



National Infrastructure Protection Plan

Dams Sector

Homeland Security Presidential Directive 7 (HSPD-7) identified 17 critical infrastructure and key resources (CI/KR) sectors and designated Federal Government Sector-Specific Agencies (SSAs) for each of the sectors. Each sector is responsible for developing and submitting Sector-Specific Plans and sector-level performance feedback to the Department of Homeland Security (DHS) to enable national cross-sector CI/KR protection program gap assessments. 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 encompasses major infrastructure assets that harness the water resources of the Nation and enable water management, balancing droughts and floods throughout the U.S. These dams, locks, pumping plants, canals, and levees provide water supply, power generation, navigable waterways, flood protection, and unique environmental stability and enhancements to habitats across the country. Ten percent of American cropland is irrigated using water stored behind dams. Hydropower facilities generate more than 60 percent of the electricity used along the Pacific coast. More than 12,000 miles of navigable waterways in the U.S. provide routes for transportation of mass quantities of commodities within the country and more than \$70 billion worth of cargo is shipped along these waterways annually. There are approximately 78,000 dams included in the National Inventory of Dams, and almost 60 percent of them are privately owned.

The Dams Sector has 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 Drinking Water and Water Treatment Systems 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** relies on Dams Sector assets for firefighting water supply, emergency water supply, and waterborne access in the event of a significant disaster.

Sector Partnerships

HSPD-7 assigned responsibility for the protection of the Dams Sector to DHS. Within DHS, the Risk Management Division (RMD) will maintain responsibility for critical infrastructure protection of the Dams Sector in cooperation with two councils—the Dams Government Coordinating Council (DGCC) and the Dams Sector Coordinating Council (DSCC).

These councils provide a structure through which representative groups from government and the private sector can collaborate and share approaches to CI/KR protection. The DGCC provides coordination and communication of security-related strategies, activities, and policy across and between the Federal and State governments, and between government and the sector. The DSCC helps build consensus on information-sharing capabilities and participates in the development and implementation of sector-wide programs and activities.

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.

CI/KR Protection Issues

Because attacks on dams have 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, owners and operators must identify sector assets and prioritize them based on consequence, vulnerability, and threat of terrorist attack. This information must be protected from public release.

Priority Programs

Some protective programs with a sector-wide impact on the Dams Sector are currently managed by DHS, with implementation assistance provided by the sector councils. Current programs include:

- **Buffer Zone Protection Plans (BZPPs):** BZPPs identify and recommend security measures and local law enforcement coordination for the area surrounding a facility, making it more difficult for a potential attacker to conduct surveillance or to plan or launch an attack on Dams Sector facilities.
- **Protective Security Advisor (PSA) Program.** To better partner with State governments, local communities, and businesses, DHS is placing PSAs in communities throughout the country to assist with local efforts to protect critical assets and provide a local perspective to the national risk picture, as well as facilitate the execution of DHS protective programs. PSAs are critical infrastructure protection and vulnerability assessment

specialists with a wealth of anti-terrorism and security experience.

- **National Asset Database (NADB):** The NADB is a continually evolving and comprehensive catalog of the assets that comprise the Nation's infrastructure. This database is the cornerstone of many planning efforts at DHS and facilitates the strategic risk assessment process used to allocate resources and focus DHS's grant programs.
- **Risk Analysis and Management for Critical Assets Protection (RAMCAP):** RAMCAP will provide a common risk-based method for comparing security risk across sectors, helping DHS and the Federal Government to allocate Federal resources based on risk. RAMCAP informs owners and operators of their risk of terrorist attacks, leaving them better able to make decisions on investments and strategies.
- **Site Assistance Visits (SAVs).** SAVs are normally one-day visits conducted jointly by DHS and the facility's owner/operator to facilitate vulnerability identification. It is a qualitative exercise that looks at the facility's operations, utility management, crisis management, physical and cyber security, operational security, infrastructure interdependencies, and systems affected. The specific elements or tasks associated with each phase of the SAV are tailored to meet the specific facility and infrastructure objectives.
- **CV/PI/PM Papers:** RMD is continuing to develop Common Characteristics and Vulnerabilities (CV) reports, Potential Indicators of Terrorist Activity (PI) reports, and Protective Measures (PM) reports for every sector and segment of our Nation's CI/KR. These reports are disseminated to State and local authorities and private sector partners to help detect, deter, and defend against potential terrorist attacks.

In addition to the protective measures described above, members of the Dams Sector's private sector are voluntarily leading the development and implementation of numerous security and protection activities.



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