Federal Initiatives for Security and Protection of Dams

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DHS Strategic Goals:

- **Awareness** - Identify and understand threats, assess vulnerabilities, determine potential impacts and disseminate timely information to homeland security partners and the American public.
- **Prevention** - Detect, deter and mitigate threats to our homeland.
- **Protection** - Safeguard our people and their freedoms, critical infrastructure, property and the economy of our Nation from acts of terrorism, natural disasters, or other emergencies.
- **Response** - Lead, manage and coordinate the national response to acts of terrorism, natural disasters, or other emergencies.
- **Recovery** - Lead national, state, local and private sector efforts to restore services and rebuild communities after acts of terrorism, natural disasters, or other emergencies.
**National Infrastructure Protection Plan**


HSPD-7 specifies the following key content elements:

- A strategy to identify, prioritize, and coordinate the protection of critical infrastructure and key resources (CI/KR);
- Descriptions of activities which support each element of the strategy;
- A summary of initiatives for sharing CI/KR information and for providing CI/KR threat warning data; and
- Coordination and integration with other Federal emergency management and preparedness activities.

**Critical Infrastructure / Key Resources**

- **Critical Infrastructure:** Thirteen sectors that provide the production of essential goods and services, interconnectedness and operability, public safety and security that contribute to a strong national defense and thriving economy

- **Key Resources:** Facilities, sites and groups of organized people whose destruction could cause large-scale injury, death, or destruction of property and/or profoundly damage our national prestige and confidence.
**National Infrastructure Protection Plan**

**Overarching Goal:** Build a safer, more secure, and more resilient America by enhancing protection of the Nation’s CI/KR to **prevent**, deter, neutralize, or **mitigate** the effects of deliberate efforts by terrorists to destroy, incapacitate, or exploit them; and to strengthen national preparedness, timely response, and rapid recovery in the event of an attack, natural disaster, or other emergency.

![Protection Diagram](Image)

**NIPP Risk Management Framework**

**Managing Risk:** The NIPP establishes the processes for combining consequence, vulnerability, and threat information to produce a comprehensive, systematic, and rational assessment of national or sector risk.

![Risk Management Framework Diagram](Image)
CI/KR Protection and Incident Management

- **National Infrastructure Protection Plan (NIPP)**
- **Sector Specific Plans (SSP)**
- **National Response Plan (NRP)**

Integrated approach addressing key elements of the Nation’s homeland security mission in an all-hazards context.

Alert and warning systems for natural hazards, technological or industrial accidents, and terrorist incidents provide the bridge between the NIPP steady-state framework and the NRP incident management activities for actions related to both pre-incident prevention and post-incident response and recovery.

Sector Specific Agency

- HSPD-7 designates Federal Government SSAs for each of the CI/KR sectors. Their primary functions include:
  - Implement the NIPP sector partnership model and risk management framework.
  - Coordinate and support comprehensive risk assessment & management programs for high-risk CI/KR, identify protection priorities, and incorporate them into the all-hazards approach to domestic incident management within the sector.
  - Provide an annual report to the Secretary of Homeland Security on efforts to identify, prioritize, and coordinate CI/KR protection.
CI/KR Sectors and Sector Specific Agencies

Agriculture and Food
(meat, poultry, egg products)

Department of Agriculture

Public Health and Healthcare, Food
(other than meat, poultry, egg products)

Department of Health and Human Services

Drinking Water, Wastewater, and Stormwater Treatment Systems

Environmental Protection Agency

Energy (production, refining, storage, and distribution of oil, gas, and electric power excepting commercial nuclear power facilities)

Department of Energy

Banking and Finance

Department of the Treasury

National Monuments and Icons

Department of the Interior

Defense Industrial Base

Department of Defense

Chemical

DHS / Office of Infrastructure Protection

Commercial Facilities

Emergency Services

Commercial Nuclear Reactors

DHS / Cyber Security and Telecommunications

DHS / Transportation Security Administration

DHS / Transportation Security Administration
DHS / US Coast Guard

DHS / Federal Protective Service

Information Technology

Telecommunications

Postal and Shipping

Transportation Systems

Government Facilities
**Sector Partnership Model**

**Partnership Model:** Provides the framework for security partners to work together in a robust public-private partnership.

**Sector Coordinating Council**

- Representative of a broad base of CI/KR owners, operators, associations, and other entities – both large and small – within a sector. Primary functions include:
  - Represent a primary point of entry for government into the sector;
  - Serves as a strategic communication mechanism between owners, operators and suppliers, and the government;
  - Identify, implement, and support the information sharing mechanisms that are most appropriate for the sector;
  - Facilitate organization and coordination of the sector’s policy development regarding CI/KR protection planning and preparedness; exercises and training; and public awareness;
  - Advise on integration of Federal, State, regional, and local planning with private-sector initiatives;
Government Coordinating Council

- Formed as the government counterpart for each SCC to enable interagency and cross-jurisdictional coordination.
- Comprised of representatives across various levels of government (Federal, State, local, or tribal). Functions include:
  - Provide interagency strategic coordination and communication at the sector level.
  - Participate in planning efforts relating to the development, implementation, update, and revision of the NIPP and SSP.
  - Coordinate strategic communications, and issue management and resolution among government entities within the sector.
  - Coordinate with and support efforts of the SCC to plan, implement, and execute the Nation’s CI/KR protection mission.

Dams Sector – Ownership Distribution

Total Number of Dams ≅ 79,000

- Private: 57.7%
- Public Utility: 2.5%
- Local Government: 20.5%
- State Government: 4.9%
- Federal Government: 4.8%
- Undetermined: 9.5%

High Hazard Dams ≅ 12,000

- Private: 38.9%
- Public Utility: 6.6%
- Local Government: 27.8%
- State Government: 7.0%
- Federal Government: 10.8%
- Undetermined: 8.8%

Homeland Security
Mission: Reduce the risk of the Nation’s CI/KR to terrorism by developing, coordinating, integrating, and implementing efforts to identify, catalog, prioritize, and protect CI/KR, and facilitate the recovery of CI/KR from all hazards.

Objectives:
- Identify and characterize CI/KR.
- Implement NIPP and assess performance.
- Develop and apply a risk-based prioritization process to build a comprehensive understanding of the nation’s CI/KR.
- Facilitate allocation of protective security expertise, equipment, facilities, and training.
- Assist with training and exercise needs.
- Establish local and regional protective security capacity.
Dams Sector - RMD Programs

- RMD has SSA responsibilities for the Dams Sector.
- Several RMD programs have an important impact on the Dams Sector:
  - National Asset Database (NADB)
  - Risk Analysis and Management for Critical Asset Protection (RAMCAP)
  - Protective Security Advisors (PSA)
  - Site Assistance Visits (SAV)
  - Buffer Zone Protection Program (BZPP)
  - International Outreach Programs

National Asset Database

- The NADB is a repository and inventory for the universe of national infrastructure and resources.
- As such it will have as a subset, critical assets and key resources.
- Risk is dynamic, requiring an all-encompassing inventory.
- The NADB provides a foundation for strategic risk analysis and resource allocation, facilitates planning, and provides support to operational missions.
- Data is collected from Federal agencies, State and Local entities, commercial and private-sector databases as well as the NIPP process.
Protective Security Advisor Program

- Protective Security Advisors (PSAs) are the DHS on-site critical infrastructure and vulnerability assessment specialists assigned to local communities throughout the United States.
- Serve as DHS liaisons between Federal agencies, state, territorial, local, and tribal governments, and the private sector.
- Serve as advisors regarding local infrastructure during activation of the National Response Plan.
Buffer Zone Protection Program

• The Buffer Zone is the area outside of a CI/KR facility that can be utilized to plan or launch an attack.
• Use site-specific Buffer Zone Plans to conduct a gap analysis of state and local first preventers’ equipment, staffing, and training needs.
• Identify and/or enhance the existing procedures to prevent a terrorist incident at CI/KR facilities.
• Determine lines of communication and coordination among facilities, local, state, tribal, and Federal responders.

Site Assistance Visit Program

• Site Assistance Visits are designed to facilitate vulnerability identification and mitigation discussions between government and industry in the field.
• Facilitate identification of system connectivity and interdependencies
• Provide private sector with lessons learned and best practices.
• Create a site-specific report from visit observations, expert inputs, and background data. Information is not made available to the public. Access is determined on a need-to-know basis.
International Collaboration

- Joint vulnerability assessments conducted on dams along the US-Mexico border, in collaboration with the International Boundary and Water Commission.