

# CYBERSECURITY MEASURES FOR A SECURE FUTURE IN WATER AND WATERWAYS

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# CISA Mission and Vision

## MISSION:

We lead the National effort to understand, manage, and reduce risk to our cyber and physical infrastructure.

## VISION:

Secure and resilient infrastructure for the American people.



# Critical Infrastructure Sectors

There are 16 U.S. Critical Infrastructure Sectors. The U.S. Department of Agriculture (USDA) and the Food and Drug Administration (FDA) are the Sector Risk Management Agencies (SRMAs) for the Food & Agriculture Sector. CISA is the SRMA for eight sectors.



## Critical Infrastructure Sectors | CISA

[cisa.gov/critical-infrastructure-sectors](https://cisa.gov/critical-infrastructure-sectors)



# Dams Sector Overview

- Dams Sector comprises dam projects, hydropower plants, navigation locks, levees, dikes, hurricane barriers, mine tailings, and industrial waste impoundments
- Mission functions include:
  - Water supply
  - Hydropower
  - Flood control
  - Irrigation
  - Navigation
  - Recreation



# Council Structure

Sector Coordinating Council (SCC)	Government Coordinating Council (GCC)	Levee Sub-Sector Councils
<p><b>27 member organizations</b></p> <ul style="list-style-type: none"><li>• Chair: Duke Energy</li><li>• Vice Chair: Xcel Energy</li><li>• Secretary: Southern California Edison</li></ul>	<p><b>13 voting member organizations</b></p> <ul style="list-style-type: none"><li>• 7 federal agencies</li><li>• 6 state entities</li><li>• 7 ad-hoc (non-voting organizations)</li></ul>	<p>Levee GCC:</p> <ul style="list-style-type: none"><li>• Chair: US Army Corps of Engineers and CISA</li></ul> <p>Levee SCC:</p> <ul style="list-style-type: none"><li>• Chair: TBD</li></ul>



# Common Goals for Cyber Criminals

- Embarrass, harass, or financial gain.
- Geopolitics: destabilize or influence institutions and governments. Disrupt an organization's processes.
- Steal customers' personal data or credit card information from the billing system.
- Install malicious programs like ransomware, which can disable business enterprise or process control operations.



# Ransomware

- In 2021, the value of U.S. ransomware attacks was \$886 million, up from \$527M in 2020 and \$102M in 2018 (source: [GAO analysis](#) of U.S. Department of Treasury data).
- GAO also shared FBI data that 870 critical infrastructure organizations were victims of ransomware in 2022.
  - [www.cisa.gov/stopransomware](http://www.cisa.gov/stopransomware)



# 4 Key Mitigation Strategies

- Beware of Phishing Tactics (but do go fishing)
- Use Strong Passwords
- Activate Multifactor Authentication
- Update Software



- [Cisa.gov/resources-tool/services](https://cisa.gov/resources-tool/services)





# FREE Cyber Vulnerability Scanning

**Purpose:** Assess Internet-accessible systems for known vulnerabilities and configuration errors.

**Delivery:** Identify public-facing Internet security risks, through service enumeration and vulnerability scanning online by CISA.

## Benefits:

- Continual review of system to identify potential problems
- Weekly reports detailing current and previously mitigated vulnerabilities
- Recommended mitigation for identified vulnerabilities

## Network Vulnerability & Configuration Scanning:

- Identify network vulnerabilities and weakness

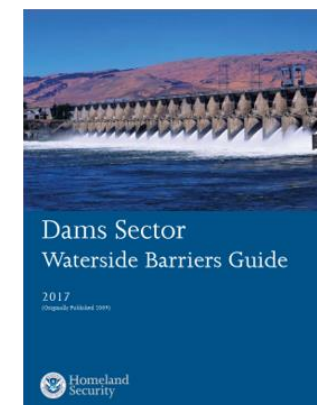
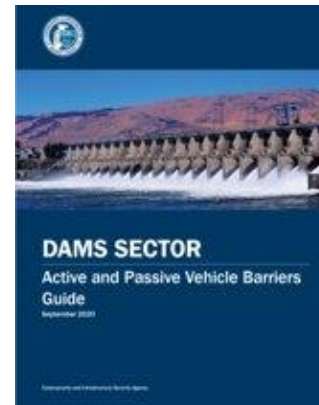
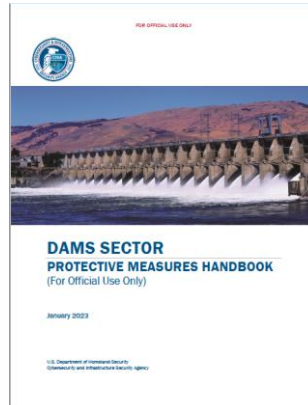
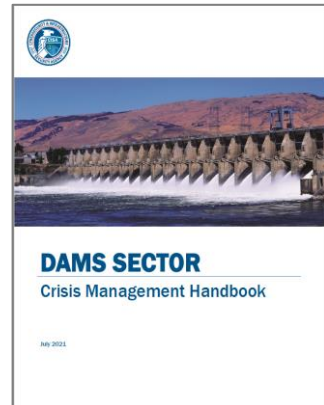
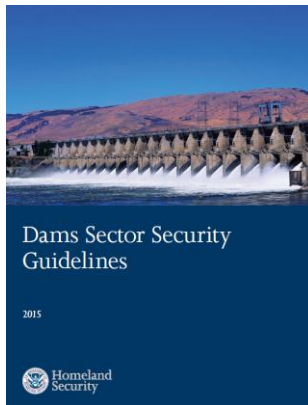


- [cisa.gov/resources-tools/services/cisa-vulnerability-scanning](https://cisa.gov/resources-tools/services/cisa-vulnerability-scanning)



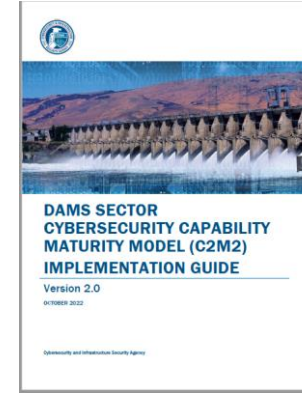
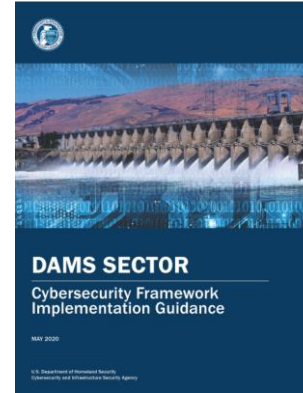
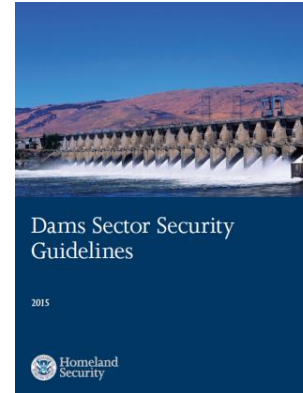
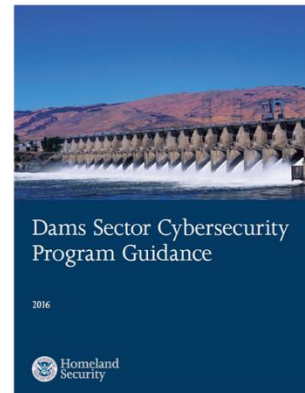
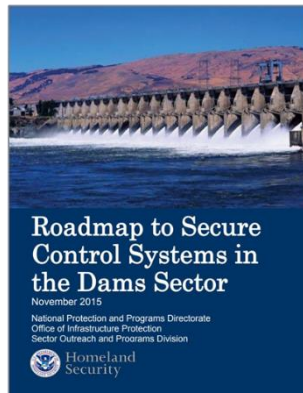
# Dams Sector Resources

- Dams Sector Security Guidelines
- Dams Sector Crisis Management Handbook
- Dams Sector Protective Measures Handbook (FOUO)
- Dams Sector Active and Passive Vehicle Barriers Guide
- Dams Sector Waterside Barriers Guide

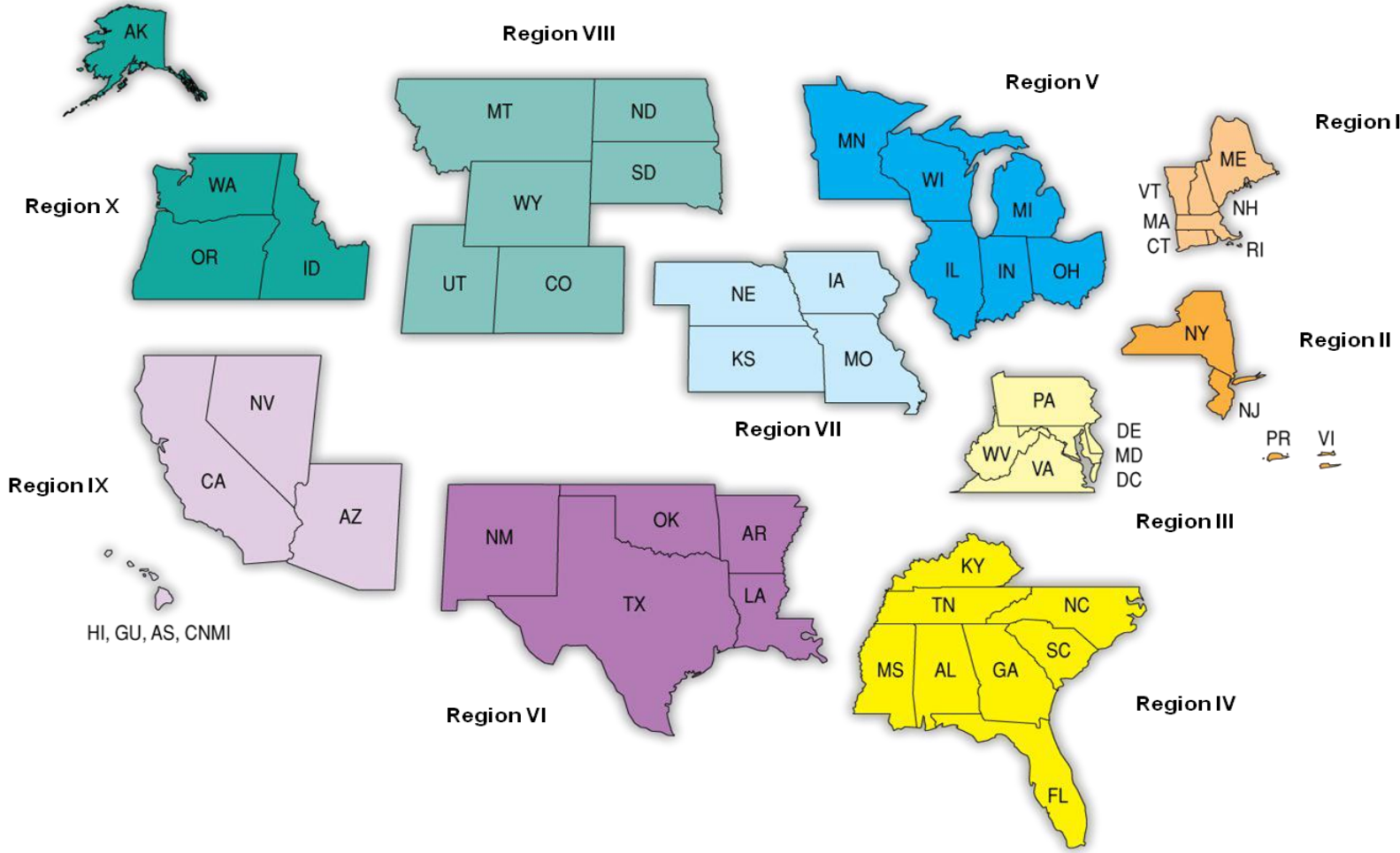


# Dams Sector Cybersecurity Resources

- Roadmap to Secure Control Systems in the Dams Sector
- Dams Sector Cybersecurity Program Guidance
- Dams Sector Security Guidelines
- Dams Sector Cybersecurity Framework Implementation Guide
- Dams Sector Cybersecurity Capability Maturity Model (C2M2) and Implementation Guide



# CISA Regional Staff



- Regional Personnel:**
- Cybersecurity Advisors (CSAs)
  - Cybersecurity Coordinators
  - Protective Security Advisors (PSAs)
  - Emergency Communications Coordinators
  - Chemical Security Inspectors



# Thank You!



## Contact Information

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