



Physical Security Measures for Levees



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OVERVIEW

In the absence of industry standards for the physical security of levees, individual levee owners and operators must set the level of physical security appropriate for their asset. The best sources for determining the appropriate level of security are the owner or operator’s knowledge of the levee’s history and a common sense assessment of what measures are appropriate, if any. Input from local law enforcement and/or other local levee owners and operators can help to understand current threats and security measures used successfully at other sites.

The Cybersecurity and Infrastructure Agency, as the Sector Risk Management Agency for the Dams Sector, collaborated with sector partners to develop materials to help owners and operators enhance their security posture. The following publications are available for download from the Homeland Security Information Network—Critical Infrastructure (HSIN-CI) Dams Portal. For access to the Dams Portal, email DamsPortal@hq.dhs.gov.

- **Surveillance and Suspicious Activity Indicators Guide for Dams and Levees:** Enhances the security posture of an owner or operator by providing descriptive information related to surveillance objectives, indicators of surveillance and suspicious activity, and the means to report suspicious activity.
- **Emergency Preparedness Guidelines for Levees:** Helps owners and operators to plan and prepare for high water events, including developing an emergency preparedness plan and understanding security concepts.
- **Dams Sector Protective Measures Handbook (FOUO):** Helps owners and operators to select protective measures and includes recommendations for developing site security plans.

This fact sheet introduces foundational concepts included in these materials related to selecting and implementing security measures for levees. For additional information, refer to the full suite of resources listed above or contact the Dams Sector Management Team at DamsSector@cisa.dhs.gov.

FACTORS TO CONSIDER WHEN SELECTING SECURITY MEASURES

When choosing security measures, levee owners and operators should consider several factors related to threats to the levee or staff, consequences of failure, and mitigation measures:

- A prior history of thefts, vandalism, or other security-related problems either directed against the levee itself or the surrounding area.
- Threats directed against the levee or staff who operate it.
- The potential consequences of levee failure or the malfunctioning of critical control devices that may be damaged through theft or other deliberate acts.
- The need to mitigate liability issues resulting from potential deliberate acts.
- Visibility and public access to the levee.
- Whether temporary protective measures—such as additional access restrictions or increased patrols—are needed at critical locations during periods of greatest vulnerability and consequences (e.g., high water conditions).

TYPES OF SECURITY MEASURES

To increase the level of physical security at a levee, owners and operators could implement the following types of security measures, which focus on restricting access, alerting about possible trespassing, mitigating theft, deterring criminal or suspicious activity, conducting assessments, and enhancing security awareness:

- Instal fencing, gates, or other barriers to restrict access to the levee or support facilities.
- Limit access to critical facilities or features to authorized persons through unique or restricted keying systems, remote “smart locks,” or access card systems.
- Instruct maintenance staff to be alert for cuts in fencing, broken locks, or other irregularities.
- Post signs in non-public areas to warn individuals that they are trespassing. Local law enforcement can advise as to the language and posting requirements.
- Mark tools and maintaining an accurate inventory of generators, power tools, and other valuable equipment, which could aid in their recovery if stolen.
- Ensure that metal products, such as copper or aluminum, are secured at night and marked to help identify them if stolen. Marking or branding wire reels with a unique color spray paint may help.
- Implement access control measures to identify and process all personnel, visitors, vehicles, vendors, and contractors. For example, all personnel display photo IDs, uniforms, marked vehicles, visitor passes, and/or contractor IDs while in critical buildings or areas.
- Instal door alarms or other systems to monitor entry into critical buildings or areas.
- Implement recorded closed-circuit television (CCTV) systems that provide surveillance of a protected facility.
- Integrate alarm, CCTV, and other security systems that report to a staffed levee facility or a contract alarm station for incident assessment and that dispatch the appropriate company or law enforcement personnel as needed.
- Place barriers to delay or stop vehicles, particularly in vital areas where only authorized vehicles should be allowed.
- Instruct levee personnel to be vigilant of suspicious aircraft or Unmanned Aircraft Systems (UAS) flyovers.
- Light critical areas to deter trespassing and to facilitate observation at night. An alternative is to install motion-detection lighting.
- Establish a contract with a reputable security vendor who can provide either random patrols or more stringent onsite security when circumstances require such actions.
- Create a security awareness program to advise neighbors and employees of the types of problems happening and how to report suspicious activities. Local law enforcement should be able to assist.
- Ask local law enforcement to assess the security of the levee and its facilities, particularly in response to local crime patterns.



Levees along a riverbank (Source: DHS)