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ASDSO Issue/Position Brief

The Implementation of a National Levee Safety Program and Discussion of ASDSO's Involvement

Issue

What should the ASDSO's role be in the new national levee safety program and should the Association of State Dam Safety Officials become the Association of State Dam and Levee Safety Officials?

Background

In the wake of levee failures associated with Hurricane Katrina, ASDSO has been exploring the needs of its membership with regard to advocacy for state levee safety programs. This led to the adoption of a resolution in 2006 supporting the establishment of a National Levee Safety Program. In 2007, ASDSO presented testimony before Congress indicating this support and later that year, Congress passed the National Levee Safety Act of 2007. This act created the National Committee on Levee Safety (NCLS) with a charge to develop recommendations for the formation of a National Levee Safety Program. ASDSO has continued to be engaged in levee safety issues by nominating state and private sector members to the NCLS and participating on the NCLS Review Team.

The NCLS developed a draft report to Congress dated January 15, 2009 titled "Recommendations for a National Levee Safety Program" with twenty specific recommendations from three main concepts: (1) the need for comprehensive and consistent national leadership via a *National Levee Safety Commission* that provides for state delegated programs, national technical standards, risk communication, and coordinating environmental and safety concerns; (2) building and sustaining strong levee safety programs in and within all states that in turn provide oversight, regulation, and critical levee safety processes; and (3) a foundation of well-aligned federal agency programs and processes. The entire report is provided as an attachment to this issue paper. In addition, the Executive Summary of the report states that the committee recognizes "the benefits of integrating national dam safety and levee safety programs."

In March of 2009, the ASDSO Board of Directors voted to support the recommendations of the NCLS draft report and to support the integration of the National Dam Safety Program with the National Levee Safety Program in a new federal commission. The board further discussed the integration of levee safety into the mission of ASDSO. The board did not take formal action at that time, but deferred action until a later time to provide time for board members to discuss the issue with state representatives.

Many other governmental and nongovernmental organizations (NGO) also have an interest in levee safety issues including the following:

- American Society of Civil Engineers (ASCE) supports levee safety and strong standards. Has a technical committee on levees many available subject matter experts.
- The Association of State Floodplain Managers (ASFPM) ASFPM has an interest in levees from the floodplain management/NFIP (National Flood Insurance Program) view. They would like to see levee safety viewed in a broader context of flood risk mitigation.
- The National Association of Flood and Stormwater Management Agencies (NAFSMA) – NAFSMA represents many flood control/levee districts and other levee owners.
- The United States Society on Dams (USSD) USSD has an interest from a technical/engineering standpoint, has a committee on levees and many members who are involved with levee design and rehabilitation, and holds technical seminars and workshops on levee design.
- The Corps of Engineers The Corps owns and operates or has designed many levee systems through the United States. The Corps is undertaking a program to inventory all levees and to inspect existing Corps levees.
- FEMA is interested in levee safety from a floodplain management view. The overall condition of a levee, whether it is certified or not, affects flood insurance rates for protected areas.

ASDSO conducted a survey of state dam safety programs in 2006 and determined that at that time 23 states had some levee safety regulatory authority/responsibility. The level of authority and commitment of resources varies greatly among these states.

Discussion

The recommendations of the NCLS report support strong state levee safety programs. The obvious benefit of these programs would be the protection of people and property in areas protected by levees. Development of these programs will require a tremendous commitment of time and resources for many states. The number of levee systems in the states and their condition is largely unknown. While many aspects of levee safety and dam safety are the same, implementing an effective levee safety program will require training for new and existing state engineers. It will also require closer coordination with state floodplain management and emergency management programs. Many states are concerned that the implementation of a state levee safety program will draw resources away from already struggling dam safety programs. Another concern is that state dam safety regulators will be expected to take on this additional role without additional resources. Without the support of a strong national levee safety organization, states will not have a voice in the formation of a new federal commission and new levee safety standards.

Should ASDSO endorse a new National Dam and Levee Safety Commission?

Pros –

• As stated in the NCLS report – The committee recognizes the "… need for a broader national flood risk management approach, the benefits of integrating national dam safety

and levee safety programs, and the call for leveraging levee safety as a critical first step in a national infrastructure investment. ...Commonalities between levee safety and dam safety are many. In order to maximize efficiencies at all levels of government, build upon existing state expertise and provide consistent messages related to multi-hazard risk to the public, all opportunities to integrate the two should be explored."

- A new commission with combined dam and levee safety responsibilities will provide for and balance both aspects with the attention that each requires.
- The new commission will be focused solely on dam and levee infrastructure safety. FEMA (the current home of the National Dam Safety Program (NDSP)) is not an infrastructure safety entity. The mission of FEMA has historically been primarily focused on disaster response and notification. While these are important aspects of dam safety programs, they are just a part of the overall dam safety mission.
- The new commission would have its own federally appropriated budget. Without a lineitem appropriation, the NDSP has been subject to reductions to support other priorities within the Department of Homeland Security.
- Including dam safety as part of a larger commission would be an improvement. Without the support of a stand-alone commission to support the NDSP, the program will continue to lack proper funding and focused national support. Development of strong state levee safety programs could reduce already limited dam safety funding and resources if the programs are not joined.

Cons -

- Levee safety is a huge issue and dam safety could get lost within the new commission.
- If the federal government has to make budget cuts, it could be easier to do away with a new commission.
- Moving the NDSP to another federal entity may result in complications in the NDSP state assistance grants and a possible interruption in the grant funding cycle. This must be avoided to help state programs.

Should ASDSO include levees within its mission and become both a dam and levee safety professional association?

Pros –

- The National Committee on Levee Safety recommends states have significant responsibility for levees. Therefore it would be critical for states to participate in shaping future policy regarding levee safety. It would also be important for states to coordinate and have a unified position. ASDSO is the organization that already represents state interest and has coordinated state interest for over 25 years.
- Levees and dams have many structural similarities and state regulatory programs will be similar. The mission of ASDSO can essentially remain the same in support of state programs. Many of the things that ASDSO provides to members; training, research, advocacy to the federal government, etc. will be the same needs of levee safety programs.
- In many if not most states, levee safety programs are managed by the same staff as the dam safety program. This trend will most likely continue as the programs expand. One association will better serve those state programs and provide a united voice on legislative and other issues.

- Private sector members have voiced an interest in not creating another separate association that they have to belong to or keep tabs on. One association for both dams and levees issues is efficient for the private sector.
- Many ASDSO members are already involved in levee safety and the number of members involved in both will continue to increase as the federal government implements the new national program.
- Greater involvement in levee safety will provide ASDSO with opportunities to work more closely with ASCE, ASFPM, NAFSMA and other NGO's. This could result in greater partnerships for dam safety issues as well.
- Through greater involvement in levee safety ASDSO can reach out to levee owners, consultants, and others and promote infrastructure safety issues to a wider membership/audience.

Cons -

- Funding a larger and more diverse organization is an unknown for ASDSO. ASDSO will have to make a commitment to levee safety by funding additional staff to help states establish levee safety programs.
- The focus on dams could diminish.
- Working with a new commission is an unknown. It may involve too much federal oversight.
- There may be some states that choose to not participate in levee safety due to a lack of state resources, etc. Those state members could be concerned about losing a voice in the association.

(Including levees in the ASDSO mission will require resolution of constitutional and policy issues with the association's internal structure. This could be viewed as a pro - an opportunity to strengthen the association, or a con - a potentially laborious and contentious task. Some flexibility in format and timing for these types of changes may be needed since the recommendations are dependent on actions taken by many states and on the national level. Implementation of any changes within ASDSO should be timed based on how the recommendations of the NCLS report are implemented.)

An examination of some of the twenty recommendations of the NCLS report and current ASDSO initiatives shows that ASDSO is already positioned to provide a leadership role in levee safety.

- 1. Establish a National Levee Safety Commission part of this recommendation involves delegation to state levee safety programs. Assuming that many, if not most, state levee safety programs will be incorporated with existing dam safety programs, ASDSO is well positioned to assist the commission through current relationships with all the state dam safety programs.
- 2. Expand and Maintain the National Levee Database ASDSO has many years of experience in assisting the Corps and working with the state programs to help populate the National Inventory of Dams.
- 3 5. These recommendations involve the adoption of a hazard classification system, national levee safety standards, and tolerable risk guidelines ASDSO committees have

developed the national model dam safety program and worked with federal partners over many years to develop national guidelines for dam safety.

- 7. This recommendation involves peer review of levee compliance determinations ASDSO has a well established peer review structure for state dam safety programs that could be useful in establishing and conducting levee compliance reviews. Many of our Affiliate Members are actively engaged in the inspection and rehabilitation of existing levees and the design and construction of new levees and would provide a pool of resources for a Levee Peer Review Program.
- 9. Public Involvement and Education/Awareness ASDSO has many established public outreach/awareness initiatives including a dam owner education program and media communications program.
- 10. Provide Technical Materials and Direct Technical Assistance ASDSO committees and ASDSO members have participated in the development of many technical materials for dam safety. In addition, ASDSO has a distribution network to provide materials to state programs and other members.
- 11. Develop a National Levee Safety Training Program ASDSO has a very successful training program for dam safety that could easily be adapted to incorporate levee safety training. These include regional technical seminars, advanced technical seminars, and web-based training. Also, ASDSO holds the preeminent dam safety technical conference each year. Many of the topics will apply to levee programs as well as dam safety and the program could be expanded to include levee safety specific topics. Having a combined dam and levee safety-specific conference will provide excellent networking and knowledge sharing opportunities for the levee safety community.
- 12. Harmony with Environmental Protection Requirements ASDSO has provided technical forums for environmental issues and can facilitate similar coordination between environmental groups, federal programs and state programs. As an example, ASDSO assisted USEPA this past year in coordinating with state dam safety programs on coal combustion products impoundments.
- 13. Research and Development ASDSO and ASDSO members have coordinated with federal and private partners on dam safety research activities.
- 14 16. Establishment of State Programs and Funding Sources As stated above, ASDSO is well positioned to assist the commission in establishing state programs through current relationships with its members.

Recommendations or Position Points

It makes sense for states to regulate both dams and levees. "States are well positioned to provide assistance and oversight to local owner/operators, and coordinate activities in a systems approach among entities within and among states." (NCLS Report) They are similar structures and the same type of skills and experience are needed to regulate both. Dam safety regulation in the United States is largely the responsibility of the fifty states. Although there are not overarching federal standards for dams, states have worked together to develop somewhat consistent applications of dam safety programs based on the needs and available funding to those states. The model program is an example of working together to develop consistency. However, levee safety is in its infancy with little or no standards. A commission structure proposed by the NCLS

would be ideal to accelerate the development of consistent application of levee safety programs and development of standards.

For states to include levees they need resources. Most states do not have sufficient resources to adequately regulate dams. The number and condition of levees in most states is unknown. It will require a significant commitment of resources – staff, equipment, and technology - to run an effective program. It can be expected that in some states the initial reaction will be to simply add levees to the dam safety program section, perhaps without additional funding. An ASDSO that includes levees would be well positioned to assist the states with a voice to address the need for appropriate funding.

A commission overseeing both the dam and levee safety national programs is warranted. As recommended in the NCLS Report, "... a *National Levee Safety Commission* charged with understanding and communicating risks associated with levees, developing national safety standards, facilitating dialogue and research on important levee related topics (e.g. research and development, facilitating dialogue with environmental interests), providing technical materials and assistance to all levels of government, encouraging improved safety measures and programs through grants, and overseeing national and state levee safety program development and implementation activities." This same need exists for the national dam safety program and integration of the two in one commission will provide an effective means to deliver these resources.

One national association should act as the professional and advocacy group for those dealing with the technical/engineering/safety issues of dams and levees.