



Dams Sector Resources



DEFEND TODAY,
SECURE TOMORROW

OVERVIEW

Dams, levees, and related facilities are a vital part of the Nation's infrastructure, providing a wide range of economic, environmental, and social benefits through the delivery of critical water retention and control services in the United States. The Cybersecurity and Infrastructure Security Agency (CISA), which serves as the Sector Risk Management Agency for Dams, and sector partners collaboratively develop guidance, resources, and training that support the security and resilience of our Nation's critical dams, levees, navigation locks, and other water control facilities.

This fact sheet provides an overview of resources available to Dams Sector stakeholders. Many of these offerings are accessible via the Dams Sector Resources webpage at cisa.gov/dams-sector-resources. Items marked For Official Use Only (FOUO) are accessed via the Homeland Security Information Network–Critical Infrastructure (HSIN-CI) Dams Portal.

Click on any icon below to learn more.



Sector Overview Documents

Learn about the sector and its partnership framework



Physical Security Publications

Learn about actions to manage risk and mitigate incidents



Cybersecurity Publications

Learn about cybersecurity in sector and how to build and evaluate cyber programs



Training and Exercise Support

Learn about sector-specific training and exercise offerings



Workshops and Webinars

Learn about sector-specific educational offerings



Information-Sharing Resources

Learn about how information is shared in the Dams Sector

SECTOR OVERVIEW DOCUMENTS

Sector Profile: Highlights Dams Sector assets; the economic, environmental, and social benefits provided by the sector; and the role of government in dam safety and security. The document also provides fast facts on each sector asset type—dams, navigation locks, and levees—such as primary purpose, scope, and ownership.

Sector Landscape: Provides an overview of the five major focus areas influencing Dams Sector security and resilience risk management—natural hazards, technological hazards, cybersecurity, criminal activities and terrorism, and crosscutting issues (e.g., workforce, dependencies, interdependencies).

Sector Overview Fact Sheet: Summarizes the Dams Sector partnership framework, including the sector's vision and makeup of the various coordinating councils that guide the partnership's work.

PHYSICAL SECURITY PUBLICATIONS

Dams Sector Crisis Management Handbook: Provides information relating to emergency response and preparedness issues and includes recommendations for developing emergency action plans and site recovery plans.

Emergency Preparedness Guidelines for Levees: Provides basic recommendations regarding how to plan and prepare for high water events and identifies practical steps that could be considered before, during, and after such events. The document also introduces basic security concepts and provides guidance on how to develop an emergency preparedness plan.

Dams Sector Protective Measures Handbook (FOUO): Assists in selecting protective measures addressing physical, cyber, and human elements and includes recommendations for developing site security plans. Available via the HSIN-CI Dams Portal.

Physical Security Measures for Levees Fact Sheet: Highlights information on physical security measures that a levee owner could employ and the factors affecting the selection of those measures.

Dams Sector Security Awareness Handbook (FOUO): Assists in identifying security concerns, coordinating response, and establishing effective partnerships with local law enforcement and first responder communities. Available via the HSIN-CI Dams Portal.

Security Awareness for Levee Owners Fact Sheet: Highlights information specific to levees about surveillance indicators (particularly during periods of potential flooding or heightened national threat advisories) and how to report suspicious activities and incidents.

Dams Sector Security Guidelines: Consolidates industry security practices into a framework to help owners and operators select and implement security activities and measures that reduce risk; improve the protection of personnel, public health, and public safety; and reinforce public confidence. Available via the HSIN-CI Dams Portal.

Dams Sector Active and Passive Vehicle Barriers Guide: Assists dam owners and operators in understanding various types of active and passive vehicle barriers and how to incorporate them into their overall security plan. The guide also provides a cursory level of technical information regarding barriers and includes references to assist owners and operators in properly designing protective schemes and selecting vehicle barriers and their appurtenant safety and security systems.

Dams Sector Waterside Barriers Guide: Assists dam owners and operators in understanding the possible need for waterside barriers as part of their overall security plan. The guide provides a cursory level of information on barriers and their use, maintenance, and effectiveness—elements that must be carefully taken into account when selecting waterside barriers.

Dams Sector Consequence-Based Top Screen: Identifies the critical facilities within the Dams Sector that have the potential for the greatest impact to their surrounding area in the event of a failure or disruption and enables the sector to prioritize high-consequence facilities for further assessments, additional analysis, and detailed studies, regardless of the hazard.

Dams Sector Pandemic Influenza Planning Guide: Assists sector stakeholders in contingency planning for a catastrophic pandemic influenza. Available via the HSIN-CI Dams Portal.

Dams Sector Personnel Screening Guide for Owners and Operators: Provides information that assists in developing and implementing personnel screening protocols. An effective screening protocol for potential employees and contractor support can contribute to enhanced facility security by ensuring that untrustworthy individuals do not gain employment or access to sensitive facilities or information.

CYBERSECURITY PUBLICATIONS

Dams Sector Cybersecurity Program Guidance: Outlines various strategies and methods that owners and operators can use to develop or improve a basic cybersecurity program appropriate to their cyber assets and risk profiles, including industrial control systems (ICS). Available via the HSIN-CI Dams Portal.

Dams Sector Cybersecurity Framework Implementation Guide: Enables an organization—regardless of its size, degree of risk, or cybersecurity sophistication—to apply the principles and effective practices of cyber risk management to improve the security and resilience of its critical infrastructure. This framework recommends an approach that enables organizations to prioritize their cybersecurity decisions based on individual business needs without additional regulatory requirements.

Dams Sector Cybersecurity Capability Maturity Model (C2M2): Helps Dams Sector organizations evaluate and improve their cybersecurity programs, regardless of the type or size of the organization.

Dams Sector Cybersecurity Capability Maturity Model (C2M2) Implementation Guide: Provides options for implementing the C2M2 in a systematic manner using a workshop approach. The guide and associated templates for conducting the C2M2 using a discussion-based workshop are available via the HSIN-CI Dams Portal.

Roadmap to Secure Control Systems in the Dams Sector: Describes a plan and strategic vision for voluntarily improving the cybersecurity posture of control systems within the Dams Sector. It also highlights recommended strategies to address sector challenges, specifies mitigation requirements, and lists long-term research and development needs regarding control system security. Available via the HSIN-CI Dams Portal.

TRAINING AND EXERCISE SUPPORT

Web-Based Training: Enables sector partners to learn at their own pace by providing additional knowledge about security vulnerabilities in the Dams Sector, assessing risks to facilities, putting protective programs into practice, and improving incident response capabilities within an all-hazards strategy. Three web-based training courses are currently available:

- **Dams Sector: Crisis Management (IS-870a):** Explains the application of crisis management concepts as integral components of an overall risk management program. The course provides planning guidance for Dam Sector partners to use when developing emergency action, recovery continuity of operations, pandemic preparedness, and exercise plans.
- **Dams Sector: Security Awareness (IS-871a) (FOUO):** Enhances the ability to identify security concerns, coordinate proper response, and establish effective partnerships with local law enforcement and first responder communities. The course describes common security vulnerabilities, potential indicators of threats, surveillance detection, and reporting of incidents and suspicious activities. Available via the HSIN-CI Dams Portal.
- **Dams Sector: Protective Measures (IS-872a) (FOUO):** Addresses protective measures related to physical, cyber, and human elements, and describes the importance of these measures as components of an overall risk management program. Available via the HSIN-CI Dams Portal.

Dams Sector Information Sharing Drill: The drill—hosted by the CISA Dams Sector Risk Management Team and conducted every two years—tests the information-sharing protocols used during an incident affecting the sector. While a specific scenario is developed for each drill, focusing on a physical and/or cyber incident, the drills address multiple phases of an incident (e.g., preparedness and response) and steps in the attack planning cycle (e.g., surveillance, procuring materials, and testing security measures). Drill injects used to advance the scenario are representational of what stakeholders receive during both steady-state and incident response. In addition, a Stakeholder Call is held to test CISA's ability to convene and convey critical information to sector stakeholders.

Dams Sector Tabletop Exercise Toolbox: Provides dam owners and operators with an exercise-planning tool to maximize the limited resources available for exercise purposes. The toolbox offers four scenarios, including active shooter, international adversary, cyber incident (insider threat), and cyber incident (external adversary). Materials included in the toolbox are compliant with the Homeland Security Exercise Evaluation Program (HSEEP) and include a situation manual with scenario details and proposed discussion questions, briefing slides to guide the discussion, facilitator and evaluation handbook, exercise planner instructions, and feedback forms. Available via the HSIN-CI Dams Portal.

WORKSHOPS AND WEBINARS

Security and Protection of Dams and Levees Workshop: Provides dam owners and operators, emergency managers, and other relevant stakeholders with information on the fundamental aspects of security and protection for dams, levees, and related facilities. Participants learn about risk, physical security and cybersecurity threats and attack vectors relevant to the Dams Sector, specific actions to consider to mitigate risk, how to identify and report suspicious activities, components of a security program, and fundamentals of crisis management. The workshop combines traditional lectures with multiple group discussions and activities to reinforce the concepts learned during the course. A list of resources accompanies the course materials to enable self-guided learning after the workshop. Workshop dates and locations are announced on the HSIN-CI Dams Portal.

Security and Protection of Dams and Levees Webinar: Highlights fundamental aspects of security and protection for Dams Sector facilities, including risk assessments, physical and cyber threats, security considerations and protective measures, and crisis management. The 101-level webinar introduces students to concepts taught in other sector training, including independent study courses and the full two-day workshop offered by CISA (summarized above). Webinars are held multiple times each year, with dates announced on the HSIN-CI Dams Portal.

Dams Sector Cybersecurity Capability Maturity Model (C2M2) Implementation Webinar: Highlights the Dams-C2M2 Model, C2M2 Implementation Guide, and evaluation templates, which were developed as a suite of materials to support organizations intending to conduct a self-evaluation of their cyber maturity. During the webinar, the instructor reviews the model and tips for conducting the evaluation. Students have an opportunity to practice evaluating their cyber maturity and ask questions about the model and evaluation process. Webinars are held quarterly (with dates announced on the HSIN-CI Dams Portal) and upon request for organizations interested in using the C2M2.

INFORMATION-SHARING RESOURCES

Information Sharing in the Dams Sector Fact Sheet: Highlights the primary entities, practices, and tools of the Dams Sector Information Sharing Environment (Dams ISE), including how to join the Dams ISE, what information is shared within the ISE, and how to access additional information resources and tools.

Homeland Security Information Network—Critical Infrastructure (HSIN-CI): Serves as the primary system through which owners and operators; the U.S. Department of Homeland Security; and other government agencies collaborate to protect the Nation's critical infrastructure. Homeland security partners use HSIN-CI to manage operations, analyze data, send alerts and notices, and convene in a virtual meeting space.

HSIN-CI Dams Portal: Serves as the primary information-sharing mechanism for the Dams ISE. The portal enables stakeholders to share sensitive information in members-only areas, research critical infrastructure reference documents, access exercise and training products, and remain updated on emerging threats and incident information from approved content providers. To be granted access, sector personnel must submit an email request for HSIN-CI Dams Portal Access to the HSIN-CI mailbox at HSINCI@hq.dhs.gov or to the HSIN-CI Dams Section Program Manager at DamsPortal@hq.dhs.gov.