



National Infrastructure Protection Plan

Dams Sector

Homeland Security Presidential Directive 7 (HSPD-7) identified 17 critical infrastructure and key resources (CIKR) sectors and designated Federal Government Sector-Specific Agencies (SSAs) for each of the sectors. Each sector is responsible for developing and implementing a Sector-Specific Plan and providing sector-level performance feedback to the Department of Homeland Security (DHS) to enable gap assessments of national cross-sector CIKR protection programs. SSAs are responsible for collaborating with private sector security partners and encouraging the development of appropriate information-sharing and analysis mechanisms within the sector.

Sector Overview

The Dams Sector comprises the assets, systems, networks, and functions related to dam projects, navigation locks, levees, hurricane barriers, mine tailings impoundments, or other similar water retention and/or control facilities. The Dams Sector is a vital and beneficial part of the Nation's infrastructure and continuously provides a wide range of economic, environmental, and social benefits, including hydroelectric power, river navigation, water supply, wildlife habitat, waste management, flood control, and recreation.

The Dams Sector has dependencies and interdependencies with a wide range of other sectors, including:

- **The Agriculture and Food Sector**, as a continued source of water for irrigation and water management;
- **The Transportation Systems Sector** uses dams and locks to manage navigable waters throughout inland waterways;
- **The Water Sector**, by supplying potable water to concentrated populations and commercial facilities in the U.S.;

- **The Energy Sector**, by providing approximately 8 to 12 percent of the Nation's power needs with hydropower dams; and
- **The Emergency Services Sector**, which relies on Dams Sector assets for firefighting water supply, emergency water supply, and waterborne access in the event of a significant disaster.

Sector Partnerships

The Office of Infrastructure Protection (IP) within DHS serves as the SSA for the Dams Sector. Within IP, the Sector-Specific Agency Executive Management Office maintains responsibility for the critical infrastructure protection of the Dams Sector through ongoing coordination with the Dams Sector Coordinating Council (DSCC) and the Dams Sector Government Coordinating Council (DGCC).

The DSCC was formally launched in May 2005 and is comprised of representatives from industry, municipal

and private ownership. The DSCC serves as a hub for communication, coordination, sector-specific expertise, and advice between the government and private owner/operators during protection, response, and recovery activities. The DGCC, formally launched in January 2005, is comprised of representatives from Federal and State agencies and serves as the counterpart and partner to the DSCC to assist in the planning, implementation, and execution of sector-wide security programs for the sector's assets. These councils provide a structure through which representatives from the government and the private sector can effectively collaborate and share approaches focused on the improvement of CIKR protection.

Sector partnerships within the Dams Sector also include coordination with other important sector entities, such as the National Dam Safety Review Board and the Interagency Committee on Dam Safety.

CIKR Protection Issues

The potential risks in the event of asset failures within the Dams Sector are considerable and could result in significant destruction, including loss of life, massive property damage, and severe long-term consequences. Residual effects of dam failure can be loss of water supply, power, flood control, navigation, or recreation, all having long-lasting social, economic and public health impacts.

Due to the potential to cause massive downstream casualties and severe economic impact, dams are considered a possible terrorist target. The Dams Sector has long-standing programs to assess, mitigate, and respond to potential damage due to catastrophic dam failures caused by natural hazards, and some of this information can be put to use with respect to terrorist attacks. To best protect the Dams Sector, sector security partners must work together to develop a consistent screening strategy to support a systematic prioritization of Dams Sector assets.

Considering the large number of assets within the Dams Sector, it is appropriate to initially identify and characterize the subset of high-consequence facilities, the failure or disruption of which could cause the most severe impacts. This screening can be done at the national level, according to consequence levels adopted as representative of nationally significant incidents, as well as at the State or regional levels for prioritization efforts. There is also a need for a consistent sector-wide approach to measure and quantify the consequence elements included in these prioritization analyses.

Due to the large number and diversity of assets, security postures, and owners and operators within the Dams Sector, a "one size fits all" protective program or approach is not appropriate. Furthermore, no single portion of the protective spectrum can be identified as the focus of the sector's protective programs due to the complexity of assets. Protective measures undertaken across the sector include installation of boat and vehicle barriers; enhanced access

control measures; expanded CCTV coverage; increased use of alarm systems; enhanced SCADA security measures (both physical and cyber); integration of security into existing emergency plans; expanded personnel screening programs; increased liaison with all levels of law enforcement; and an expanded ability to deploy additional security staffing.

Outreach and Information Sharing across the Dams Sector

In collaboration with sector security partners, the Dams SSA has developed a comprehensive series of reference documents that provide sector partners with important information and enhance security awareness. The Dams Sector Security Awareness Handbook and Dams Sector Security Awareness Guide provide sector-specific technical information that assists in identifying security concerns, coordinating proper response, and establishing effective partnerships with local law enforcement and first responder communities. The Dams Sector Protective Measures Handbook assists owner/operators in selecting protective measures addressing physical, cyber, and human elements, and includes recommendations for development of site security plans. Additionally, the Dams Sector Crisis Management Handbook provides owner/operators with sector-specific technical information related to emergency response and preparedness issues, and includes recommendations for development of emergency action plans and site recovery plans.

The Dams Sector, by fostering and guiding research in the development and implementation of protective measures, will ensure the continued economic use and enjoyment of this key resource through the use of a risk-based management program of preparedness, response, mitigation, and recovery.



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For questions or more information, please contact dams@dhs.gov or visit www.dhs.gov/nipp.