

Table 1 attached to this testimony provides state-by-state data on the number of dams, the number of staff, the state budget and the number of dams that are considered unsafe, referred to as “deficient” in the table.

Deficient or unsafe means that these dams have been identified as having hydrologic or structural deficiencies that make them susceptible to a failure triggered by a large storm event, an earthquake, progressive deterioration, or simply through inadequate maintenance. States have identified over 2,000 high hazard potential dams as being deficient, or unsafe. The number of unsafe dams has risen significantly since 1998. With over 11,000 state regulated dams classified as high hazard potential, meaning that the consequences of the dam’s failure will likely include loss of human life and significant downstream property damage, the issue is of growing concern. Every member of this Committee has high hazard dams in their state. In California the state lists 690 dams classified as high hazard potential. In Oklahoma there are 321 high hazard dams. North Carolina has the highest number of high hazard dams with 1,126; Texas follows closely behind with 1,048.

However, the task for our nation’s state dam safety programs is staggering; in Iowa where there are 3,374 dams there are only 3 full-time employees assigned to the dam safety program. Meaning each Iowa dam safety inspector is responsible for 1,256 dams! In Alabama, conditions are worse, with the state still being the only state without a state dam safety program.

B. Create a National Levee Safety Program

Seven years after Hurricane Katrina devastated the Gulf Coast, there is still no national safety program for federal or state levees. While FEMA and the U.S. Army Corps of Engineers have made great strides in creating an inventory of the location of the nation’s levees, when examined the conditions of many of these levees are worse than originally expected.

Congress must take action and enact federal legislation to protect the health and welfare of American citizens from the catastrophic effects of levee failures. The levee safety program should be modeled on the successful National Dam Safety Program. The act should require the federal and state governments to conduct mandatory safety inspections for levees and complete a national inventory of levees.

Many privately built levees are deeded to local governments or associations who do not maintain them or even recognize the risks. There is still no complete, and dependable, catalog of the location, ownership, condition, or hazard potential of levees in the United States. Flooding from Hurricane Katrina, and more recently from Hurricane Isaac, demonstrated the need for consistent, up-to-date standards for levees based upon reliable engineering data on their location, function, and condition.

The nation must use all the tools available to reduce damages from hurricanes and major storms.

This means the use of structural methods, such as levees, floodwalls, and dams, but also non-structural approaches, such as flood-resistant design, voluntary relocation of homes and businesses from flood-prone areas, the revitalization of wetlands for storage, and the use of natural barriers to storm surges. WRDA 2012 should require the Comptroller General, in consultation with the Secretary of the Army, to study the potential benefits of formally uniting the National Dam Safety Program with the National Levee Safety Program. The study should examine:

- The potential to improve the protection of the general public health, safety, and welfare from dam and levee failures through a unified dam and levee safety program;
- The administrative and budgetary efficiencies to be achieved in the unification of the national dam and levee safety programs; and
- Any other factors the Comptroller determines will assist the Congress in assessing the benefits of the integration of the two programs.

The need for a National Levee Safety Program is manifest. Without a national approach that seeks coordination across federal agencies and cooperation among federal, state and local efforts, risks to human life and property are certain to increase, and catastrophic failures will be more likely. Congress cannot delay action further on this critical public safety program. We urge your committee to act quickly to enact legislation establishing a National Levee Safety Program before the end of this session of the 112th Congress.

In summary, ASDSO urges the Committee to consider the inclusion of the Dam Safety Act of 2012 in WRDA and the creation of a National Levee Safety Program. Our nation's dams and levees are a vital resource and their failure can risk both lives and property. ASDSO looks forward to working with the Environment and Public Works Committee as you work on the Water Resources Development Act.

Table 1

State	NID Dams	Total State Regulated Dams	#State-Regulated HH Dams	Total Budget	Full Time Employee Total	Dams per Full Time Employee
Alabama	2228	0	0	0	0	-
Alaska	96	85	19	285,337	2	42.5
Arizona	346	247	101	476,000	5.5	44.9
Arkansas	1229	1256	152	374,200	4.8	261.7
California	1468	1254	690	11,142,000	60	20.9
Colorado	1822	1758	367	1,475,019	13	135.2
Connecticut	726	3381	240	750,000	6	563.5
Delaware	86	48	43	891,500	1.25	38.4
Florida	892	882	72	1,387,125	20.5	43.0
Georgia	4606	4053	474	619,549	7.5	540.4
Hawaii	138	142	125	754,000	5	28.4
Idaho	443	596	114	240,249	2	298.0
Illinois	1504	1594	217	335,000	4.7	339.1
Indiana	1142	1084	243	392,000	5	216.8
Iowa	3374	3768	91	140,000	3	1,256.0
Kansas	6087	6132	220	368,066	9.18	668.0
Kentucky	1050	967	169	1,550,420	5	193.4
Louisiana	557	548	36	800,909	5.2	105.4
Maine	647	618	30	58,900	2.5	247.2
Maryland	340	416	74	422,987	4.75	87.6
Massachusetts	1602	1523	303	1,230,151	7.7	197.8
Michigan	927	1019	88	304,000	3.5	291.1
Minnesota	1021	1115	24	378,000	5.4	206.5
Mississippi	3533	3828	256	266,775	4	957.0
Missouri	5099	677	462	584,470	5	135.4
Montana	2917	2895	103	620,947	7.6	380.9
Nebraska	2368	2382	132	351,455	10	238.2
Nevada	516	653	148	230,604	2.35	277.9

New Hampshire	653	833	137	852,000	8.5	98.0
New Jersey	804	1676	214	1,254,000	13	128.9
New Mexico	519	307	151	544,322	6	51.2
New York	1982	5726	396	1,386,500	12.49	458.4
North Carolina	3382	4478	1126	1,205,710	18	248.8
North Dakota	869	1188	30	275,720	4.5	264.0
Ohio	1577	1535	366	1,574,295	14	109.6
Oklahoma	4758	4539	321	166,972	5.35	848.4
Oregon	958	1330	130	244,000	2.93	453.9
Pennsylvania	1546	3325	776	2,502,295	28	118.8
Puerto Rico	32	36	35	460,579	4	9.0
Rhode Island	215	667	97	189,966	1.6	416.9
South Carolina	2421	2380	160	0	1.58	1,506.3
South Dakota	2520	2348	46	150,000	3	782.7
Tennessee	1216	661	149	362,146	8	82.6
Texas	7173	7122	1048	2,104,634	29	245.6
Utah	818	600	196	770,600	13	46.2
Vermont	367	453	39	226,000	2.25	201.3
Virginia	1642	1690	273	617,404	8	211.3
Washington	763	1030	179	1,330,303	8.5	121.2
West Virginia	562	363	257	624,729	6	60.5
Wisconsin	1163	953	188	752,000	6.25	152.5
Wyoming	1429	1518	81	222,028	5.28	287.5