



Guidelines for State Dam Safety Office Implementation of a Dam Security Program

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NJDEP - Bureau of Dam Safety & Flood Control

Background

- Developed by ASDSO and DHS
- Approved by ASDSO – June 2013 Board Meeting
- Distributed to State Dam Safety Offices in July 2013

Section 1:
Develop Awareness of Dam Security
Issues and Responsibilities

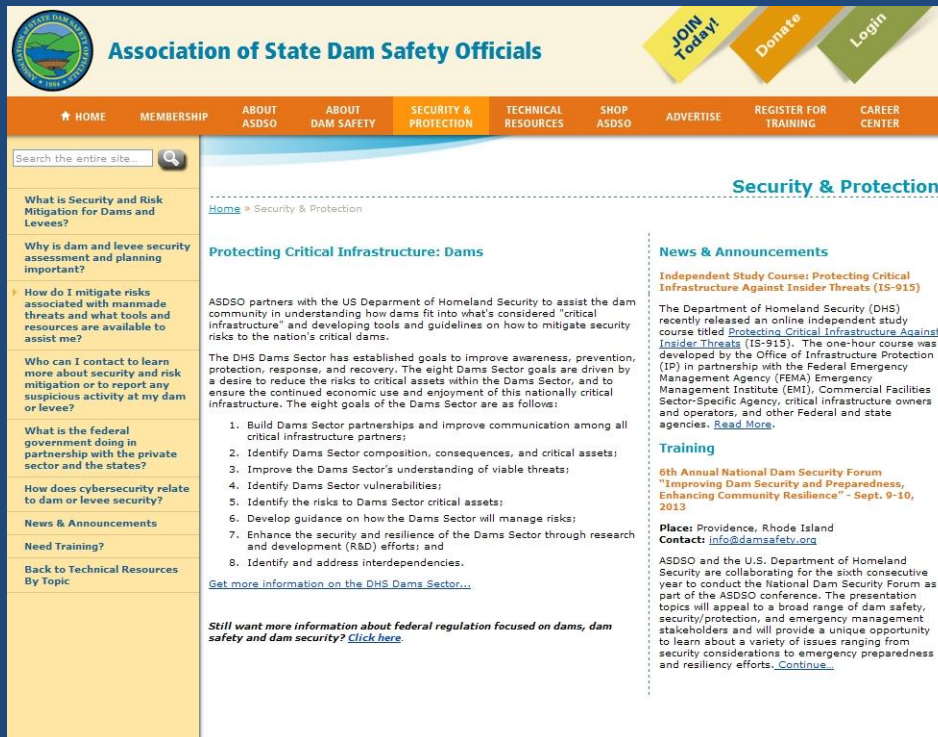
1.1 Stay Informed and Develop a Basic Understanding of Security Issues

- **Conduct Periodic Security Briefings and Provide Security Training to Dam Safety Personnel**
 - Training Opportunities
 - DHS
 - FEMA
 - ASDSO



1.1 Stay Informed and Develop a Basic Understanding of Security Issues

- Access the ASDSO's Security, Protection and Risk Mitigation for Critical Infrastructure Dams Website



The screenshot shows the ASDSO website's "Security & Protection" section. The header includes the ASDSO logo and navigation links: HOME, MEMBERSHIP, ABOUT ASDSO, ABOUT DAM SAFETY, SECURITY & PROTECTION (active), TECHNICAL RESOURCES, SHOP ASDSO, ADVERTISE, REGISTER FOR TRAINING, and CAREER CENTER. A search bar is located below the navigation. The main content area is titled "Protecting Critical Infrastructure: Dams" and includes a "News & Announcements" section. The "News & Announcements" section features a link to "Independent Study Course: Protecting Critical Infrastructure Against Insider Threats (IS-915)" and a "Training" section for the "6th Annual National Dam Security Forum".

Association of State Dam Safety Officials

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Security & Protection

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Protecting Critical Infrastructure: Dams

ASDSO partners with the US Department of Homeland Security to assist the dam community in understanding how dams fit into what's considered "critical infrastructure" and developing tools and guidelines on how to mitigate security risks to the nation's critical dams.

The DHS Dams Sector has established goals to improve awareness, prevention, protection, response, and recovery. The eight Dams Sector goals are driven by a desire to reduce the risks to critical assets within the Dams Sector, and to ensure the continued economic use and enjoyment of this nationally critical infrastructure. The eight goals of the Dams Sector are as follows:

1. Build Dams Sector partnerships and improve communication among all critical infrastructure partners;
2. Identify Dams Sector composition, consequences, and critical assets;
3. Improve the Dams Sector's understanding of viable threats;
4. Identify Dams Sector vulnerabilities;
5. Identify the risks to Dams Sector critical assets;
6. Develop guidance on how the Dams Sector will manage risks;
7. Enhance the security and resilience of the Dams Sector through research and development (R&D) efforts; and
8. Identify and address interdependencies.

[Get more information on the DHS Dams Sector...](#)

Still want more information about federal regulation focused on dams, dam safety and dam security? [Click here.](#)

News & Announcements

Independent Study Course: Protecting Critical Infrastructure Against Insider Threats (IS-915)

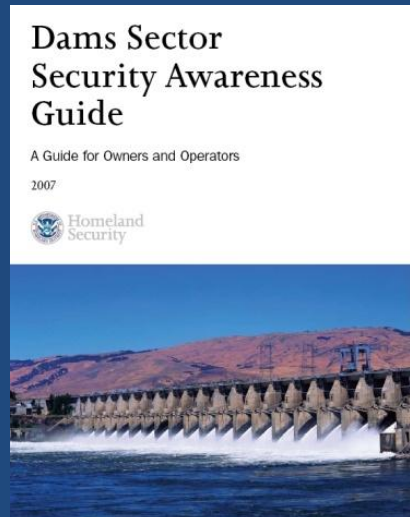
The Department of Homeland Security (DHS) recently released an online independent study course titled *Protecting Critical Infrastructure Against Insider Threats (IS-915)*. The one-hour course was developed by the Office of Infrastructure Protection (IP) in partnership with the Federal Emergency Management Agency (FEMA) Emergency Management Institute (EMI), Commercial Facilities Sector-Specific Agency, critical infrastructure owners and operators, and other Federal and state agencies. [Read More.](#)

Training

6th Annual National Dam Security Forum
"Improving Dam Security and Preparedness, Enhancing Community Resilience" - Sept. 9-10, 2013

Place: Providence, Rhode Island
Contact: info@damsafety.org

ASDSO and the U.S. Department of Homeland Security are collaborating for the sixth consecutive year to conduct the National Dam Security Forum as part of the ASDSO conference. The presentation topics will appeal to a broad range of dam safety, security/protection, and emergency management stakeholders and will provide a unique opportunity to learn about a variety of issues ranging from security considerations to emergency preparedness and resiliency efforts. [Continue...](#)



1.1 Stay Informed and Develop a Basic Understanding of Security Issues

- **Access and Monitor the Homeland Security Information Network - Critical Sector (HSIN-CS) Dams Portal**
 - Web-based portal for information sharing and collaboration between Federal, State, local, tribal, territorial, private sector, and international partners engaged in the homeland security mission

1.1 Stay Informed and Develop a Basic Understanding of Security Issues

- **HSIN-CS Dams Portal**



To Participate Contact: DAMS@HQ.DHS.GOV

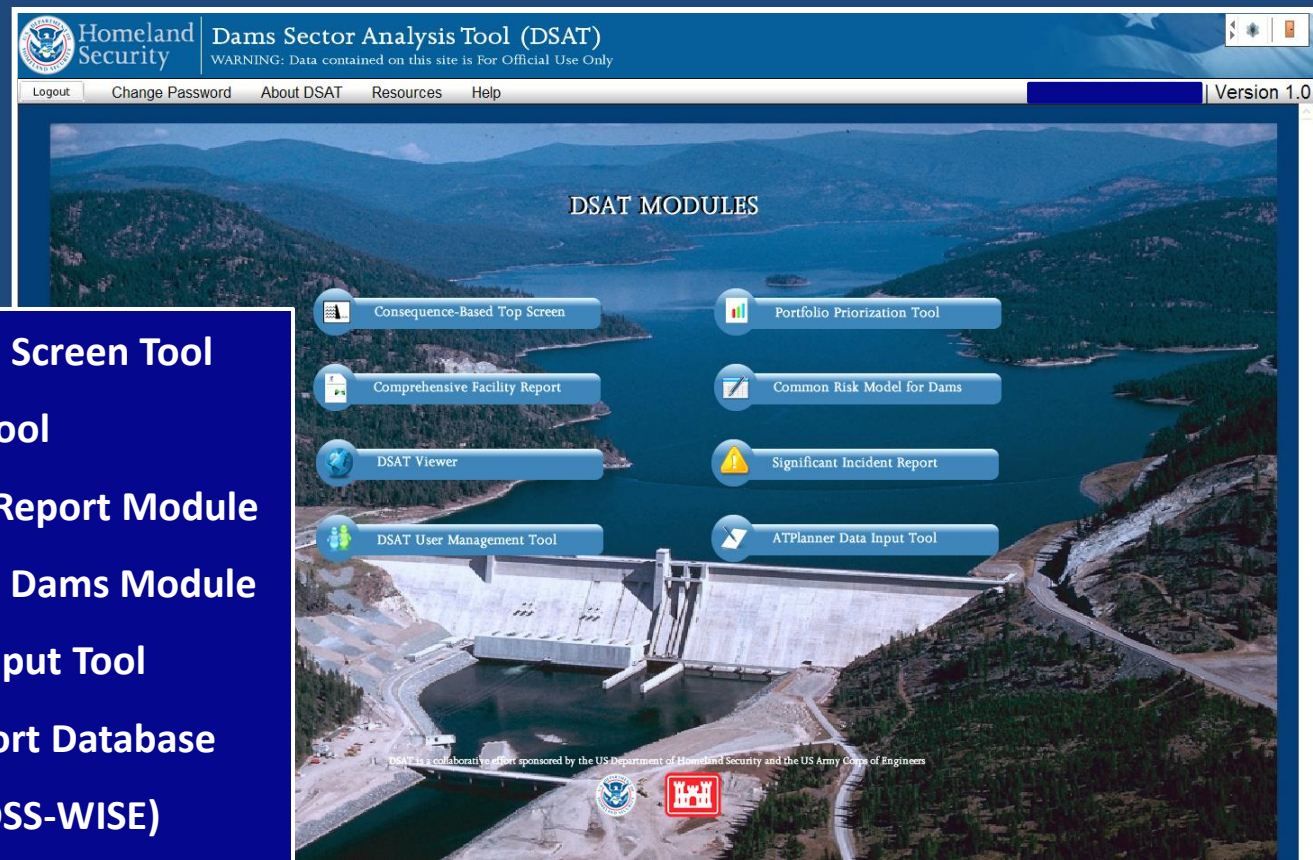
1.1 Stay Informed and Develop a Basic Understanding of Security Issues

- **Access the Dams Sector Analysis Tool (DSAT)**
 - Dams Sector Analysis Tool (DSAT) is a web-based platform developed by DHS and the USACE
 - Series of modules and supporting components that integrate a variety of analytical capabilities and data collection tools.
 - For access to DSAT Contact: DAMS@HQ.DHS.GOV

1.1 Stay Informed and Develop a Basic Understanding of Security Issues

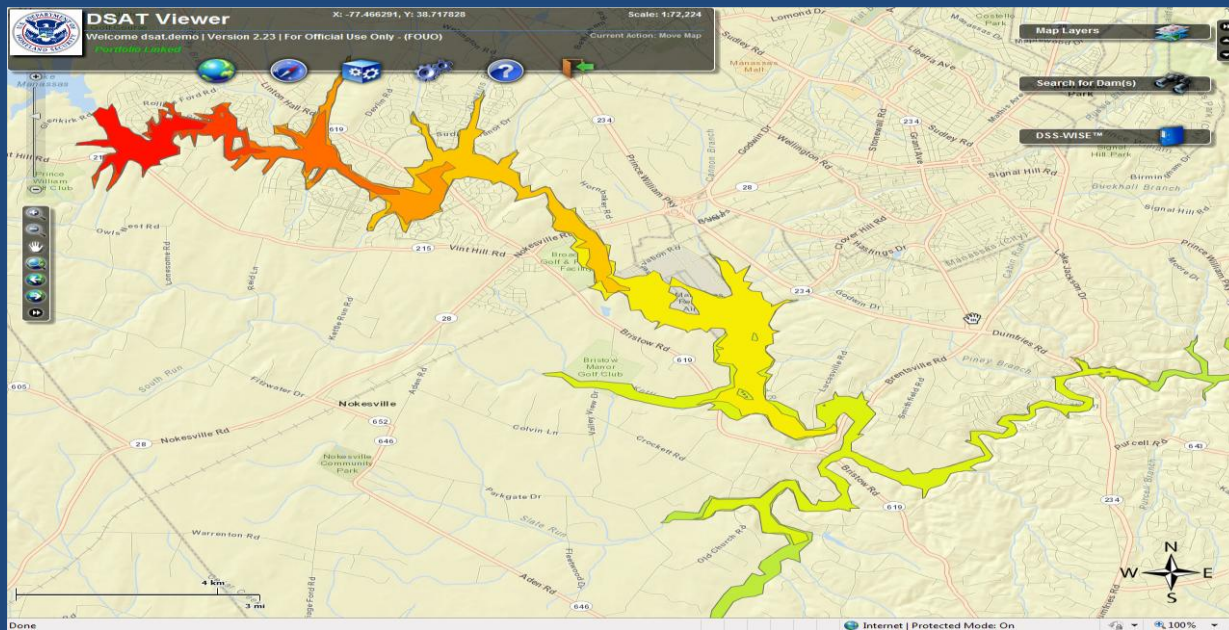
- **Dams Sector Analysis Tool**

- **Consequence-Based Top Screen Tool**
- **Portfolio Prioritization Tool**
- **Comprehensive Facility Report Module**
- **Common Risk Model for Dams Module**
- **ATPlanner-Dams Data Input Tool**
- **Significant Incident Report Database**
- **DSAT Viewer (includes DSS-WISE)**
- **DSAT User Management Tool**



1.1 Stay Informed and Develop a Basic Understanding of Security Issues

- **Dams Sector Analysis Tool (Cont.)**
 - **DSS-WISE**
 - Integrated software package for two-dimensional dam and levee break flood simulation, inundation mapping and consequence analysis

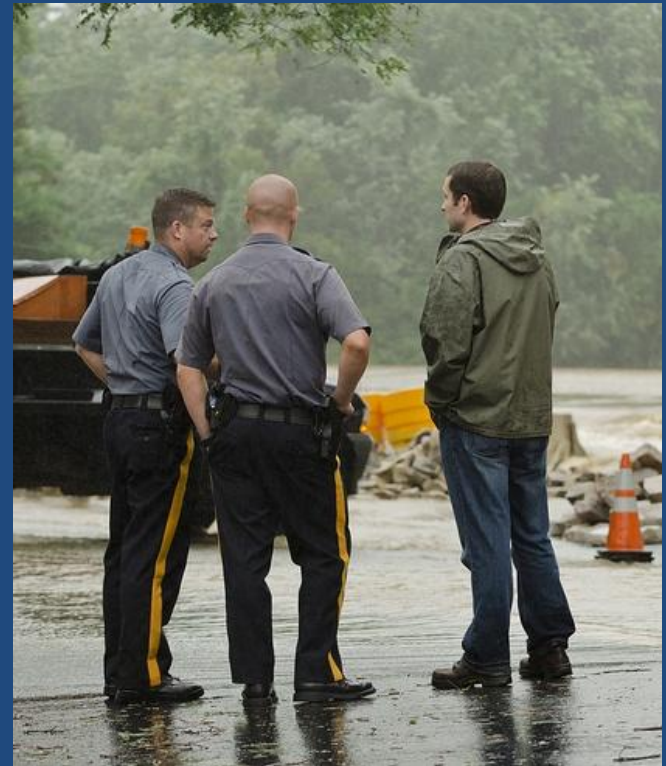


1.1 Stay Informed and Develop a Basic Understanding of Security Issues

- **Develop a Consolidated Reference Library of Dam Security Documents**
 - Inventory of Dams Requiring Elevated Security Scrutiny
 - Inundation Mapping
 - Consequence-Based Top Screen (CTS) Data Summaries
 - Security Related Correspondence / Inspection Reports
 - Suspicious Activity Reports
 - Security references, guides, handbooks

1.2 Encourage Information Sharing and Outreach

- **Enhance Dam Owner/Operator and First Responder Awareness of Dam Security Issues**
 - Security Training/Exercises for Owners/Operators
 - Maintain Relationship With Law Enforcement and State Homeland Security Office



1.2 Encourage Information Sharing and Outreach

- **Encourage Reporting of Suspicious Activities**

- Share Suspicious Activity

Posters with Owner/Operators

- Utilize the SAR Tool in HSIN-CS Dams Portal

- Coordinate with Fusion Center to determine contact information

DAMS SECTOR ADVISORY

Suspicious Activity?

*You are the first line of defense.
Remain vigilant and report any suspicious activity.*

BE AWARE...	TAKE ACTION...
<ul style="list-style-type: none">○ Persons behaving in a nervous or evasive manner○ Surveillance via photography, videotaping, sketching or binoculars○ Elicitation of information regarding technical data, security systems, or personnel resources○ Attempts to access restricted areas, or probing of security systems and procedures○ Missing work clothes or identification cards○ Unusual aircraft flyovers or boating activities○ Unauthorized vehicles in suspicious locations or at unusual times	<ul style="list-style-type: none">✓ Maintain awareness of your environment✓ Identify behaviors that are out of the ordinary✓ Report the activity with as much detail as possible



CONCERNED? Contact your immediate supervisor, local law enforcement, or State & Local Fusion Center

CONTACT: 

 **Homeland Security**

Section 2:

Collaborate with State, Federal and National Organizations with Dam Security Responsibilities

2.1 Encourage State and Local Coordination and Collaboration

- Coordinate and Collaborate with State and Local Agencies
 - Keep state and local OEM agencies and state offices of homeland security apprised of dam security related activities, formulate inter-agency strategies, and coordinate follow-up activities.



2.1 Encourage State and Local Coordination and Collaboration

- **Coordinate and Collaborate with Dam Owners**
 - Discuss Current Issues, Challenges, and Needs.

2.1 Encourage State and Local Coordination and Collaboration

- Coordinate and Collaborate with State Agency Dam Owners
 - Develop a State-owned dam security plan



2.2 Encourage Federal and National Coordination and Collaboration

- **Participate in National Dam Security Meetings and Committees**
 - Government Coordinating Counsel (GCC)
 - GCC Workgroups
 - Education
 - Research
 - Information Sharing
 - ASDSO Committee on Security and Risk Mitigation for Critical Infrastructure Dams

2.2 Encourage Federal and National Coordination and Collaboration

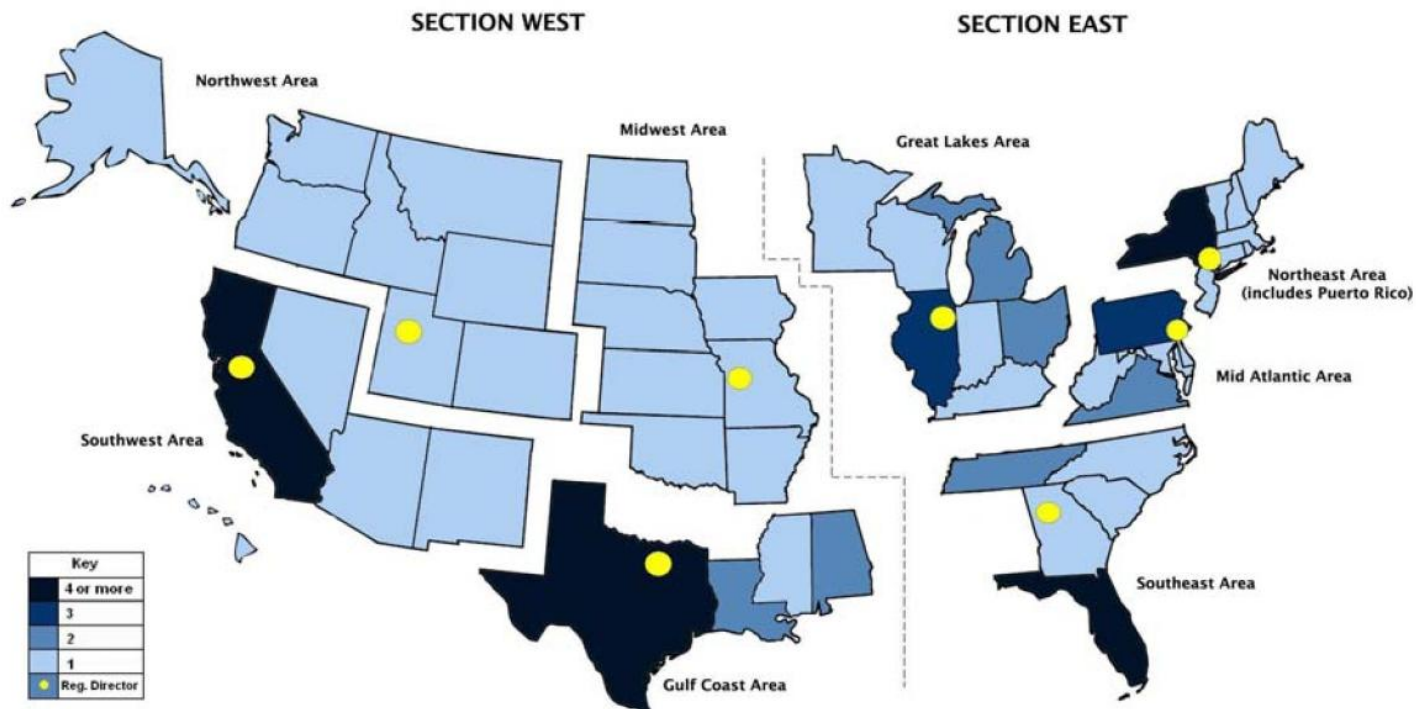
- **Support Federal Requests for Information Regarding Dam Security**
 - Participate in Consequence Based Top Screen (CTS) Program
 - Compile and Submit Data Pertaining to Critical Facilities



2.2 Encourage Federal and National Coordination and Collaboration

- Meet and Collaborate with DHS Protective Security Advisors

Figure 2: Map of PSA and IP Regional Director Distribution



Source: OIG analysis of information provided by IP, September 2010.

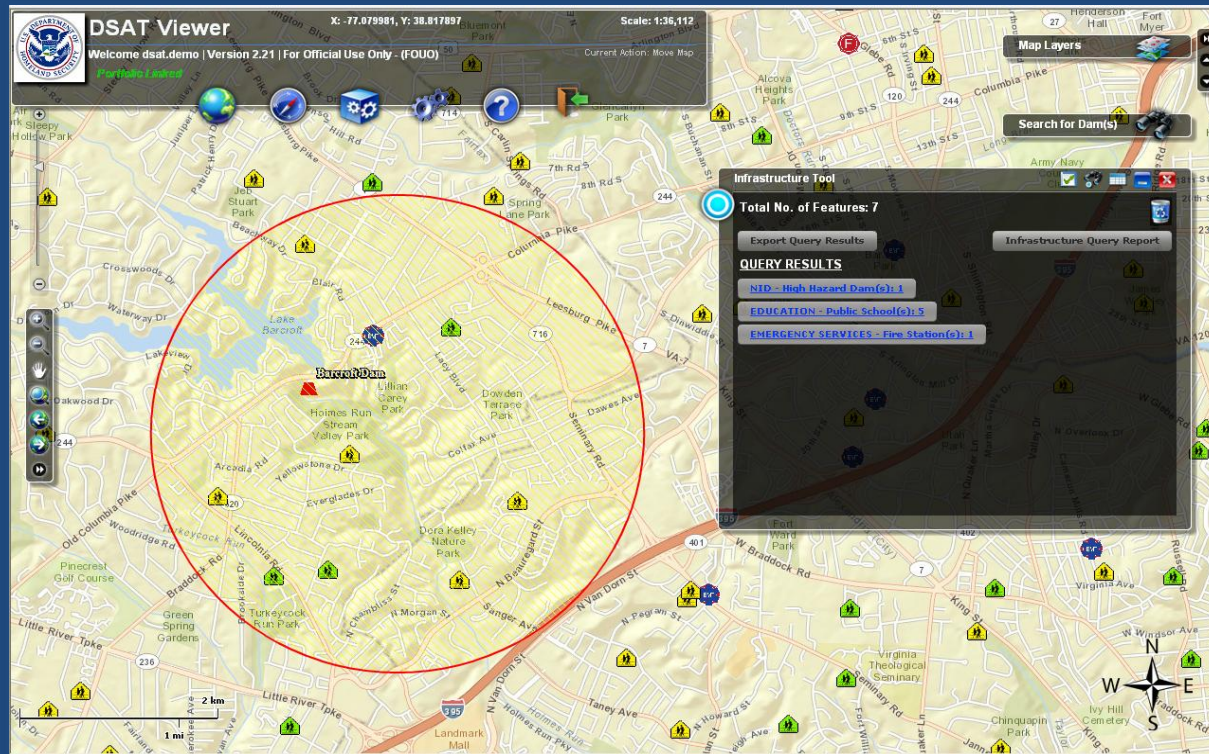
Section 3:
Identify, Prioritize, and Evaluate
Security Risks on State-Regulated
Dams

3.1 Identify High-Priority State-Regulated Dams

- **Conduct Consequence-Based Prioritization of State-Regulated Dams**
 - Evaluation of...
 - Downstream Impacts Based on Inundation Mapping
 - » PAR, Critical Facilities, Transportation
 - Function/Purpose of Facility
 - Utilize Consequence Based Top Screen (CTS) Screening and Prioritization Method Available Through DSAT.

3.1 Identify High-Priority State-Regulated Dams

- **Consequence-Based Prioritization (Cont.)**
 - **Dam Sector Analysis Tool (DSAT) Viewer** provides...
 - **Population Tool** – Daytime/Nighttime Population Data
 - **Infrastructure Tool** – Schools, Hospitals, Emergency Services



3.2 Conduct Risk Assessments for High-Priority State-Regulated Dams

- **Complete Security Inspection**
 - Evaluate the Current State of On-Site Security Measures / Procedures.
 - Security Inspection Checklist
 - Tool to Help Evaluate Overall Security
 - Located in Appendix B of Guidelines

SENSITIVE

SAMPLE SECURITY INSPECTION CHECKLIST

Project Classification: _____ Project Name: _____ Dam: _____
Owner: _____ Security Group: _____ Date: _____
Inspector: _____ Accompanied by: _____

Field Observations: (Provide additional details on back of sheet, if necessary)

A. Studies and Assessments:

1. Is there a Risk Assessment? Date: _____
2. Is there a Vulnerability Assessment? Date: _____
3. Is there a Security Assessment? Date: _____
4. Have critical assets and vulnerabilities been identified?
5. Have potential threats been identified in the assessments?
6. Have the impacts and consequences been assessed if critical assets are compromised?

B. Critical Assets:

7. Are spillway/gate controls secured against unauthorized access?
8. Are tower house doors/windows locked?
 - a.) Are sensors/alarms and cameras present?
 - b.) Can sensors/alarms be easily bypassed?
9. Are Critical Dam Features vulnerable?
 - a.) Are there Surveillance sensors, cameras and/or patrols present?
 - b.) Is Access to vulnerable features restricted?
10. Is there HAZMAT/Haz storage on site?
 - a.) Is access controlled and secured?
 - b.) Is the material easily portable?
11. Are water distribution outlets vulnerable?
12. Does the structural safety record of the dam make it vulnerable to an attack?

C. Access Control

13. Is the dam site fenced with gates/access points locked?

	YES	NO	N/A
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			

SENSITIVE

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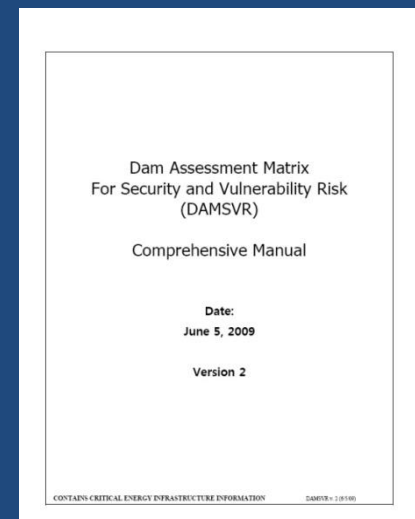
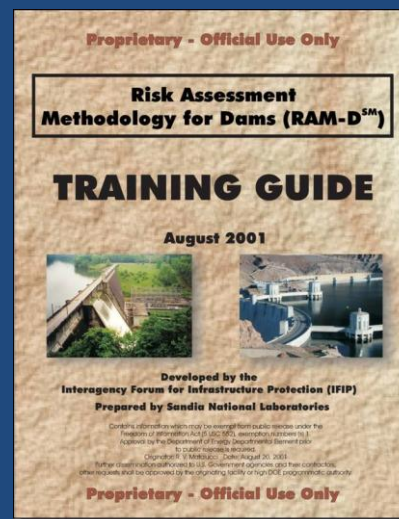
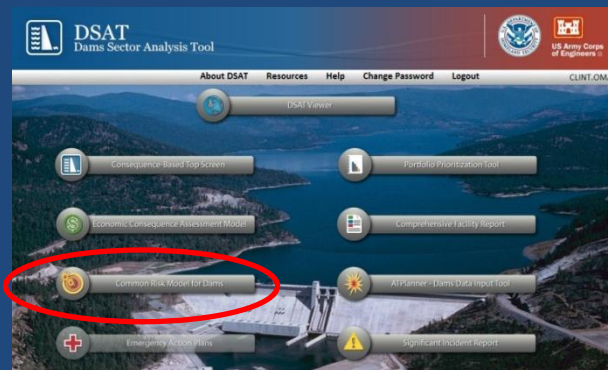
3.2 Conduct Risk Assessments for High-Priority State-Regulated Dams

- **Complete Security Inspection**
 - Security System must address
 - Deterrence
 - Detection
 - Delay
 - Assessment
 - Response



3.2 Conduct Risk Assessments for High-Priority State-Regulated Dams

- **Complete Vulnerability & Risk Assessments**
 - Common Risk Model for Dams (CRM-D)
 - Risk Assessment Methodology for Dams (RAM-D)
 - Dam Assessment Matrix for Security and Vulnerability Risk (DAMSVR)



3.3 Support and Coordinate Development of Security Plans

- **Develop a State Dam Security Implementation Plan**
 - Coordinate With State Homeland Security / State Police



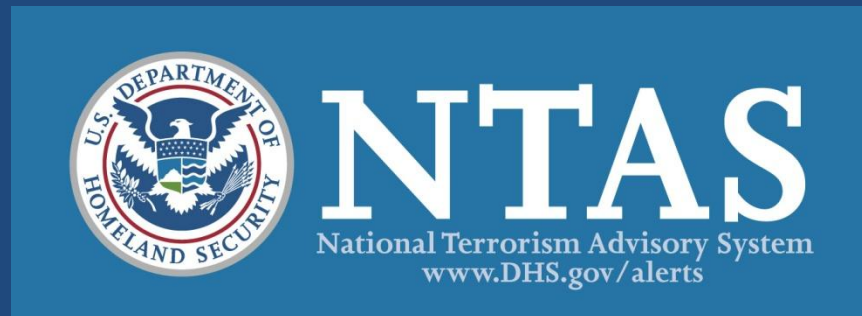
3.3 Support and Coordinate Development of Security Plans

- **Oversee the Development of Plans for Individual Dams**
 - Emergency Action Plans
 - Security Plans
 - Recovery Plans
 - Continuity Plans

3.3 Support and Coordinate Development of Security Plans

- **Oversee the Development of Plans for Individual Dams**
 - Security Plans must include procedures reflecting increased security measures during periods of heightened terrorist threat as determined by the DHS National Terrorism Advisory System

- Elevated
- Immanent



3.4 Monitor Status and Progress

- **Oversee Implementation of Protective Measures on Dams**
 - Site Visits to Confirm Security Enhancements



3.4 Monitor Status and Progress

- **Monitor Effectiveness of Protective Measures on Dams**
 - Monitor Condition of Existing Measures
 - Recommend Modifications



3.4 Monitor Status and Progress

- **Track General Status/Progress of Dam Security for State-Regulated Dams**
 - Conduct Periodic Security Inspections to Evaluate Completed Security Enhancements and Procedural Changes.

Section 4:
Conduct Security Exercises and
Participate in Related Activities

4.1 Conduct Security Exercises for High-Priority State-Regulated Dams

- Encourage a Periodic Security Exercise Program for High-Priority State-Regulated Dams
 - Exercises (Discussion or Functional-Oriented)



4.1 Conduct Security Exercises for High-Priority State-Regulated Dams

- **Take Advantage of Existing Exercise-Planning Tools**
 - DHS Dams Sector Tabletop Exercise Toolbox (DSTET)
 - Homeland Security Exercise and Evaluation Program (HSEEP)

4.2 Participate in Related Exercise Activities Relevant to Dam Security

- **Participate in Federal, Cross-Sector, or Regional Exercises and Assessments**
 - DHS Information Sharing Drill
 - Conducted in 2012 and 2013
 - Next Drill Scheduled for February 2014
 - Statewide Emergency Action Plan Exercise
 - Scheduled for December 2013

What's Next?

- Continue to Monitor ASDSO Website for updates.

Guidelines for State Dam Safety Office Implementation of a Dam Security Program

Questions?