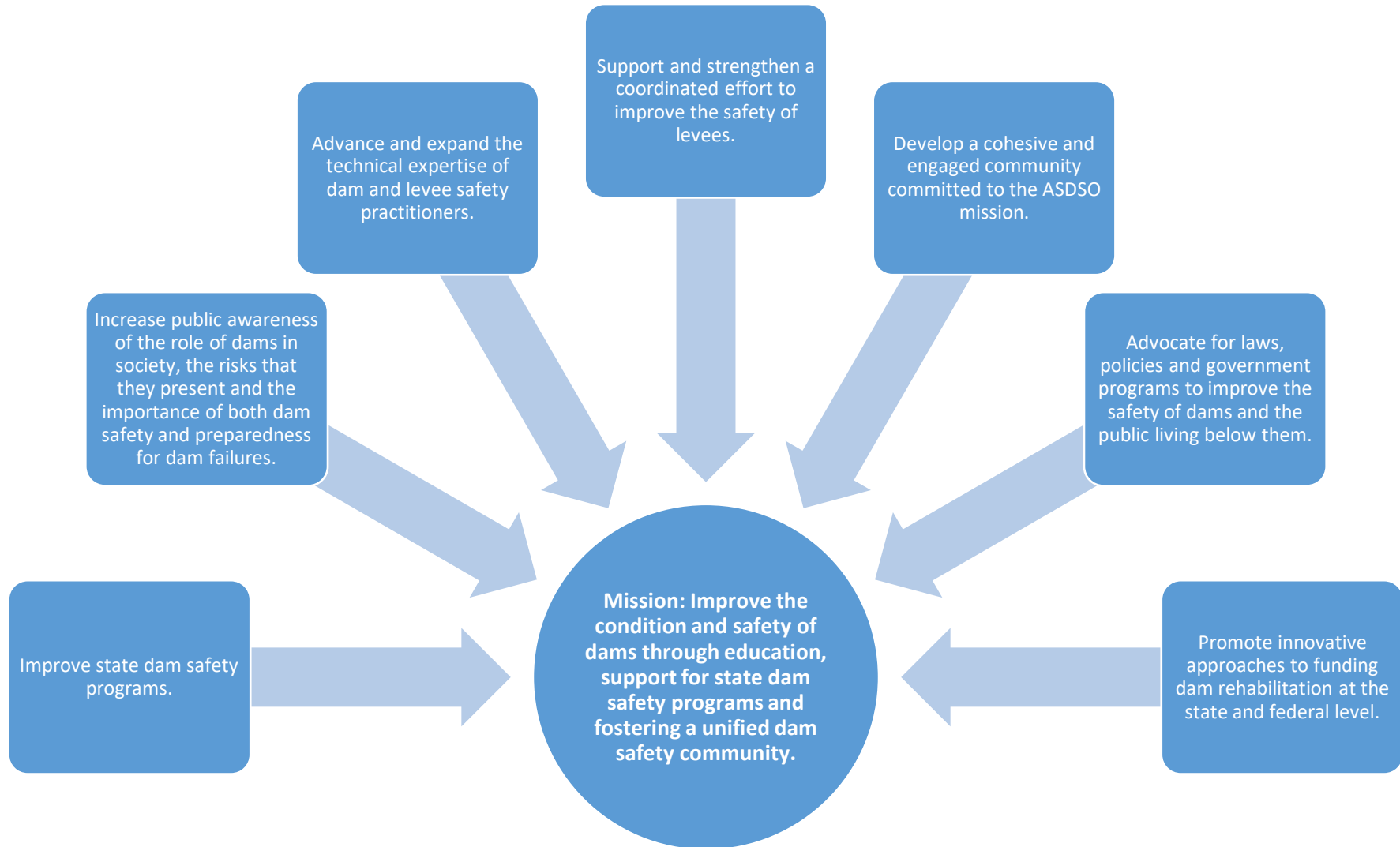


Association of State Dam Safety Officials Strategic Plan

2017-2021



<p>Goal: Improve state dam safety programs.</p> <ul style="list-style-type: none"> ➤ Work to increase the number of annual dam inspections and consistency of National Inventory of Dams (NID) defined condition assessments. ➤ Provide for state dam safety program performance data collection, analysis and reporting. ➤ Identify and work to fill gaps in state programs. ➤ Provide Leadership to define, promote and share best practices in dam safety. 	 <p>Mission: Improve the condition and safety of dams through education, support for state dam safety programs and fostering a unified dam safety community.</p>	<p>Goal: Promote innovative approaches to funding dam rehabilitation at the state and federal level.</p> <ul style="list-style-type: none"> ➤ Promote promulgation of State Revolving Loan and Grant Programs. ➤ Create a Resource Center to identify and highlight existing programs that could be modeled by others. ➤ Identify agencies or organizations (e.g. NGOs, local governments) with interest and funding to assist with rehabilitation, removal, etc. Make contact with these other groups and facilitate communication and development of mechanisms to create funding. Facilitate communications between sources and dam owners.
<p>Goal: Advocate for laws, policies and government programs to improve the safety of dams and the public living below them.</p> <ul style="list-style-type: none"> ➤ Educate federal lawmakers and policymakers about the importance of supporting federal leadership and coordination over dam safety. ➤ Create and implement advocacy programs to maintain a network of organizations and individuals ready to communicate the importance of strong federal dam safety programs. ➤ Educate state lawmakers and policymakers about the importance of supporting state dam safety programs. ➤ Create and implement state-focused advocacy programs to maintain a network of state-based organizations and individuals ready to communicate the importance of strong state dam safety programs. 	<p>Goal: Advance and expand the technical expertise of dam and levee safety practitioners.</p> <ul style="list-style-type: none"> ➤ Manage an effective technical training program designed to meet the changing needs of dam and levee safety professionals. ➤ Develop the full potential of ASDSO's Program of Study as a collective roadmap for dam and levee safety education in the U.S. ➤ Coordinate with other organizations that provide training in dam safety, security and emergency management and promote the Program of Study as a collective reference. ➤ Serve as the primary resource for dam and levee safety information. ➤ Track, facilitate the completion of, and share information on research that will elevate the practice of dam safety. ➤ Establish a task group to complete a feasibility report on creating a "dam safety engineering" micro-credentialing program for engineers/consulting firms. Implement the program if found feasible. ➤ Manage an effective education program for dam and levee owners/operators to assist dam and levee owners/operators in reducing the risk associated with their dam(s). ➤ Manage an effective education program to provide guidance to policymakers and first responders on how dams fit into their risk mitigation plans. 	<p>Goal: Develop a cohesive and engaged community committed to the ASDSO mission.</p> <ul style="list-style-type: none"> ➤ Increase awareness of the ASDSO brand throughout the dam safety community to drive membership growth. ➤ Provide members with an engaging member experience. ➤ Promote dam safety and levee safety engineering as a career choice to college-age students. ➤ Ensure the continuity of the organizational leadership. ➤ Develop State Representative and Board member recruitment plans. ➤ Create new, focused programs for young professionals. (Entering the work force up to age 39.) ➤ Recognize individuals and organizations contributing to the advancement of ASDSO or improving dam safety in the U.S.
<p>Goal: Increase public awareness of the role of dams in society, the risks that they present and the importance of both dam safety and preparedness for dam failures.</p> <ul style="list-style-type: none"> ➤ Create and disseminate timely and targeted messaging to improve public awareness of the risks associated with dams and levees. ➤ Engage the media to communicate relevant facts about dams and levees and dam/levee risk management policies. ➤ Leverage partnerships with other organizations and with national events to increase awareness and to advocate for strong dam safety policies. ➤ Create and implement a program to increase the awareness of the dangers of recreating around dams. 	 <p>Vision: A future where all dams are safe.</p>	<p>Goal: Support and strengthen a coordinated effort to improve the safety of levees.</p> <ul style="list-style-type: none"> ➤ Develop a communication and membership involvement plan that describes intent and rationale for addressing ASDSO's role in levee issues. ➤ Increase the number of members who are levee stakeholders. ➤ Increase cooperation and maintain a leadership role on the U.S. Levee Safety Coalition to advance levee safety at state and national levels. ➤ Implement an advocacy program to support continued reauthorization and full funding for the National Levee Safety Program. ➤ Support implementation of the National Levee Safety Program.

ASSOCIATION OF STATE DAM SAFETY OFFICIALS STRATEGIC PLAN

2017-2021

Table of Contents

Message from the President	2
Strategic Planning Committee Members.....	3
The Planning Process	3
ASDSO and Dam Safety.....	4
Vision	6
Mission	6
ASDSO Strategic Planning Goals	7
Goal 1 - Improve State Dam Safety Programs	8
Goal 2 - Develop a Cohesive and Engaged Community Committed to the ASDSO Mission.	10
Goal 3 – Advance and Expand the Technical Expertise of Dam and Levee Safety Practitioners	11
Goal 4 - Promote Innovative Approaches to Funding Dam Rehabilitation at the State and Federal Level.....	13
Goal 5 - Increase Public Awareness of the Role of Dams in Society, the Risks They Present and the Importance of Dam Safety and Preparedness.....	14
Goal 6 - Advocate for laws, policies and government programs that serve to improve the safety of dams and reduce the risk to the public.....	16
Goal 7 - Support and Strengthen a Coordinated Effort to Improve the Safety of Levees.	18
Detail for Annual Action Planning.....	19

Message from the President

As a part of our operating plan, ASDSO reviews the strategic plan every 5 years. In 2016, we focused on an update of the current plan, short of completely re-inventing it. The process we employed in this year's review assembled a broad group of volunteers to work with the Board of Directors and ASDSO staff to review the current plan and develop improvements.

The plan, as written, provides the roadmap to guide the Association for the next five years. We will continue to consult the plan and report on our progress each year.

I wish to personally thank all the volunteers, our Board of Directors, and especially our executive staff. Everybody has shown their commitment by working together toward achieving our vision of a world where all dams are safe. In doing so, they have supported our mission to improve the condition and safety of dams through education, support for state dam safety programs and fostering a unified dam safety community.

Dusty Myers
ASDSO President
2016-2017

Strategic Planning Committee Members

These teams reviewed the existing 2013-17 plan.

<p>Goal 1 Team—Improve State Dam Safety Programs</p> <p>Bill McCormick, CO Division of Water Resources Hal Van Aller, MD Department of the Environment Carl Montana, CJM Engineering, LLC Tony Fernandes, Aqua Pennsylvania, Inc. Scott Arends, Hanson Professional Services Inc. Staff: Mark Ogden</p>	<p>Goal 2 Team—Increase Dam Safety Awareness</p> <p>Paul Simon, US Army Corps of Engineers Paul Schweiger, Gannett Fleming, Inc. Mark Baker, National Park Service Dan Osmun, HDR Engineering, Inc. Tony Fletcher, ME Emergency Management Agency Staff: Sarah McCubbin-Cain</p>
<p>Goal 3 Team—Increase technical expertise</p> <p>Art Sengupta, FL Department of Environmental Protection Jon Garton, IA Department of Natural Resources Darren Brinker, Denver Water Terry Arnold, MWH Americas, Inc. Staff: Susan Sorrell</p>	<p>Goal 4 Team—Develop financial instruments</p> <p>Tom Woosley, GA Department of Natural Resources Roger Adams, PA Department of Environmental Protection Kurt Rinehart, Miami Conservancy District Bill Bingham, Gannett Fleming, Inc. John Moyle, NJ Department of Environmental Protection Staff: Jennifer Burns</p>
<p>Goal 5 Team—Consistent regulation and technical issues</p> <p>Michelle Lemieux, MT Department of Natural Resources & Conservation Eric Ditchey, McCormick Taylor, Inc. Roderick dela Cruz, Southern California Edison Jack Byers, Byers Group LLC Staff: Brittany Lewis</p>	<p>Goal 6 Team—support levee safety</p> <p>Shane Cook, NC Department of Environmental & Natural Resources Charlie Cobb, AK Department of Natural Resources Bob Dalton, Vasconcelles Engineering Corporation Jeff Dingrando, Stantec Consulting Services, Inc. Staff: Mark Ogden and Lori Spragens</p>
<p>Goal 7 Team—New and improved ASDSO/additional ideas</p> <p>Jim Gallagher, NH Department of Environmental Services Chuck Thompson, NM Office of the State Engineer Kate Aulenbach, Gannett Fleming, Inc. James Demby, Federal Emergency Management Agency Dusty Myers, MS Department of Environmental Quality Staff: Ross Brown</p>	

The Planning Process

The planning process began with assigning members of the Board, staff and volunteers to seven separate teams. A team was created for each of the six existing strategic plan goals. In addition, a team was created to review internal management issues and to investigate activities the organization might be involved with, but are not currently being addressed in the plan. At least two Board members and one ASDSO staff member were assigned to each team; the balance of the team was composed of volunteers.

The initial task of each team was to review its assigned goal and gauge whether the Association is meeting the goal. Teams reviewed annual reports from the past strategic plan period (2013-2017) and reported their findings back to the entire planning group.

The next task was a brainstorming period in which each team envisioned what had been working and not working within its goal, and collaborated to develop new ideas that could be incorporated into the new or updated goal. This was a time when activities under an existing goal could be revised, removed or even placed into one of the other goals. New goal ideas were also considered during this period.

Lastly, the resulting goals were reviewed, including comments from all of the goal teams, and reorganized into the plan included herein.

Feedback was solicited at a number of points along the way from volunteers, Board members, staff, state voting members and anyone with an interest in the Association.

ASDSO and Dam Safety

Dams are an essential component of our national infrastructure. Dams provide many benefits to society including flood protection, water supply, hydropower, irrigation, recreation, transportation, and fish and wildlife habitat. For example, it is a fact that dams built with the assistance of the U.S. Natural Resources Conservation Service provide an estimated \$1.7 billion in annual benefits in reduced flooding and erosion damage, recreation, water supply and wildlife habitat.

Most of the regulated dams in the U.S. are well maintained, in good condition and provide the service for which they were intended. However, many dams are deteriorating and/or do not meet modern safety standards, and some are at risk of failure, which, as history has shown, can be catastrophic.

Dam failures can cause and have caused loss of life and significant economic and environmental damage. Furthermore, floods produced by dam failure are almost always more sudden and violent than normal stream, river or coastal floods, and they can produce damage that looks like tornado damage. In addition to direct flood damages, failures lead to considerable indirect costs, such as recovery, clean-up and lost business opportunity. The loss of resources that occur following a dam failure can devastate communities.

As an increasing trend toward more extreme regional storm events seems to be occurring, the cumulative impacts of dozens of smaller failures are also of grave concern. Over a period from October 2015 to October 2016, there were 83 state regulated breached dams in just two states. During Hurricane Matthew in 2016, 12 state regulated dams failed in North Carolina. In South Carolina, 51 state regulated dams were breached due to flooding in October 2015 and 20 state regulated dams were breached relating to flooding from Hurricane Matthew in 2016.

During the period from 1960 to 1998 there were more than 300 fatalities from failures, most of which were caused by failures from dams less than 49 feet high. From January 1, 2005 to January 1, 2013, state dam safety programs reported 173 dam failures and 578 “incidents” – episodes that, without intervention, would likely have resulted in dam failure.

The number of high-hazard potential dams is increasing due to development in the communities downstream. There are now over 15,000 high-hazard potential dams in the United States. In addition, the average age of dams continues to increase, as does the number of identified deficient dams. Poorly maintained dams and older dams built to standards lower than required today create a serious concern from a dam safety perspective.

All dams, including those that are privately owned, can present public safety risks. Issues surrounding maintenance and rehabilitation costs heighten this risk. Annual operations and maintenance costs for dams can run into the thousands or tens of thousands of dollars depending on the facility. Rehabilitation costs can range into the hundreds of millions of dollars, depending on the size of the dam and the scope of a project. As a result, many

small private owners and local agencies are having difficulties performing required maintenance or making repairs. Many dam owners lack the financial resources necessary for adequate dam maintenance and rehabilitation.

In 2016, ASDSO concluded that it would take approximately \$18.7 billion to rehabilitate the nation's most critical (high hazard potential) non-federal dams that are in need of rehabilitation. In 2017, the American Society of Civil Engineers released their report card on national infrastructure and gave dams a "D" grade partially due to the lack of funding available to support the repair and upgrade needs of the nation's dams.

Several states have small programs to address funding for dam repairs, rehabilitation and removals with differing degrees of funding and success. In 2016, a federal bill was passed to create a national dam rehabilitation program to provide cost-shared grants to dam owners. The Natural Resources Conservation Service also operates a grant program for dam rehabilitation focused on dams built with support from the agency (PL-566). There are no other large-scale funding assistance programs for dam rehabilitation (some exist solely for dam removal). ASDSO will continue to focus resources and programs on improving the availability of funding for dam rehabilitation.

It is increasingly vital that dams are regulated for safety. Periodic inspection and design/construction approval is key to improving the safety of dams. State governments provide these regulatory functions for approximately 70% of the dams in the U.S., yet many dam safety programs lack the necessary resources to adequately monitor and regulate their inventories. A strong advocacy program will continue to assist state programs with getting the funding and resources that they need to regulate dams effectively.

As regulatory inspections alone do not make dams safe, owners play a key role in dam safety and are ultimately liable for dam failures or mis-operation. While all levels of government own some dams, the majority are privately owned. Outreach to dam owners will be an important element over the next five years for ASDSO.

Public awareness is a key challenge within the dam safety community. With increasing numbers of high-hazard potential dams, more and more people live and work within dam failure inundation zones. Although our society is highly dependent on dams, there is a severe lack of awareness about dam safety issues at the community level. Dams are generally operating in the background of public infrastructure, unlike roads and bridges, which are woven into the fabric of our daily lives. The benefits of dams can easily be overlooked and taken for granted. The opportunity to increase the number of and access to tools to educate dam owners, the public and first responders to their risks and responsibilities before, during and after a dam failure is important. In order to produce meaningful reduction in the overall risk presented by dams, work to develop tools to reduce the consequences of dam failures has been identified as a strategic goal.

Public and personal safety at and around dams continues to gain interest among our membership. Increasing media coverage, as well as more and better information, lead us to sobering conclusions about individual safety of the public around dams. Our waterways are very attractive recreational magnets, and, as the number of recreational uses increases, conflicts with dams are inevitable. Often these conflicts lead to injury or even death for the unsuspecting or unaware. ASDSO has committed to addressing this growing issue by chartering a new committee to research the problem and develop solutions and wise practices for dam owners and regulators.

Working toward a future where all dams are safe is the reason ASDSO exists. ASDSO's members are experts dedicated to ensuring the safety and security of the nation's more than 90,000 dams. ASDSO has made significant achievements in advancing dam safety by pursuing a consistent national approach, raising awareness, providing technical training, establishing forums for information exchange, facilitating financing for dam safety activities, partnering with federal government colleagues, and supporting members. ASDSO's role as the primary advocate for state dam safety programs continues to be a critical element of its existence.

While ASDSO has made significant strides in improving dam safety in the U.S., many factors come into play when developing a strategic plan for the coming 5-year period. External forces and challenges play a significant role in how ASDSO considers targeting its efforts. Important factors considered when developing this strategic plan include:

- The increasing number of aging and deficient dams.
- The increasing number of high-hazard potential dams.
- The demand for and lack of funding for rehabilitation.
- The lack of understanding by some dam owners regarding their liability and the public safety issues that may accompany ownership of a dam.
- Changes to emergency preparedness and disaster mitigation policies and programs at the state and national levels and how dams are treated as a hazard within these policies and programs.
- Lack of awareness by state and federal lawmakers about the importance of strong regulations and the threat that state lawmakers may reduce the efficacy of dam safety regulations.
- Support from federal and state appropriators for dam safety programs.
- The evolution of tailings dam safety.
- The evolution of the national and state levee safety programs.
- The evolution of infrastructure protection and security.
- The perception and awareness of the functions of dams by the general public, environmental activists and the media.
- Growing concerns about public and personal safety at and around dams.
- Plans, policies and programs created and carried out by the Department of Homeland Security, FEMA National Dam Safety Program and the Dams Sector-Specific Agency; and, by the US Army Corps of Engineers and DHS, FEMA National Levee Safety Program.

ASDSO is a national leader in dam safety and, therefore, partners with national programs including the FEMA National Dam Safety Program (NDSP), the National Levee Safety Program and the Dams Sector Coordinating Council, part of the DHS Infrastructure Protection Program. ASDSO supports these programs by advancing common objectives such as providing dam safety training, coordinating research, developing a model state dam safety program, coordinating between dam safety and security goals, promoting dam safety awareness, supporting outreach programs set up through the National Levee Safety Program and other important aspects. ASDSO continues to work on ensuring reauthorization of the National Dam Safety Program Act, full funding for the National Dam Rehabilitation Program and full funding for the National Levee Safety Program provisions.

Ongoing economic and climatic uncertainties create a challenging operational environment for ASDSO, state regulatory programs and dam owners. ASDSO will continue to strategically target activities that best leverage financial and human resources. ASDSO will continue to address the potential impacts to dam safety from extreme weather events and newly emerging climate trends. In order to effectively operate in this reality, ASDSO has developed this 2017-2021 strategic plan to help guide our program of work to ensure our recent successes continue and are strengthened while identifying new areas of opportunity to improve the safety of and lower the risks associated with dams throughout the United States.

Vision

A future where all dams are safe.

Mission

Improve the condition and safety of dams and reduce the consequences associated with dam incidents, through education, support for state dam safety programs and fostering a unified dam safety community.

ASDSO Strategic Planning Goals

1. Improve state dam safety programs.
2. Develop a cohesive and engaged community committed to the ASDSO mission.
3. Advance and expand the technical expertise of dam and levee safety practitioners.
4. Promote innovative approaches to funding dam rehabilitation at the state and federal level.
5. Increase public awareness of the role of dams in society, the risks that they present and the importance of both dam safety and preparedness for dam failures.
6. Advocate for laws, policies and government programs that serve to improve the safety of dams and reduce the risk to the public.
7. Support and strengthen a coordinated effort to improve the safety of levees.

Goal 1 - Improve State Dam Safety Programs

Narrative

Improving and supporting state dam safety programs is an essential function of ASDSO. Objectives designed to achieve this goal include work to assist states toward increasing the number of annual dam inspections and improving consistency with NID defined condition assessments; mechanisms to provide for state dam safety program performance data collection, analysis and reporting; work to identify and fill gaps in state dam safety programs; and providing leadership to define, promote and share best practices for state dam safety programs nationwide.

Objective Summary	Objective
<i>Work to increase the number of annual dam inspections and consistency of National Inventory of Dams (NID) defined condition assessments.</i>	1.1 Assist state programs toward increasing the number of annual dam inspections and resulting condition assessments.
	1.2 Coordinate an NID condition assessment update action plan with NDSRB.
	1.3 Assist toward the integration of the national condition assessment definition into states practice and updating of the condition assessment data within the NID.
<i>Provide for state dam safety program performance data collection, analysis and reporting.</i>	1.4 In conjunction with the Corps and FEMA, conduct an annual state dam safety program performance data call to collect available data about the performance of state regulatory programs including number of inspections, EAPs, dam repairs, enforcement actions, staffing and budgets.
	1.5 Use state dam safety performance data to help “tell the story” of the dam safety outlook.
<i>Identify and work to fill gaps in state programs.</i>	1.6 As needed, develop tools and guidance to assist states in providing and/or enhancing enforcement capabilities.
<i>Provide Leadership to define, promote and share best practices in dam safety</i>	1.7 Develop tools and guidance to assist states in communicating with local officials concerning planning and response activities within dam failure inundation areas.
	1.8 Establish a committee to identify and publish best practices to prepare and plan for response to dam failures to reduce the consequences within dam failure inundation zones (i.e. consequence reduction activities)
	1.9 Develop best practices for states to follow.
	1.10 Provide peer reviews for state programs annually and upon request.
	1.11 Continue existing forums for networking and peer-to-peer exchange between the state officials and annually facilitate their use. Create new forums by the end of FY 18 and annually facilitate their use.
	1.12 Develop tools for state programs to understand more clearly the uses of Risk Informed Decision Making (RIDM) for Program Activities.

Objective Summary	Objective
	1.13 Establish a committee that will identify and publish best practices for use of technology in the field of dam safety.
	1.14 Provide tools, guidance and forums to assist states with the NDSP Assistance Grant applications, collaboration and reporting.

It should be noted that the objectives in other goals may also serve to improve state dam safety programs.

Goal 2 - Develop a Cohesive and Engaged Community Committed to the ASDSO Mission.

Narrative

An important method for reaching more stakeholders is through increasing ASDSO membership and offering interaction and benefits that improve the feeling of community and professionalism among dam safety stakeholders. ASDSO members become informed advocates for dam safety and help to reach a wider audience. ASDSO seeks to broaden its scope of influence by implementing membership benefits, recognition of efforts and recruitment programs designed to increase both the size and commitment of its membership base.

ASDSO will further strive to ensure the professional development of new dam and levee safety practitioners and students. Specifically, ASDSO will engage students of all ages with targeted programs and activities designed to spark an interest in dam safety as a professional career.

ASDSO will continue to grow the leadership at the state level to ensure organizational management stays strong.

ASDSO will begin to collect data related to members' professional interest in an effort to increase personalization and targeted outreach for future communications.

Objective Summary	Objective
<i>Growing the Membership</i>	2.1 Increase awareness of the ASDSO brand throughout the dam safety community to drive membership growth.
<i>Engagement/Involvement</i>	2.2 Provide members with an engaging member experience.
	2.3 Promote dam safety and levee safety engineering as a career choice to college-age students.
<i>Leadership Development/Cultivation</i>	2.4 Ensure the continuity of the organizational leadership.
	2.5 Develop State Representative and Board member recruitment plans (WTM)
	2.6 Create new, focused programs for young professional members. (Entering the work force up to age 39.)
<i>Recognition/Achievement/Acknowledgement</i>	2.7 Recognize individuals and organizations contributing to the advancement of ASDSO or improving dam safety in the U.S.

Goal 3 – Advance and Expand the Technical Expertise of Dam and Levee Safety Practitioners

Narrative

ASDSO is resolute in its belief that creating a community of qualified and effective dam and levee safety practitioners will directly and positively impact the number of safe dams and levees in our communities. In order to support current practitioners and advance the development of the next generation of dam and levee safety professionals, ASDSO will deliver high quality dam and levee safety and security technical training and networking opportunities. Live events, such as conferences and seminars will serve both to educate and provide critical peer-to-peer interaction among the participants. Web-based and other distance learning events will allow a broad, even international audience to take advantage of technical training opportunities on an on-demand basis.

Concurrently, ASDSO believes that the education of dam owners and operators, emergency managers, and first responders is critical to reducing the risk associated with dams. ASDSO provides educational tools, training and materials focused on the specific needs of these stakeholders.

ASDSO will also serve as a critical resource by managing a technical information repository, encouraging and facilitating research efforts on behalf of the dam safety community. ASDSO will coordinate with federal and state programs to carry out national strategies dedicated to improving the knowledge and expertise on dam and levee safety and security.

In 2001, ASDSO's Technical Training Committee developed a list of technical topics that should be included in a complete dam safety Program of Study. The Program of Study is a guide to help dam safety practitioners identify and prioritize which areas of expertise to focus on for training and professional development. It contains 12 main topics, or categories that the Training Committee determined should be included in a comprehensive curriculum of professional development for dam safety professionals. In 2010, the Technical Training Committee updated and broadened the Program of Study to include both classroom and web-based courses offered by universities and dam safety-related professional organizations, as well as publications in each area of study. Since that time, the primary access point for practitioners has been the Resources by Topic page of the ASDSO website. With the upcoming website revisions, and the implementation of the new learning management system (LMS), members of the dam and levee safety stakeholder community will have even greater access to the training and educational opportunities recommended in the Program of Study.

Objective Summary	Objective
<i>Training</i>	3.1 Manage an effective technical training program designed to meet the changing needs of dam and levee safety professionals.
	3.2 Develop the full potential of ASDSO's Program of Study as a collective roadmap for dam and levee safety education in the U.S.
<i>Coordination</i>	3.3 Coordinate with other organizations that provide training in dam safety, security and emergency management and promote the Program of Study as a collective reference.
<i>Information Exchange</i>	3.4 Serve as the primary resource for dam and levee safety information
<i>Technical Research</i>	3.5. Track, facilitate the completion of, and share information on research that will elevate the practice of dam safety.
	3.6 Evaluate the feasibility of developing a certification/credentialing program for dam and/or levee safety practitioners.

<i>Outreach to Dam Owners</i>	3.7 Manage an effective education program for dam and levee owners/operators to assist dam and levee owners/operators in reducing the risk associated with their dam(s).
<i>Training for Floodplain and Emergency Planners and First Responders</i>	3.8 Manage an effective education program to provide guidance to policymakers and first responders on how dams fit into their risk mitigation plans.

Goal 4 - Promote Innovative Approaches to Funding Dam Rehabilitation at the State and Federal Level.

Narrative

The lack of financing to rehabilitate dams in the U.S. is a problem. To mitigate this problem, ASDSO will continue to advocate for the passage and implementation of legislation to fund repair of deficient dams, while simultaneously exploring and promoting alternative financing mechanisms such as Revolving Loan Funds, the development of a competitive grant program, and identifying partner organizations with interest and funding for dam rehabilitation or removal. ASDSO will create a resource center of information on innovative financing options for dam rehabilitation.

ASDSO will increase its efforts to find partner organizations (NGOs, local governments, etc.) with vested interests and available funding to support dam safety efforts, including rehabilitation and, where appropriate, removal of dams.

Objective Summary	Objective
<i>Advocacy</i>	4.1 Promote promulgation of State Revolving Loan and Grant Programs.
<i>Access to Resources</i>	4.2 Create a Resource Center to identify and highlight existing programs that could be modeled by others.
<i>Collaboration to Support Dam Rehabilitation Financing</i>	4.3 Identify agencies or organizations (e.g. NGOs, local governments) with interest and funding to assist with rehabilitation, removal, etc. Make contact with these other groups and facilitate communication and development of mechanisms to create funding. Facilitate communications between sources and dam owners.

Goal 5 - Increase Public Awareness of the Role of Dams in Society, the Risks They Present and the Importance of Dam Safety and Preparedness

Narrative

Almost everyone is impacted by dams in some way. Increasing awareness of the risks associated with dams will encourage policymakers to allocate resources for oversight and upkeep of dams. Better communication and education about dams will allow the media to report accurately and objectively on dam safety issues. Accurate and accessible data provided to the public allows them to engage elected officials, state and federal regulators, and dam owners on the importance of safe dams and preparedness for the downstream public living within dam failure inundation zones.

ASDSO will increase awareness at the above levels through creation and dissemination of awareness messaging and educational materials for these stakeholders, create tools and best practices for media engagement and direct outreach and will develop tools for raising awareness of safety at dams to reduce and/or prevent injury and loss of life of those who recreate at and around dams.

Objective Summary	Objective
<i>Create and disseminate timely and targeted messaging to improve public awareness of the risks associated with dams and levees.</i>	5.1 Maintain, update, and review the ASDSO Communications Plan.
	5.2 Create and maintain public awareness materials
	5.3 Increase usage of public awareness materials.
	5.4 Track relevant news/media interest in issues related to dam and levee safety and inform stakeholders of issues that may impact them.
<i>Engage the media to communicate relevant facts about dams and levees and dam/levee risk management policies.</i>	5.5 Respond in a timely and knowledgeable fashion to media inquiries about dams and levees, dam and levee safety, federal and state policies regarding dam/levee safety/dam risk management as appropriate.
	5.6 Proactively issue information to the media in the event of specified “trigger events,” as specified in the ASDSO Communications Plan.
	5.7 Supply corrections to inaccurate news articles and positive recognition for exemplary reporting through letters to editors and commentaries.
<i>Leverage partnerships with other organizations and with national events to increase awareness and to advocate for strong dam safety policies.</i>	5.8 Coordinate with all partner/like-minded organizations and government agencies to promote dam safety.
	5.9 Promote and help coordinate national awareness events.
<i>Create and implement a program to increase the awareness of the dangers of recreating around dams.</i>	5.10 Go to trade shows and make presentations to focus groups (e.g. sheriffs’ groups, lake management associations, city planner groups)

	5.11 Create and implement a strategy for increasing awareness of the dangers of recreating at dams.
	5.12 Collect data on incidents at dams
	5.13 Create and disseminate messages about safety at dams via all ASDSO communications outlets (social media, newsletters, Journal, website).
	5.14 Partner with other organizations to raise public awareness, and to modify or remove dangerous dams.
	5.15 Work with state dam safety programs to educate dam owners on ways to prevent drownings at dams.
	5.16 Create best practices materials for reducing the risk of drownings or accidents at dams..

Goal 6 - Advocate for laws, policies and government programs that serve to improve the safety of dams and reduce the risk to the public.

Narrative

Strong dam safety laws, policies and funding at the state and federal level will improve the safety of dams. ASDSO will continue to advocate for federal and state laws and policies that promote effective dam safety programs. State dam safety regulatory programs are operating under increasingly challenging budget constraints and threats by policymakers who want to decrease regulatory control over dams. Therefore, ASDSO will continue to educate policymakers about the importance of strong dam safety programs.

For over two decades, ASDSO has supported the implementation of the National Dam Safety Program and will continue to advocate for its reauthorization and full funding. Similarly, ASDSO will work to make sure that national dam security policies continue by advocating for the continuation of the Department of Homeland Security's Dams Sector Specific Agency. ASDSO will advocate for other, related national programs, such as the Small Watershed Dam Rehabilitation Program and the US Geological Survey's Streamgage Program, and will continue to lend support to the Infrastructure Report Card program established by the American Society of Civil Engineers. In addition, ASDSO will form partnerships with other like-minded organizations to increase advocacy outreach.

Objective Summary	Objective
Educate federal lawmakers and policymakers about the importance of supporting federal leadership and coordination over dam safety.	6.1 Develop fact sheets and a schedule of meetings with relevant federal lawmakers to create awareness for the need to reauthorize the National Dam Safety Program (expires after 2019).
	6.2 Annually, meet with federal lawmakers and administrative leaders at FEMA to educate them about the importance of providing full authorized funding for the National Dam Safety Program.
	6.3 Educate federal lawmakers about the importance of fully funding a National Dam Rehabilitation Program.
	6.4 Advise FEMA on program development details associated with the National Dam Rehabilitation Program and get buy in from relevant agency leadership.
Create and implement advocacy programs to maintain a network of organizations and individuals ready to communicate the importance of strong federal dam safety programs.	6.5 Promote the importance and details of strong state dam programs by maintaining lines of communication with the administrators of national/federal programs that affect dam risk and flood risk management.
	6.6 Implement a legislative outreach/awareness campaign to promote smart state and federal legislation that mitigates the risks associated with dams.
	6.7 Partner with other organizations urging support for dam safety policies and programs.
Educate state lawmakers and policymakers about the importance of supporting state dam safety programs.	6.8 Administer a state advocacy program to encourage state policy makers to focus resources on dam safety and security and to educate them about the importance of strong dam safety programs.

	6.9 Assist and encourage all states to participate in the National Dam Rehabilitation Act grant program.
Create and implement state-focused advocacy programs to maintain a network of state-based organizations and individuals ready to communicate the importance of strong state dam safety programs.	6.10 Encourage ASDSO members, state regulated dam owners and other stakeholders to Join individually in ASDSO's State-Focused Legislative Awareness Campaigns.

Goal 7 - Support and Strengthen a Coordinated Effort to Improve the Safety of Levees.

Narrative

ASDSO began exploring the needs of its membership with regard to advocacy for state levee safety programs in the wake of levee failures associated with Hurricane Katrina. This led to the adoption of a resolution in 2006 supporting the establishment of a National Levee Safety Program. In 2007, Congress passed the National Levee Safety Act, which authorized the National Committee on Levee Safety (NCLS). ASDSO nominated state and private sector members to the NCLS and participated on the NCLS Review Team. In 2009, the ASDSO Board voted to support the recommendations of the NCLS draft report and voted to form a standing Levee Safety Committee. In 2014, the Water Resources Reform and Development Act (WRRDA 2014) was passed and included authorization for a National Levee Safety Program. The provision for the National Levee Safety Program in WRRDA 2014 represents a major accomplishment for ASDSO and, if funding is appropriated to support the program, it will have a significant impact on ASDSO members.

With the foundation for a National Levee Safety Program established with the passage of WRRDA 2014, the recognition of many similarities between dam safety and levee safety, and with some state dam safety programs already addressing levee safety issues, ASDSO anticipates that additional state dam safety programs will have a role in levee safety. In addition, the technical and administrative knowledge within ASDSO will be critical to the success of the National Levee Safety Program. ASDSO is therefore refocusing its objectives to assist states in the implementation of levee safety at a state level and include within its Advocacy Program support for reauthorization and appropriations of the National Levee Safety Program. ASDSO expects to continue to participate with the U.S. Levee Safety Coalition and will continue to monitor the development of levee safety issues and support and incorporate levee safety advancement to the states.

Objective Summary	Objective
<i>Communication</i>	7.1 Develop a communication and membership involvement plan that describes intent and rationale for addressing ASDSO role in levee issues.
	7.2 Increase the number of members who are levee stakeholders.
<i>Coordination</i>	7.3 Increase cooperation and maintain a leadership role on the U.S. Levee Safety Coalition to advance levee safety at state and national levels.
	7.4 Implement an advocacy program to support continued reauthorization and full funding for the National Levee Safety Program.
	7.5 Support implementation of the National Levee Safety Program.

Note: See training goal for objectives focused on levee safety engineering continuing education.