USACE Homeland Security Portal

Michael Pace

ERDC, ITL

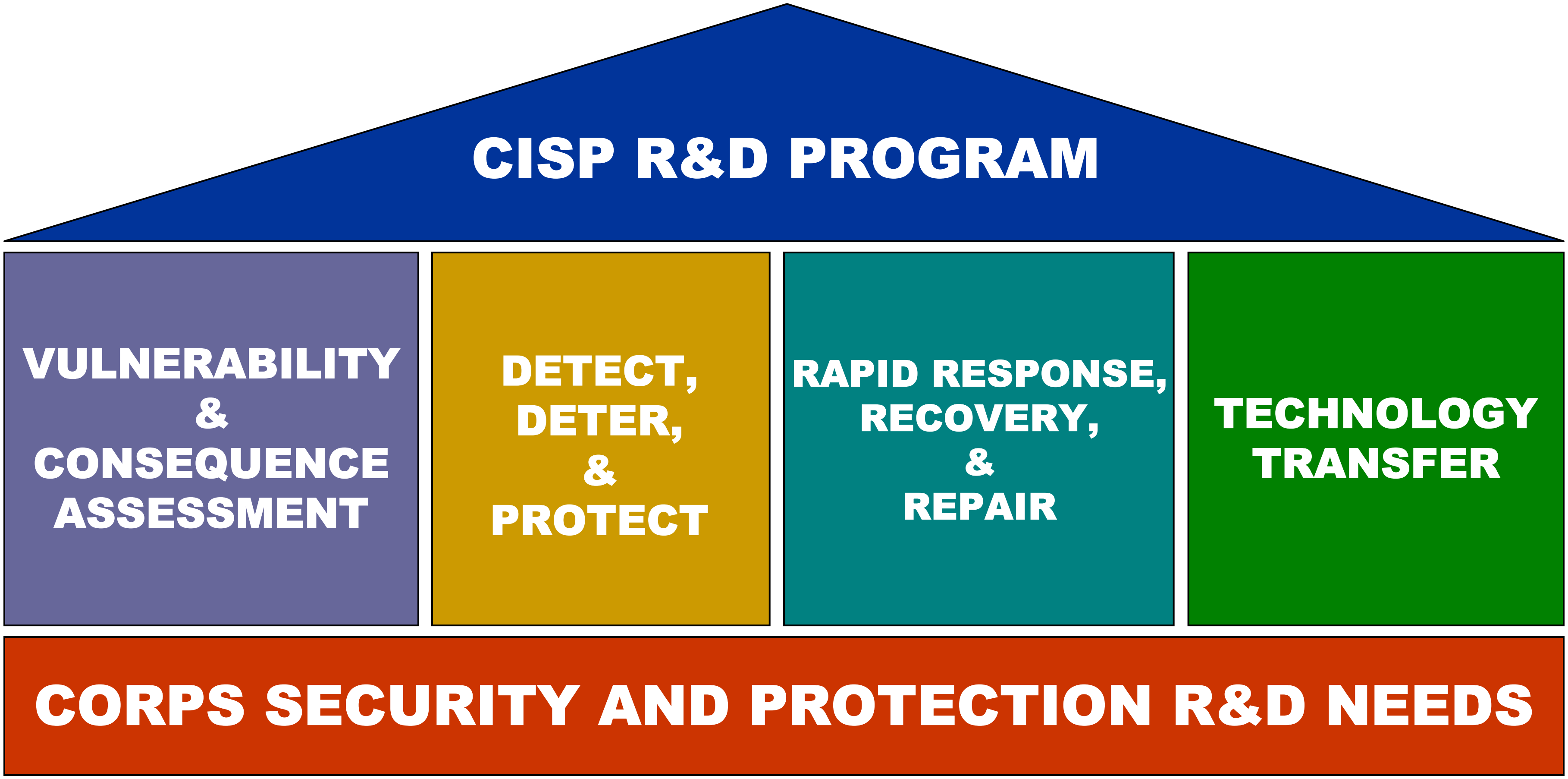
Vicksburg, MS

2005 Tri-Service Infrastructure Conference

St. Louis, MO

August 2005

CISP R&D Program Formulation


CISP R&D PROGRAM

VULNERABILITY & CONSEQUENCE ASSESSMENT

DETECT, DETER, & PROTECT

RAPID RESPONSE, RECOVERY, & REPAIR

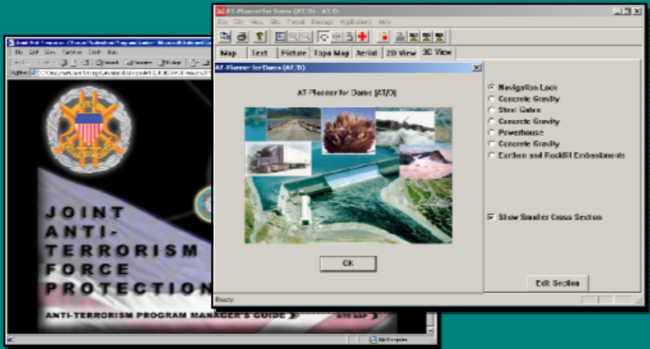
TECHNOLOGY TRANSFER

CORPS SECURITY AND PROTECTION R&D NEEDS

CISP Research Areas

Threat Definition

Integrated Decision Aid

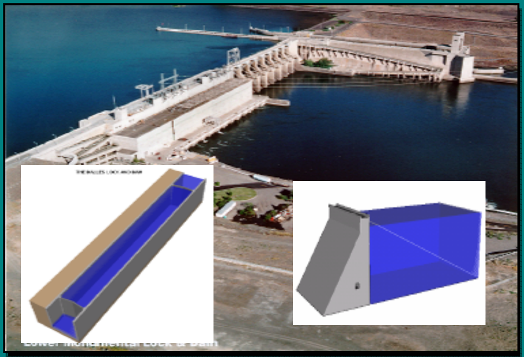

AT-Planner for Dams (AT/D) - AT/D
File Edit View Site Threat Damage Applications Help
Map Text Picture Topo Map Aerial 2D View 3D View
AT-Planner for Dams (AT/D)
OK
Edit Section
Ready
JOINT ANTI-TERRORISM FORCE PROTECTION
ANTI-TERRORISM PROGRAM MANAGER'S GUIDE
SITE MAP

AT-Planner for Dams (AT/D)

● Navigation Lock
○ Concrete Gravity
○ Steel Gates
○ Concrete Gravity
○ Powerhouse
○ Concrete Gravity
○ Earthen and Rockfill Embankments

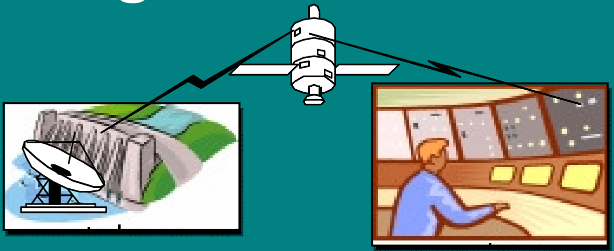
☑ Show Smaller Cross Section

Facility Descriptions

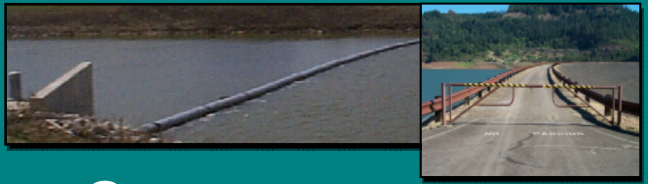


Blast Effects Damage Prediction

Regional Monitoring



Detect - Deter Protect



Recovery Measures

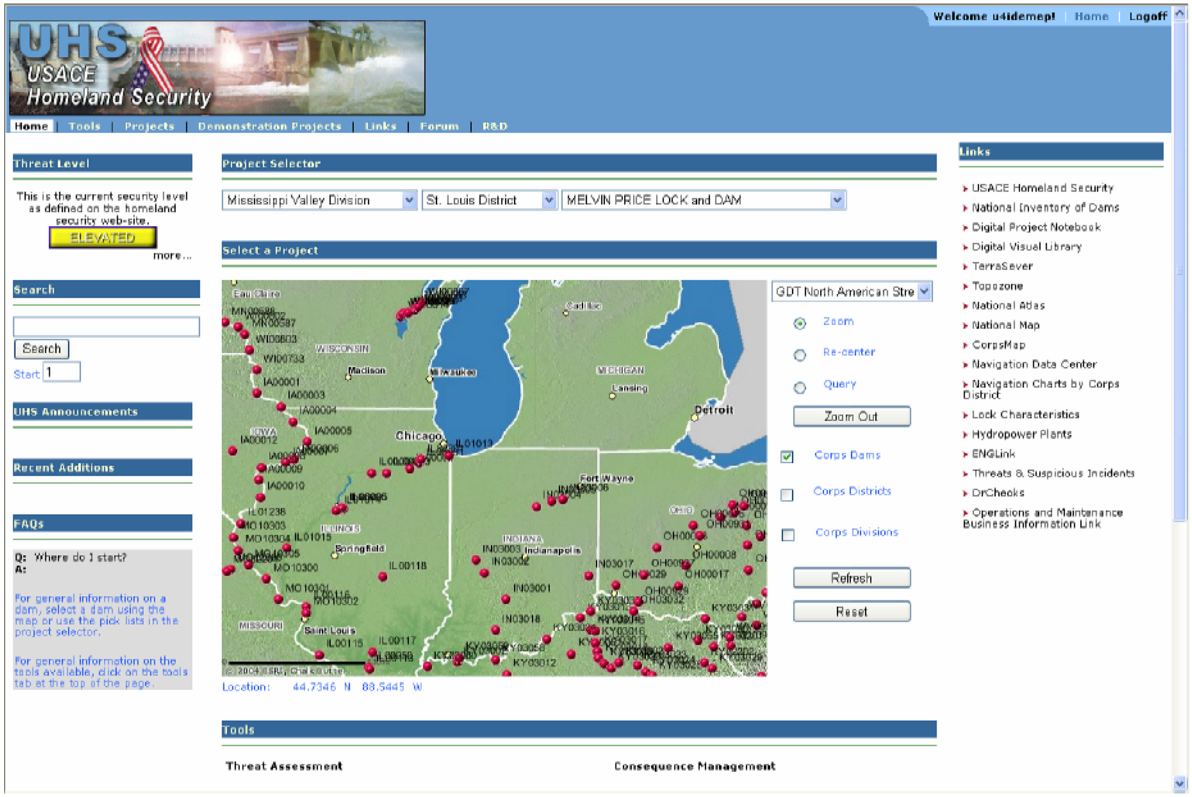
Consequence Assessment

Web Portal?

- Definition from Webopedia:
  - “*Commonly referred to as simply a portal, a Web site or service that offers a broad array of resources and services, such as e-mail, forums, search engines, and on-line shopping malls. The first Web portals were online services, such as AOL, that provided access to the Web, but by now most of the traditional search engines have transformed themselves into Web portals to attract and keep a larger audience*.”

Objective

- Develop framework for efficiently managing data, documents, and tools with easy, controlled access to support Homeland Security needs


UHS
USACE
Homeland Security
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Home
Logoff
Home
Tools
Projects
Demonstration Projects
Links
Forum
R&D
Threat Level
ELEVATED
more...
Search
Search
UHS Announcements
Recent Additions
FAQs
Project Selector
Select a Project
Eau Claire
WISCONSIN
Madison
Milwaukee
Chicago
IOWA
ILLINOIS
Springfield
MISSOURI
Saint Louis
MICHIGAN
Lansing
Detroit
Fort Wayne
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OHIO
Cadillac
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○ Zoom
○ Re-center
○ Query
Zoom Out
Refresh
Reset
Tools
Threat Assessment
Consequence Management
Links
USACE Homeland Security
National Inventory of Dams
Digital Project Notebook
Digital Visual Library
TerraSever
Topozone
National Atlas
National Map
CorpsMap
Navigation Data Center
Navigation Charts by Corps District
Lock Characteristics
Hydropower Plants
ENGLink
Threats & Suspicious Incidents
DrChecks
Operations and Maintenance Business Information Link

This is the current security level as defined on the homeland security web-site.

Start: 1

Q: Where do I start?
A:

For general information on a dam, select a dam using the map or use the pick lists in the project selector.

For general information on the tools available, click on the tools tab at the top of the page.

Mississippi Valley Division | St. Louis District | MELVIN PRICE LOCK and DAM

GDT North American Stre

● Zoom

☑ Corps Dams
☐ Corps Districts
☐ Corps Divisions

Location: 44.7346 N 88.5445 W

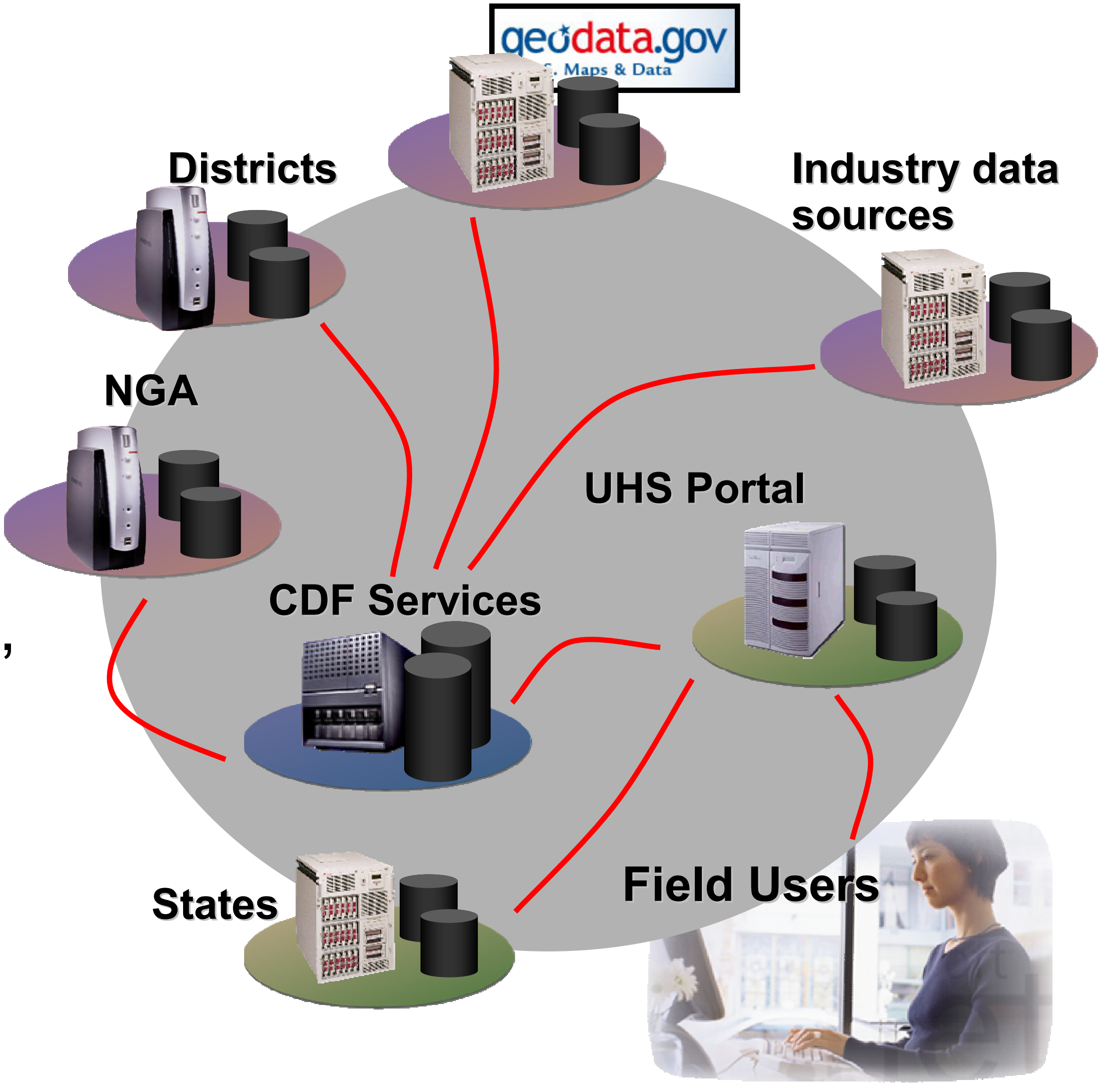
ERDC Engineer Research and Development Center

Portal Capabilities

- Serves as the download site for R&D and security-related tools or models and the data required to perform assessments
- Provides repository of information pertaining to projects
  - Content management
  - HQ, Division, District level can add or delete data
- Provides central place to archive and search for data, data sources, documents, tools
  - Search web portal plus USACE and business partners
  - Retrieves data of interest from varied sources
- Lite GIS capability for viewing/analysis of assets

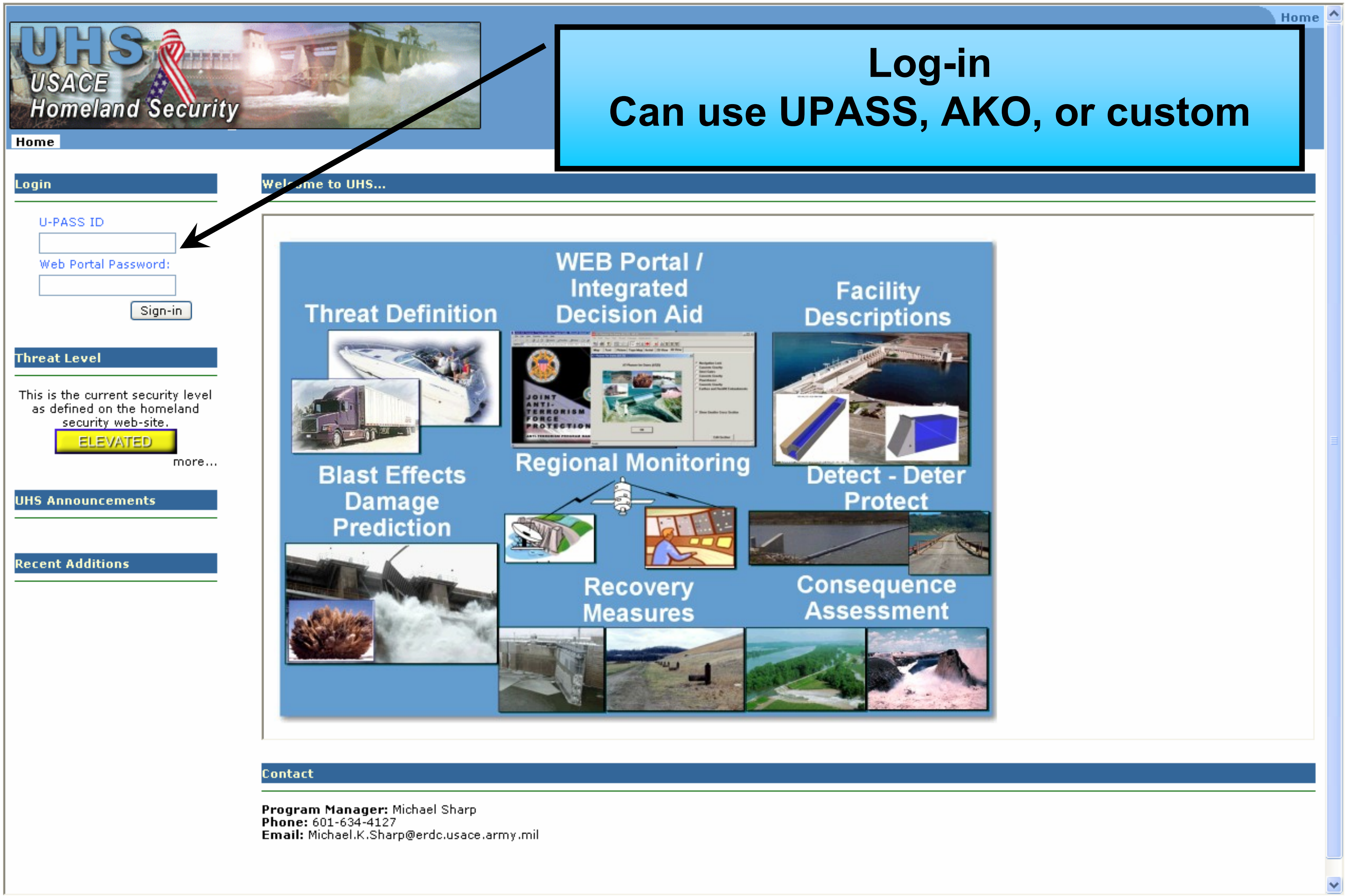
Data

- Driven by tool requirements
- Data sources
  - USACE (DPN, ENGLink)
  - Federal (USGS, NGA, DHS, Geospatial One-stop, etc.)
  - State agencies
  - Industry (ESRI, etc.)
- Published links and automated data retrieval


geodata.gov
Maps & Data
Districts
Industry data sources
NGA
UHS Portal
CDF Services
States
Field Users

Controlled Access

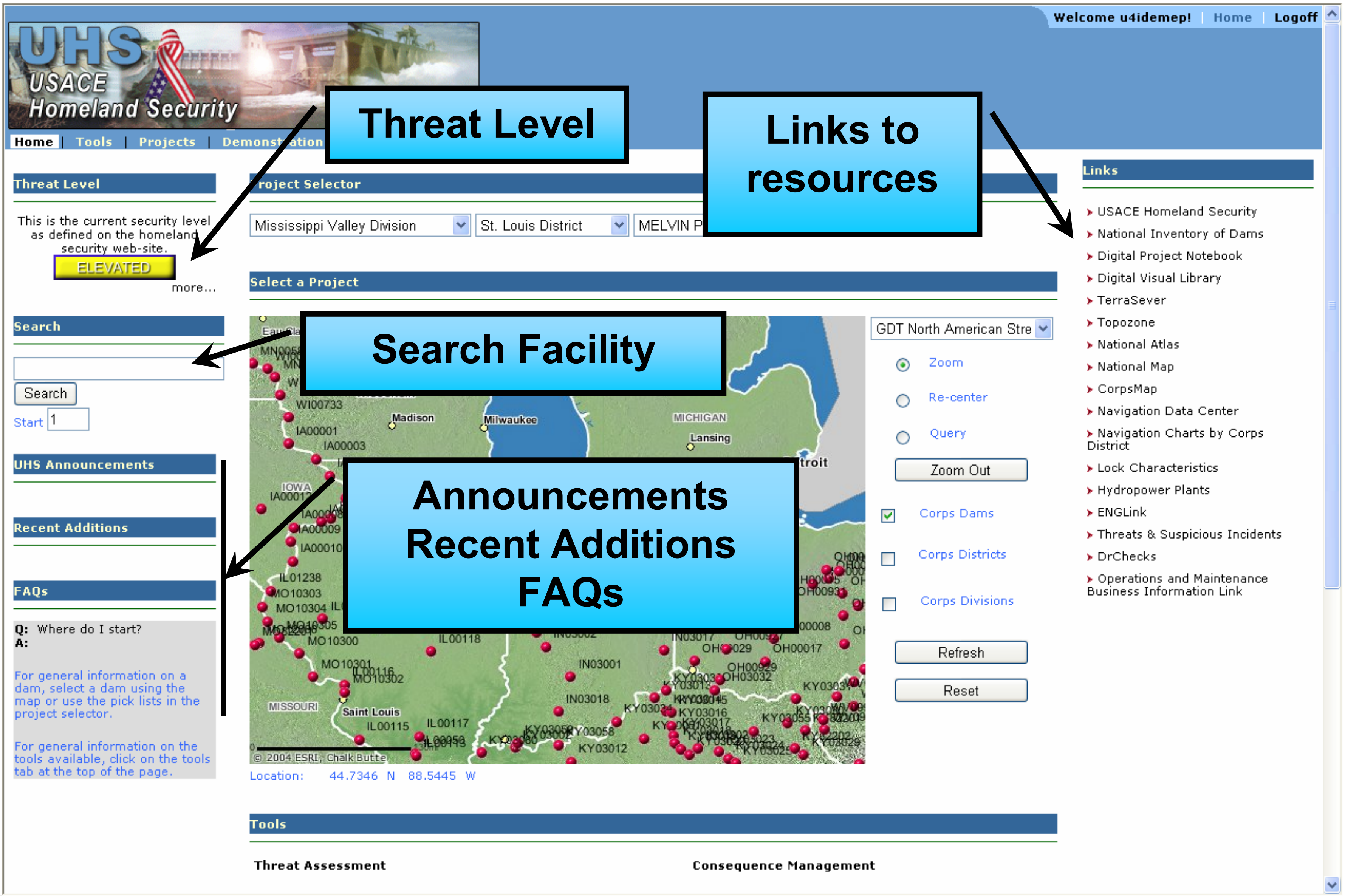
Log-in
Can use UPASS, AKO, or custom


UHS
USACE
Homeland Security
Home
Home
Login
U-PASS ID
Web Portal Password:
Sign-in
Threat Level
ELEVATED
more...
UHS Announcements
Recent Additions
Welcome to UHS...
Threat Definition
WEB Portal / Integrated Decision Aid
Facility Descriptions
Blast Effects Damage Prediction
Regional Monitoring
Detect - Deter Protect
Recovery Measures
Consequence Assessment
Contact

This is the current security level as defined on the homeland security web-site.

Program Manager: Michael Sharp
Phone: 601-634-4127
Email: Michael.K.Sharp@erdc.usace.army.mil

Main Page



UHS USACE Homeland Security
Welcome u4idemep! | Home | Logoff
Home | Tools | Projects | Demonstration
Threat Level
Project Selector
Links
Mississippi Valley Division
St. Louis District
MELVIN P
Select a Project
Search
Search
Start 1
UHS Announcements
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FAQs
GDT North American Stre
○ Zoom
○ Re-center
○ Query
Zoom Out
☑ Corps Dams
☐ Corps Districts
☐ Corps Divisions
Refresh
Reset
Madison
Milwaukee
MICHIGAN
Lansing
IOWA
MISSOURI
Saint Louis
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Tools
Threat Assessment
Consequence Management

Threat Level

Links to resources

Search Facility

Announcements
Recent Additions
FAQs

This is the current security level as defined on the homeland security web-site.

ELEVATED

more...

Location: 44.7346 N 88.5445 W

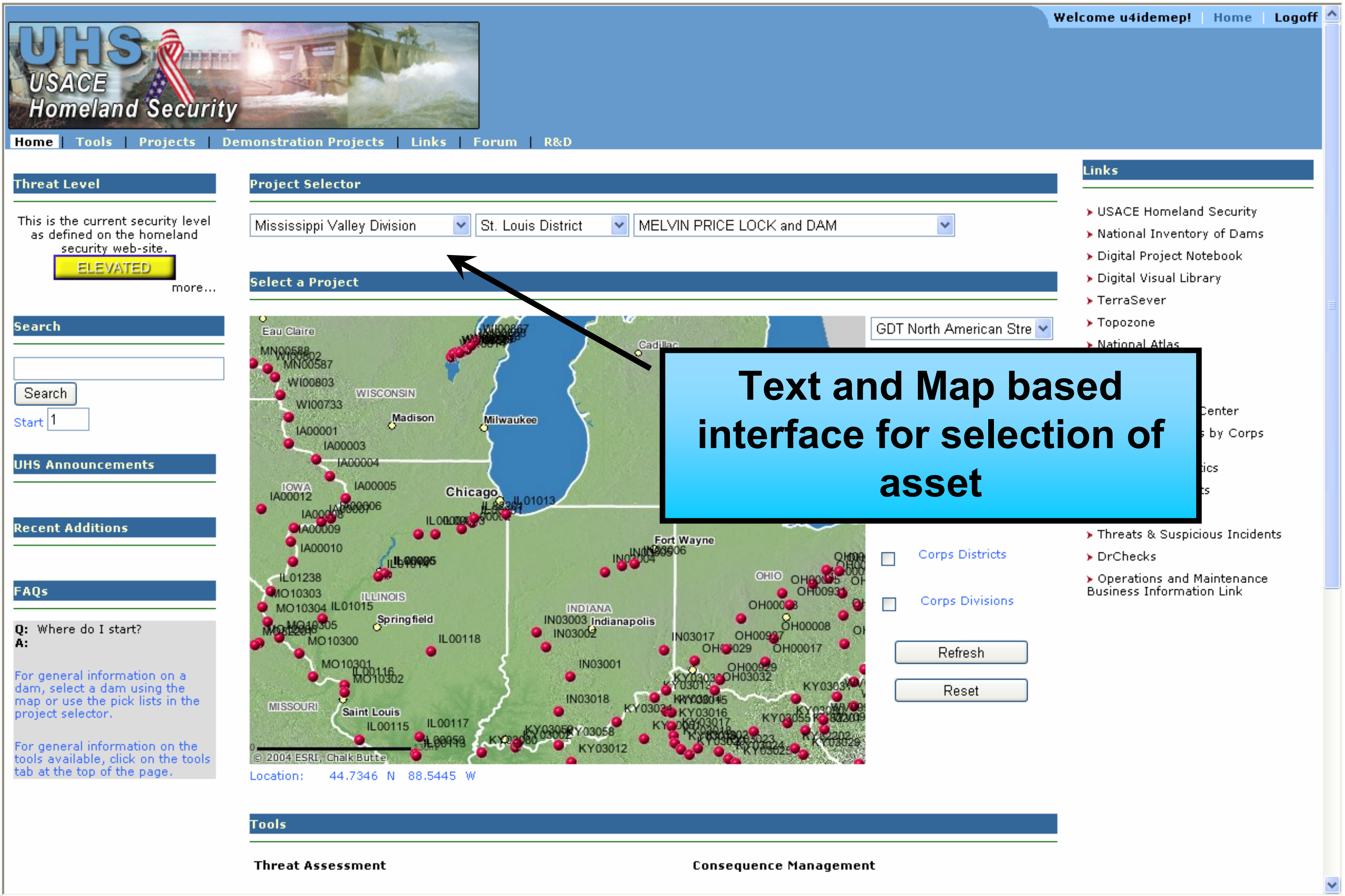
Q: Where do I start?
A:

For general information on a dam, select a dam using the map or use the pick lists in the project selector.

For general information on the tools available, click on the tools tab at the top of the page.

- USACE Homeland Security
- National Inventory of Dams
- Digital Project Notebook
- Digital Visual Library
- TerraSever
- Topozone
- National Atlas
- National Map
- CorpsMap
- Navigation Data Center
- Navigation Charts by Corps District
- Lock Characteristics
- Hydropower Plants
- ENGLink
- Threats & Suspicious Incidents
- DrChecks
- Operations and Maintenance Business Information Link

Main Page



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Threat Level

This is the current security level as defined on the homeland security web-site.

ELEVATED

more...

Search

UHS Announcements

Recent Additions

FAQs

Q: Where do I start?
A:

For general information on a dam, select a dam using the map or use the pick lists in the project selector.

For general information on the tools available, click on the tools tab at the top of the page.

Project Selector

Mississippi Valley Division | St. Louis District | MELVIN PRICE LOCK and DAM

Select a Project

GDT North American Stre

☐ Corps Districts

☐ Corps Divisions

Location: 44.7346 N 88.5445 W

Tools

Threat Assessment

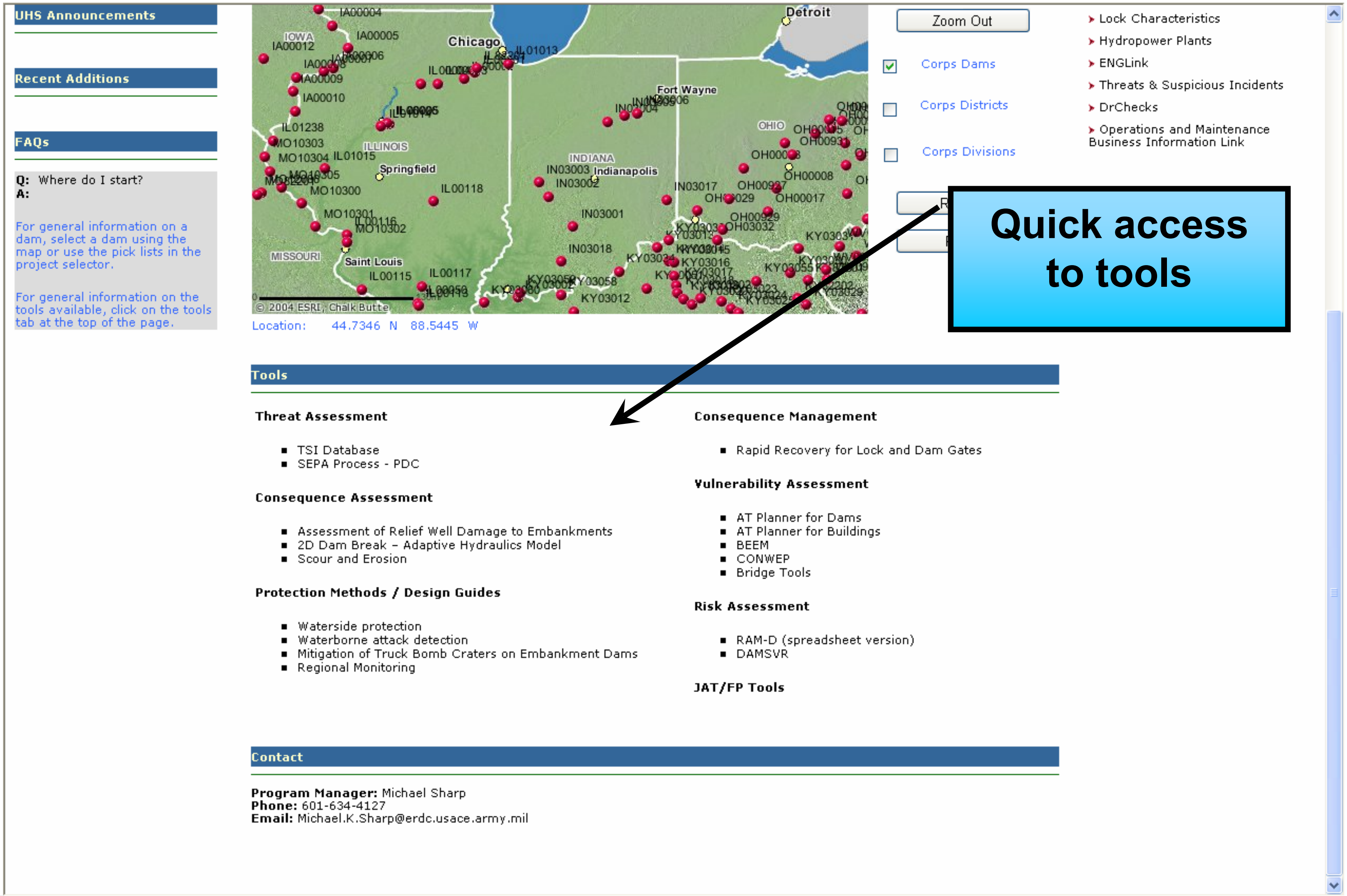
Consequence Management

Links

- USACE Homeland Security
- National Inventory of Dams
- Digital Project Notebook
- Digital Visual Library
- TerraSever
- Topozone
- National Atlas
- Center
- by Corps
- ics
- s
- Threats & Suspicious Incidents
- DrChecks
- Operations and Maintenance Business Information Link

Text and Map based interface for selection of asset

Main Page



UHS Announcements

Recent Additions

FAQs

Q: Where do I start?
A:

For general information on a dam, select a dam using the map or use the pick lists in the project selector.

For general information on the tools available, click on the tools tab at the top of the page.

Location: 44.7346 N 88.5445 W

☑ Corps Dams

☐ Corps Districts

☐ Corps Divisions

- Lock Characteristics
- Hydropower Plants
- ENGLink
- Threats & Suspicious Incidents
- DrChecks
- Operations and Maintenance Business Information Link

Tools

Threat Assessment

- TSI Database
- SEPA Process - PDC

Consequence Assessment

- Assessment of Relief Well Damage to Embankments
- 2D Dam Break – Adaptive Hydraulics Model
- Scour and Erosion

Protection Methods / Design Guides

- Waterside protection
- Waterborne attack detection
- Mitigation of Truck Bomb Craters on Embankment Dams
- Regional Monitoring

Consequence Management

- Rapid Recovery for Lock and Dam Gates

Vulnerability Assessment

- AT Planner for Dams
- AT Planner for Buildings
- BEEM
- CONWEP
- Bridge Tools

Risk Assessment

- RAM-D (spreadsheet version)
- DAMSVR

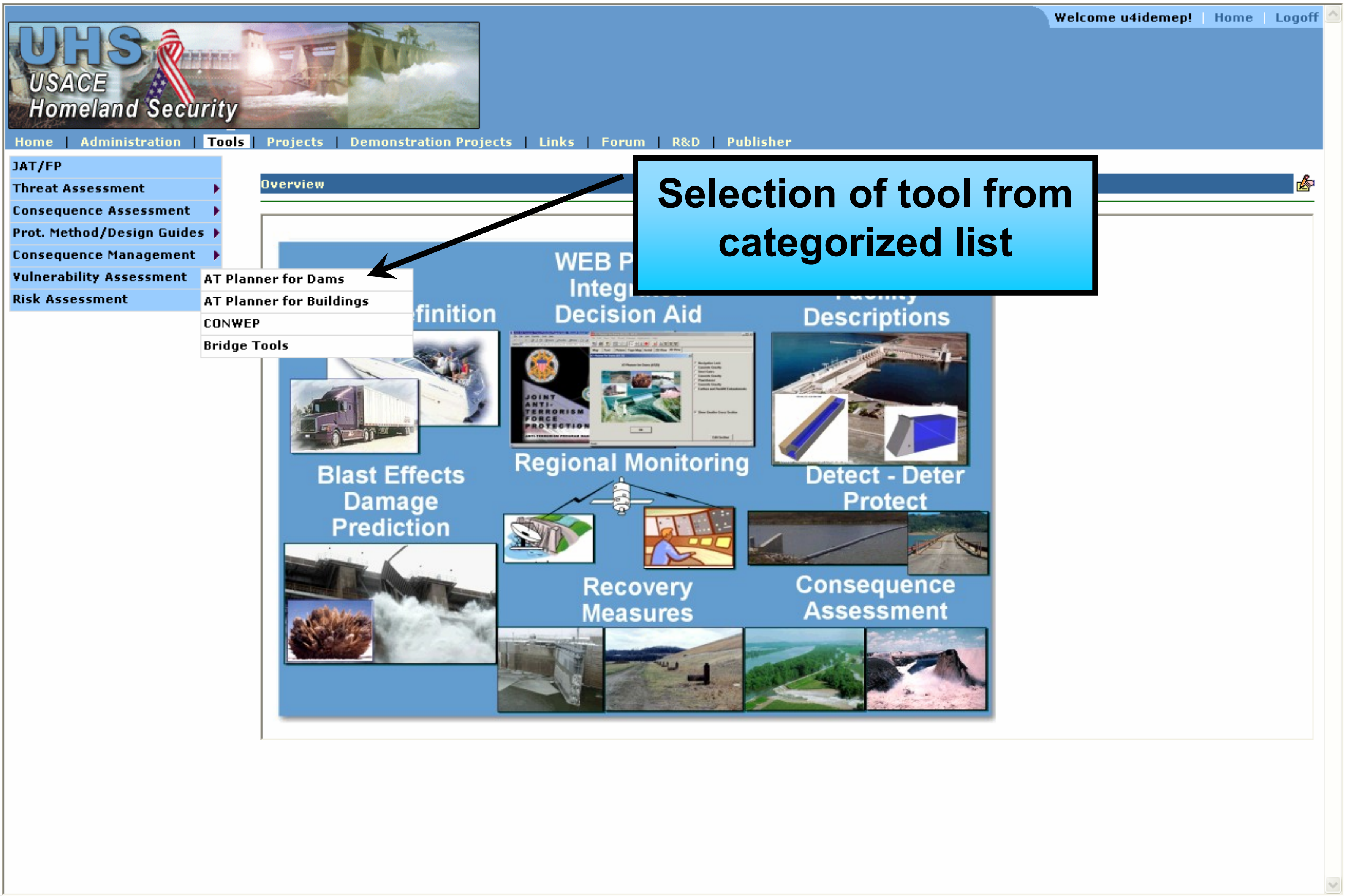
JAT/FP Tools

Contact

Program Manager: Michael Sharp
Phone: 601-634-4127
Email: Michael.K.Sharp@erdc.usace.army.mil

Quick access to tools

Tools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JAT/FP
Threat Assessment
Consequence Assessment
Prot. Method/Design Guides
Consequence Management
Vulnerability Assessment
Risk Assessment
AT Planner for Dams
AT Planner for Buildings
CONWEP
Bridge Tools
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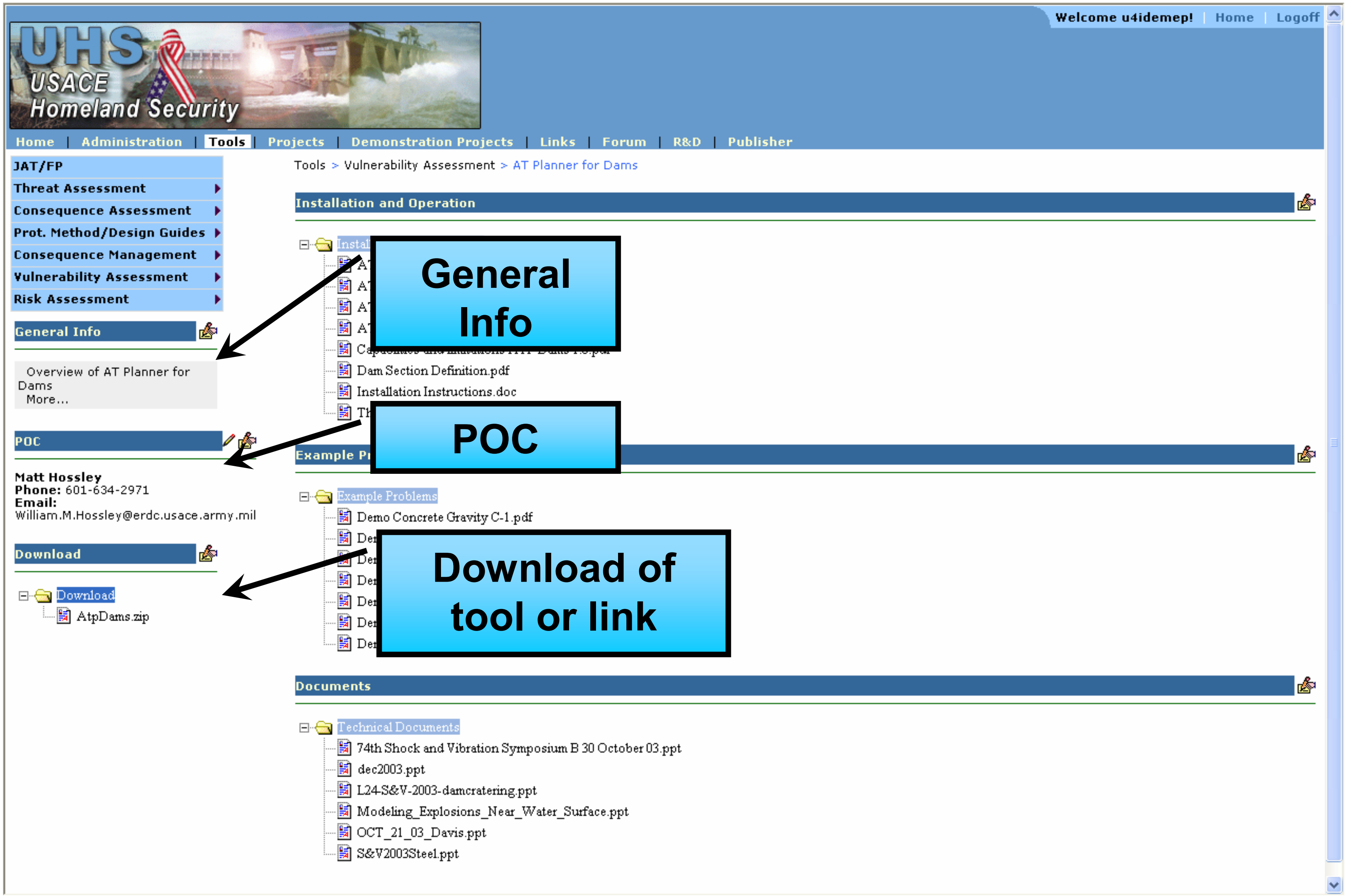
Descriptions
Blast Effects
Damage
Prediction
Regional Monitoring
Detect - Deter
Protect
Recovery
Measures
Consequence
Assessment

Selection of tool from categorized list

Tools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JAT/FP
Threat Assessment
Consequence Assessment
Prot. Method/Design Guides
Consequence Management
Vulnerability Assessment
Risk Assessment

Tools > Vulnerability Assessment > AT Planner for Dams

General Info

Overview of AT Planner for Dams
More...

POC

Matt Hossley
Phone: 601-634-2971
Email:
William.M.Hossley@erdc.usace.army.mil

Download

- Download
  - AtpDams.zip

Installation and Operation

- Instal
  - A
  - A
  - A
  - A
  - Ca
  - Dam Section Definition.pdf
  - Installation Instructions.doc
  - Th

Example Pr

- Example Problems
  - Demo Concrete Gravity C-1.pdf
  - De
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  - De
  - De
  - De
  - De

Documents

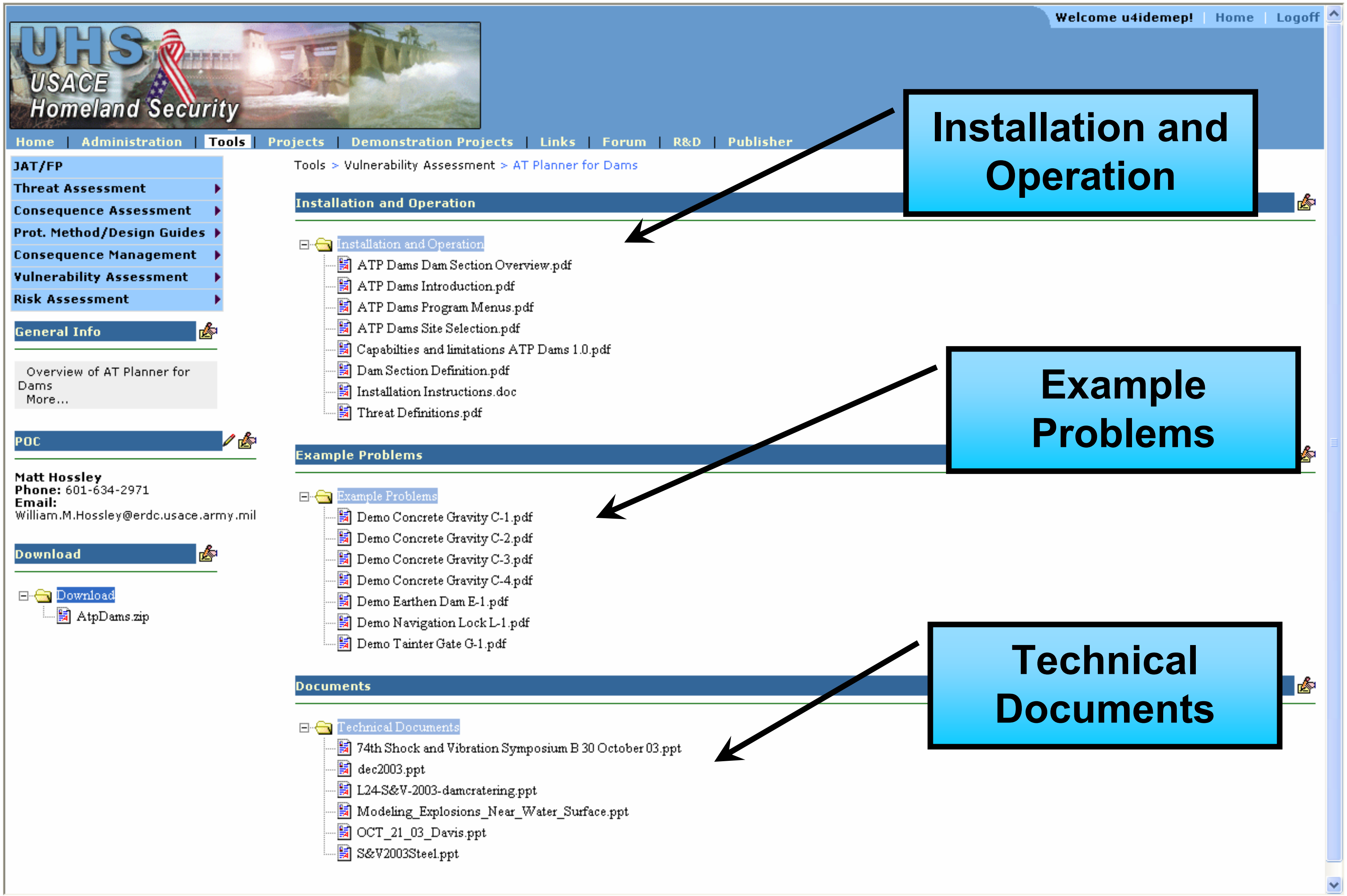
- Technical Documents
  - 74th Shock and Vibration Symposium B 30 October 03.ppt
  - dec2003.ppt
  - L24-S&V-2003-damcratering.ppt
  - Modeling_Explosions_Near_Water_Surface.ppt
  - OCT_21_03_Davis.ppt
  - S&V2003Steel.ppt

General Info

POC

Download of tool or link

Tools



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Prot. Method/Design Guides
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Vulnerability Assessment
Risk Assessment
General Info
POC
Download

Tools > Vulnerability Assessment > AT Planner for Dams

Overview of AT Planner for Dams
More...

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Email:
William.M.Hossley@erdc.usace.army.mil

Download
- AtpDams.zip

Installation and Operation

Installation and Operation
- ATP Dams Dam Section Overview.pdf
- ATP Dams Introduction.pdf
- ATP Dams Program Menus.pdf
- ATP Dams Site Selection.pdf
- Capabilties and limitations ATP Dams 1.0.pdf
- Dam Section Definition.pdf
- Installation Instructions.doc
- Threat Definitions.pdf

Example Problems

Example Problems
- Demo Concrete Gravity C-1.pdf
- Demo Concrete Gravity C-2.pdf
- Demo Concrete Gravity C-3.pdf
- Demo Concrete Gravity C-4.pdf
- Demo Earthen Dam E-1.pdf
- Demo Navigation Lock L-1.pdf
- Demo Tainter Gate G-1.pdf

Documents

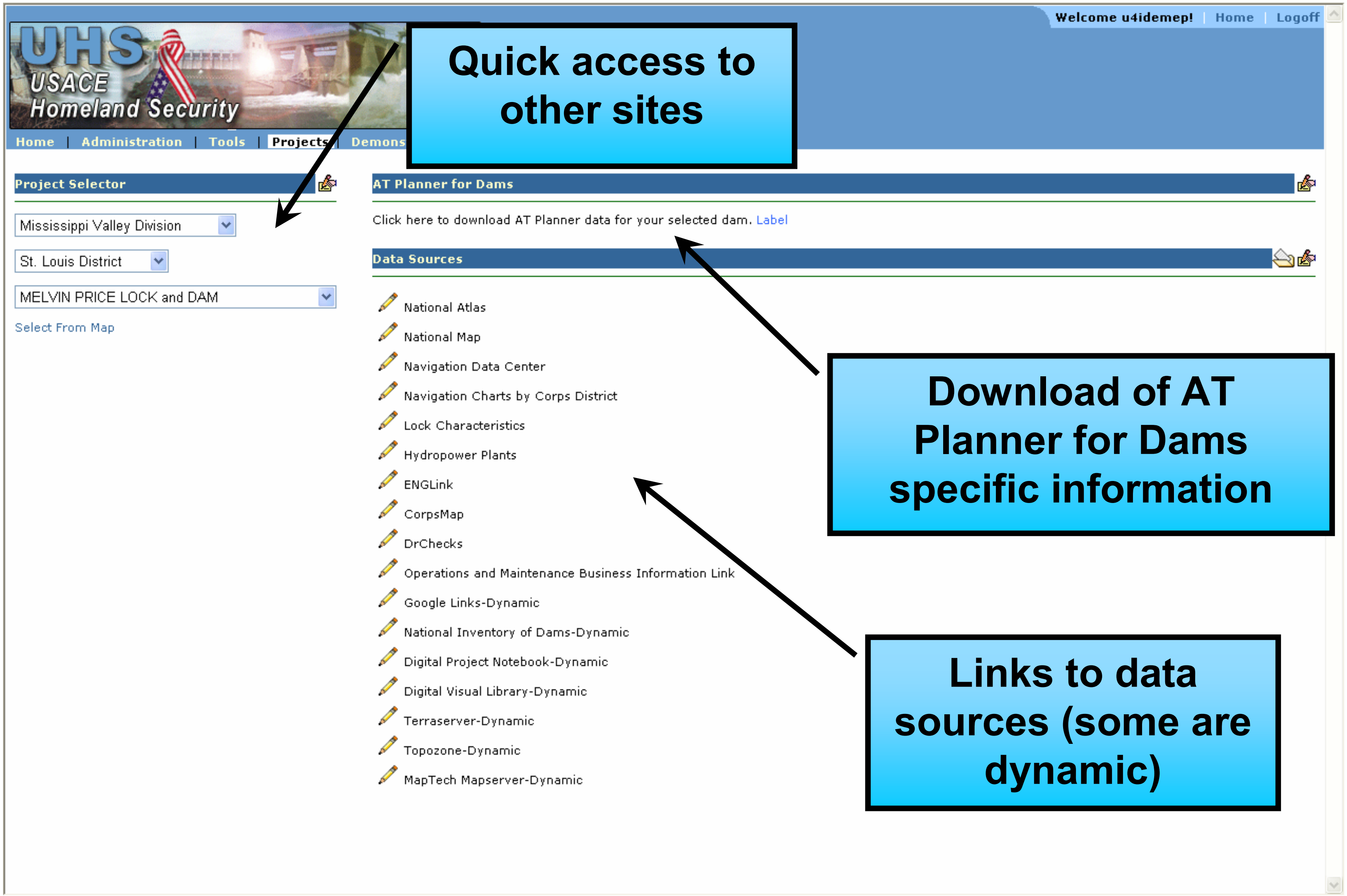
Technical Documents
- 74th Shock and Vibration Symposium B 30 October 03.ppt
- dec2003.ppt
- L24-S&V-2003-damcratering.ppt
- Modeling_Explosions_Near_Water_Surface.ppt
- OCT_21_03_Davis.ppt
- S&V2003Steel.ppt

Installation and Operation

Example Problems

Technical Documents

Project Info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Project Selector

Mississippi Valley Division

St. Louis District

MELVIN PRICE LOCK and DAM

Select From Map

AT Planner for Dams

Click here to download AT Planner data for your selected dam. Label

Data Sources

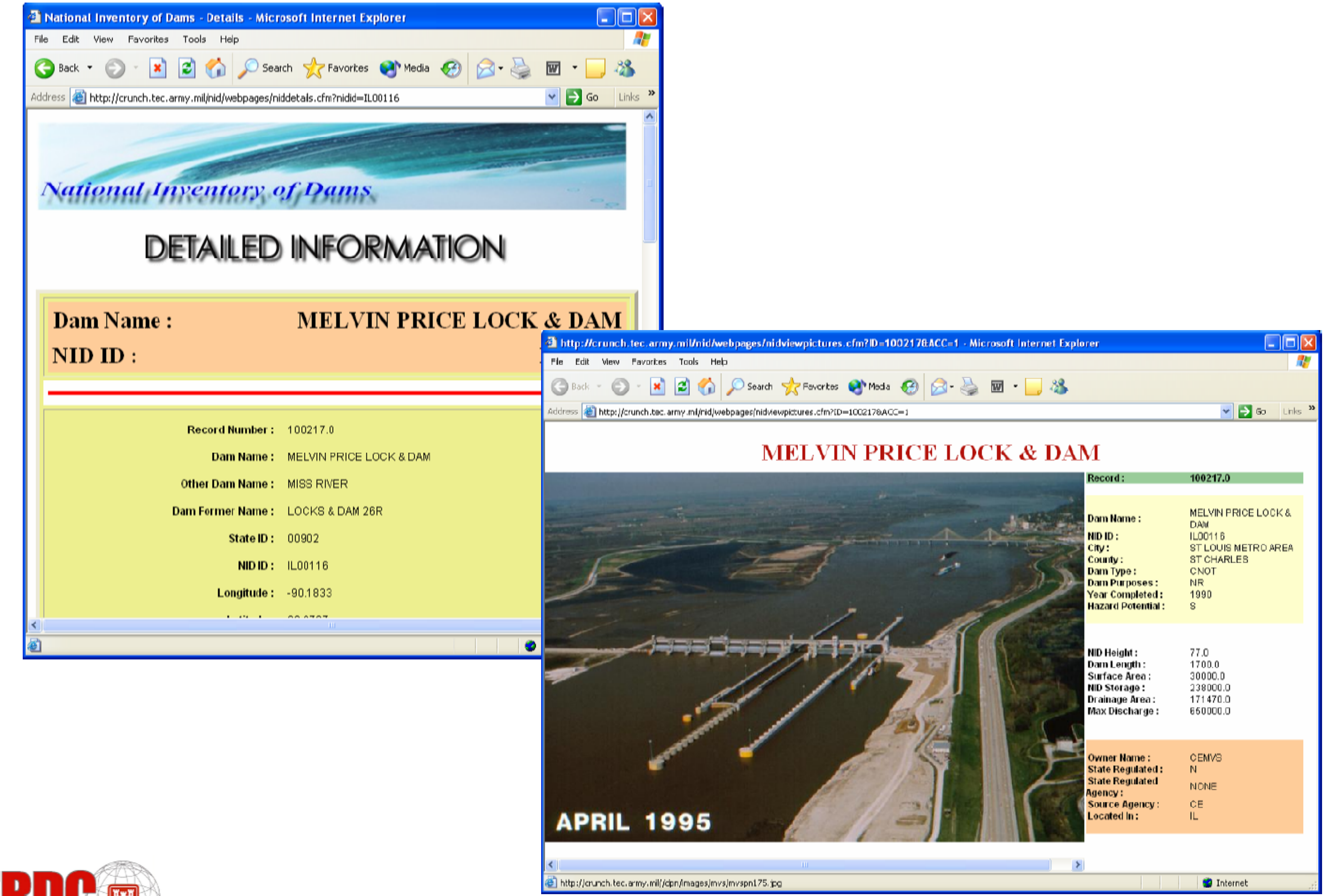
- National Atlas
- National Map
- Navigation Data Center
- Navigation Charts by Corps District
- Lock Characteristics
- Hydropower Plants
- ENGLink
- CorpsMap
- DrChecks
- Operations and Maintenance Business Information Link
- Google Links-Dynamic
- National Inventory of Dams-Dynamic
- Digital Project Notebook-Dynamic
- Digital Visual Library-Dynamic
- Terraserver-Dynamic
- Topozone-Dynamic
- MapTech Mapserver-Dynamic

Quick access to other sites

Download of AT Planner for Dams specific information

Links to data sources (some are dynamic)

Project Info (NID)


National Inventory of Dams - Details - Microsoft Internet Explorer
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Address http://crunch.tec.army.mil/nid/webpages/niddetails.cfm?nidid=IL00116
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National Inventory of Dams
DETAILED INFORMATION
http://crunch.tec.army.mil/nid/webpages/nidviewpictures.cfm?ID=100217&ACC=1 - Microsoft Internet Explorer
File Edit View Favorites Tools Help
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Go Links
APRIL 1995
http://crunch.tec.army.mil/cdpn/images/mvs/mvspn175.jpg
Internet

Dam Name : **MELVIN PRICE LOCK & DAM**
NID ID :

Record Number : 100217.0
Dam Name : MELVIN PRICE LOCK & DAM
Other Dam Name : MISS RIVER
Dam Former Name : LOCKS & DAM 26R
State ID : 00902
NID ID : IL00116
Longitude : -90.1833

MELVIN PRICE LOCK & DAM

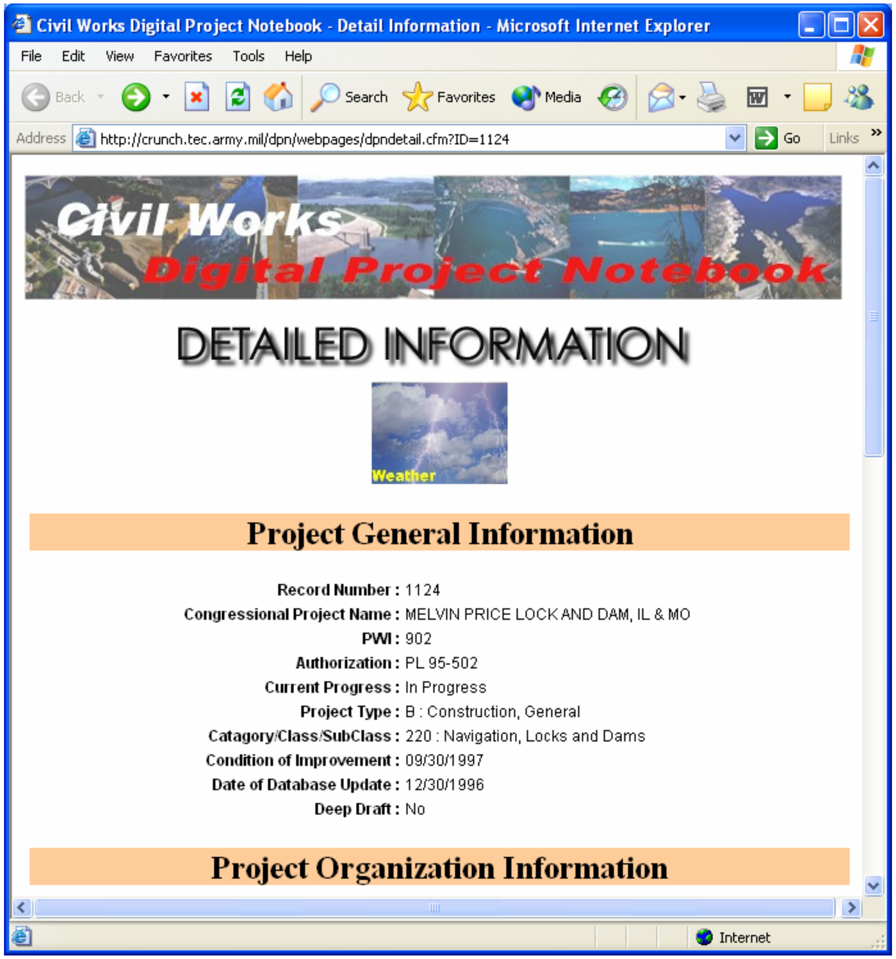
Record : **100217.0**

Dam Name : MELVIN PRICE LOCK & DAM
NID ID : IL00116
City : ST LOUIS METRO AREA
County : ST CHARLES
Dam Type : CNOT
Dam Purposes : NR
Year Completed : 1990
Hazard Potential : S

NID Height : 77.0
Dam Length : 1700.0
Surface Area : 30000.0
NID Storage : 238000.0
Drainage Area : 171470.0
Max Discharge : 650000.0

Owner Name : CEMVS
State Regulated : N
State Regulated Agency : NONE
Source Agency : CE
Located In : IL

Project Info (DPN)


File
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Links
Internet

Civil Works Digital Project Notebook - Detail Information - Microsoft Internet Explorer

Address http://crunch.tec.army.mil/dpn/webpages/dpndetail.cfm?ID=1124

Civil Works Digital Project Notebook

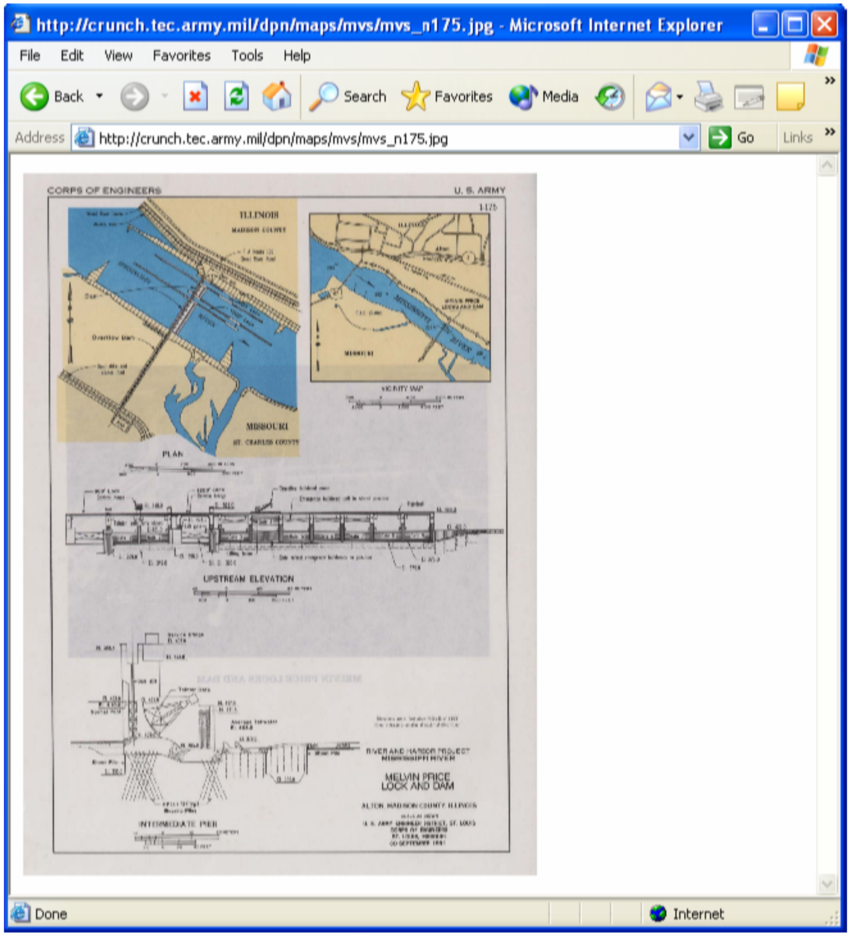
DETAILED INFORMATION

Weather

Project General Information

Record Number : 1124
Congressional Project Name : MELVIN PRICE LOCK AND DAM, IL & MO
PWI : 902
Authorization : PL 95-502
Current Progress : In Progress
Project Type : B : Construction, General
Catagory/Class/SubClass : 220 : Navigation, Locks and Dams
Condition of Improvement : 09/30/1997
Date of Database Update : 12/30/1996
Deep Draft : No

Project Organization Information


File
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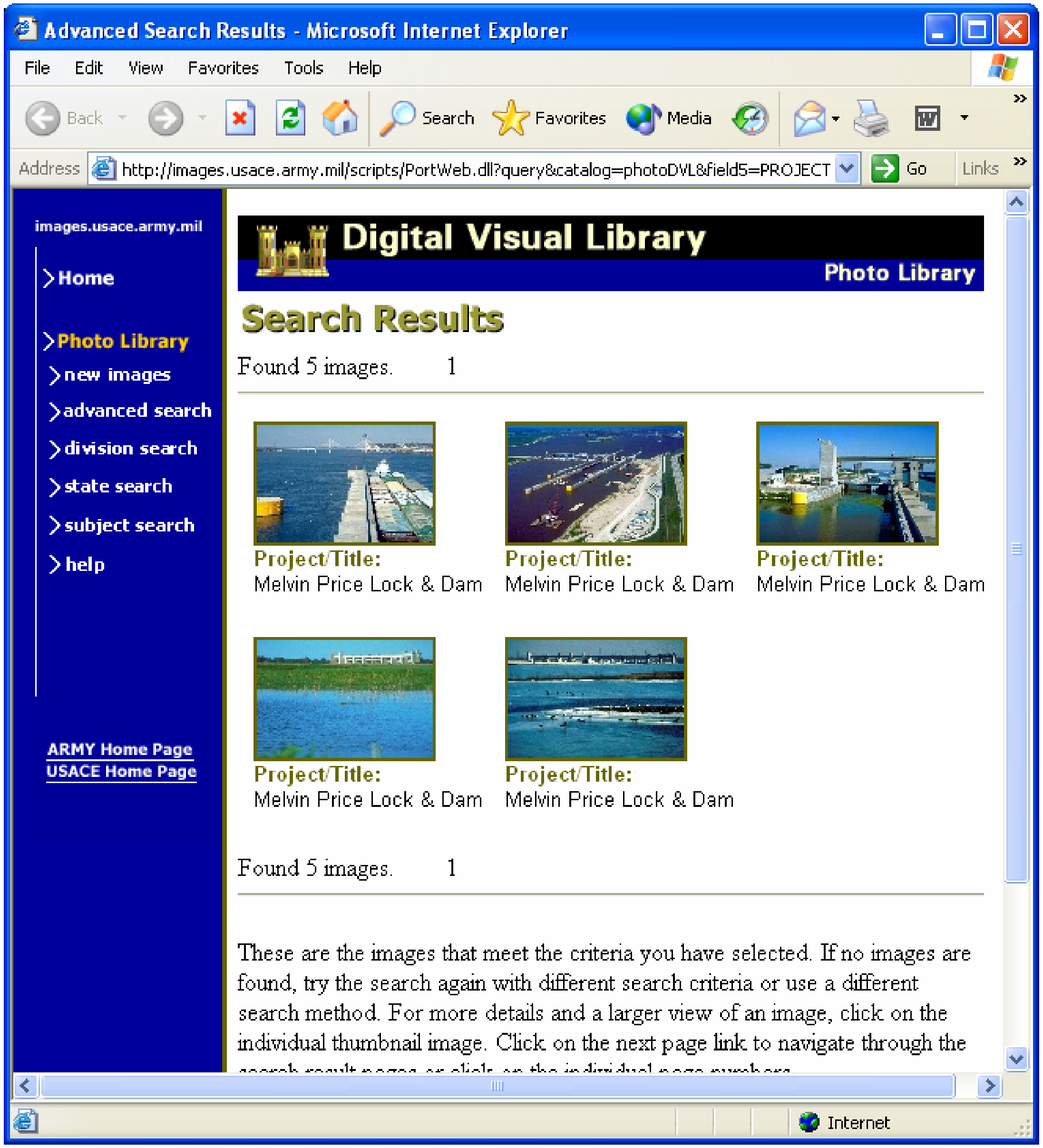
CORPS OF ENGINEERS
U. S. ARMY
1175
ILLINOIS
MADISON COUNTY
Overflow Dam
MISSOURI
ST. CHARLES COUNTY
PLAN
VICINITY MAP
MISSOURI
UPSTREAM ELEVATION
INTERMEDIATE PIER
RIVER AND HARBOR PROJECT
MISSISSIPPI RIVER
MELVIN PRICE
LOCK AND DAM
ALTON, MADISON COUNTY, ILLINOIS
U. S. ARMY ENGINEER DISTRICT, ST. LOUIS
CORPS OF ENGINEERS
ST. LOUIS, MISSOURI

http://crunch.tec.army.mil/dpn/maps/mvs/mvs_n175.jpg - Microsoft Internet Explorer

Address http://crunch.tec.army.mil/dpn/maps/mvs/mvs_n175.jpg

Project Info (DVL)


Advanced Search Results - Microsoft Internet Explorer
File
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Address
http://images.usace.army.mil/scripts/PortWeb.dll?query&catalog=photoDVL&field5=PROJECT
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Links
images.usace.army.mil
Home
Photo Library
new images
advanced search
division search
state search
subject search
help
ARMY Home Page
USACE Home Page
Digital Visual Library
Photo Library
Internet

Search Results

Found 5 images. 1

Project/Title: Melvin Price Lock & Dam

Project/Title: Melvin Price Lock & Dam

Project/Title: Melvin Price Lock & Dam

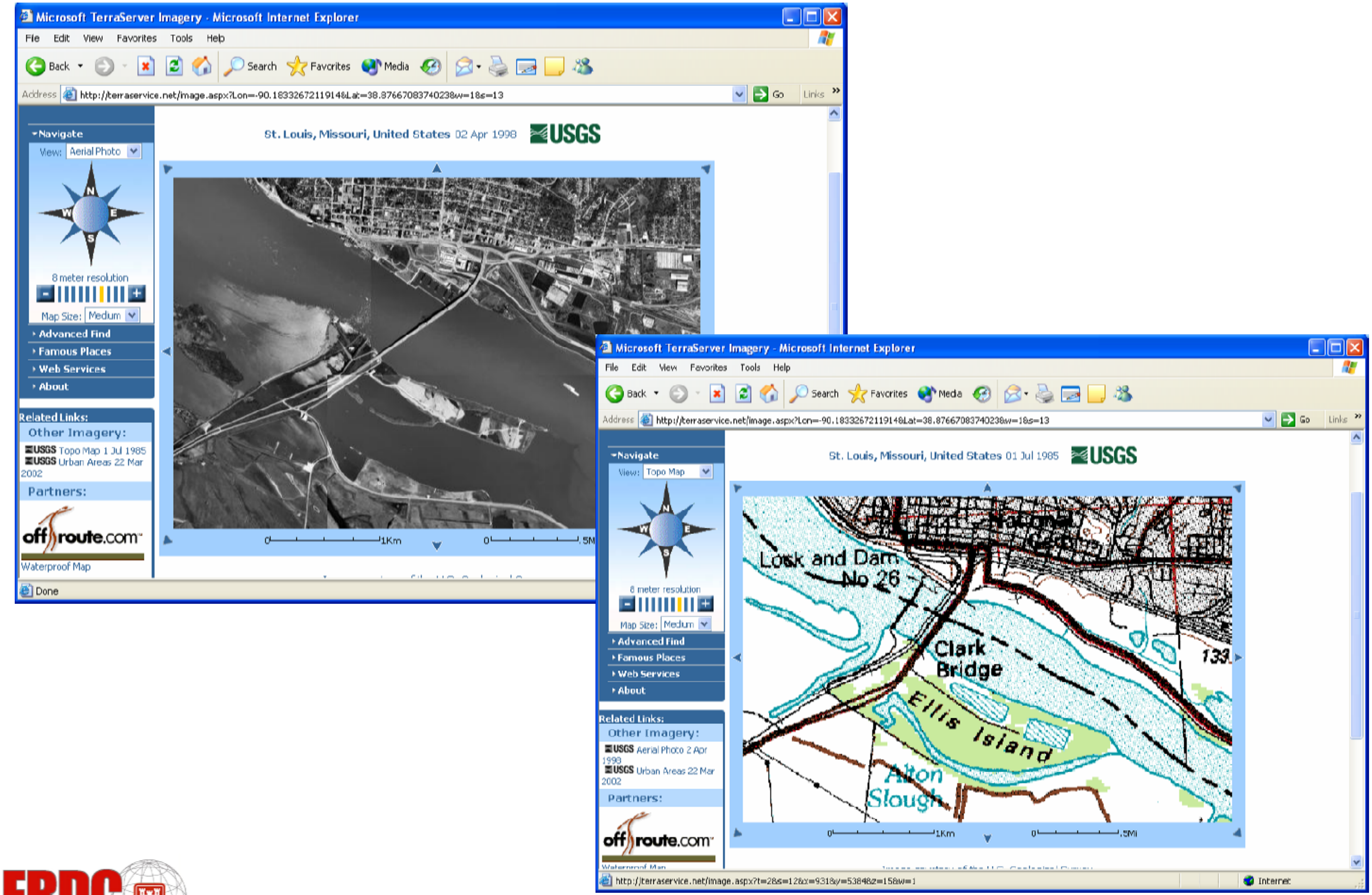
Project/Title: Melvin Price Lock & Dam

Project/Title: Melvin Price Lock & Dam

Found 5 images. 1

These are the images that meet the criteria you have selected. If no images are found, try the search again with different search criteria or use a different search method. For more details and a larger view of an image, click on the individual thumbnail image. Click on the next page link to navigate through the

Project Info (TerraServer)



Microsoft TerraServer Imagery - Microsoft Internet Explorer

Address: http://terraservice.net/image.aspx?Lon=-90.18332672119148Lat=38.87667083740238w=18s=13

St. Louis, Missouri, United States 02 Apr 1998

View: Aerial Photo

8 meter resolution

Map Size: Medium

Related Links:

Other Imagery:

USGS Topo Map 1 Jul 1985
USGS Urban Areas 22 Mar 2002

Partners:

Waterproof Map

Done

Microsoft TerraServer Imagery - Microsoft Internet Explorer

Address: http://terraservice.net/image.aspx?Lon=-90.18332672119148Lat=38.87667083740238w=18s=13

St. Louis, Missouri, United States 01 Jul 1985

View: Topo Map

8 meter resolution

Map Size: Medium

Related Links:

Other Imagery:

USGS Aerial Photo 2 Apr 1998
USGS Urban Areas 22 Mar 2002

Partners:

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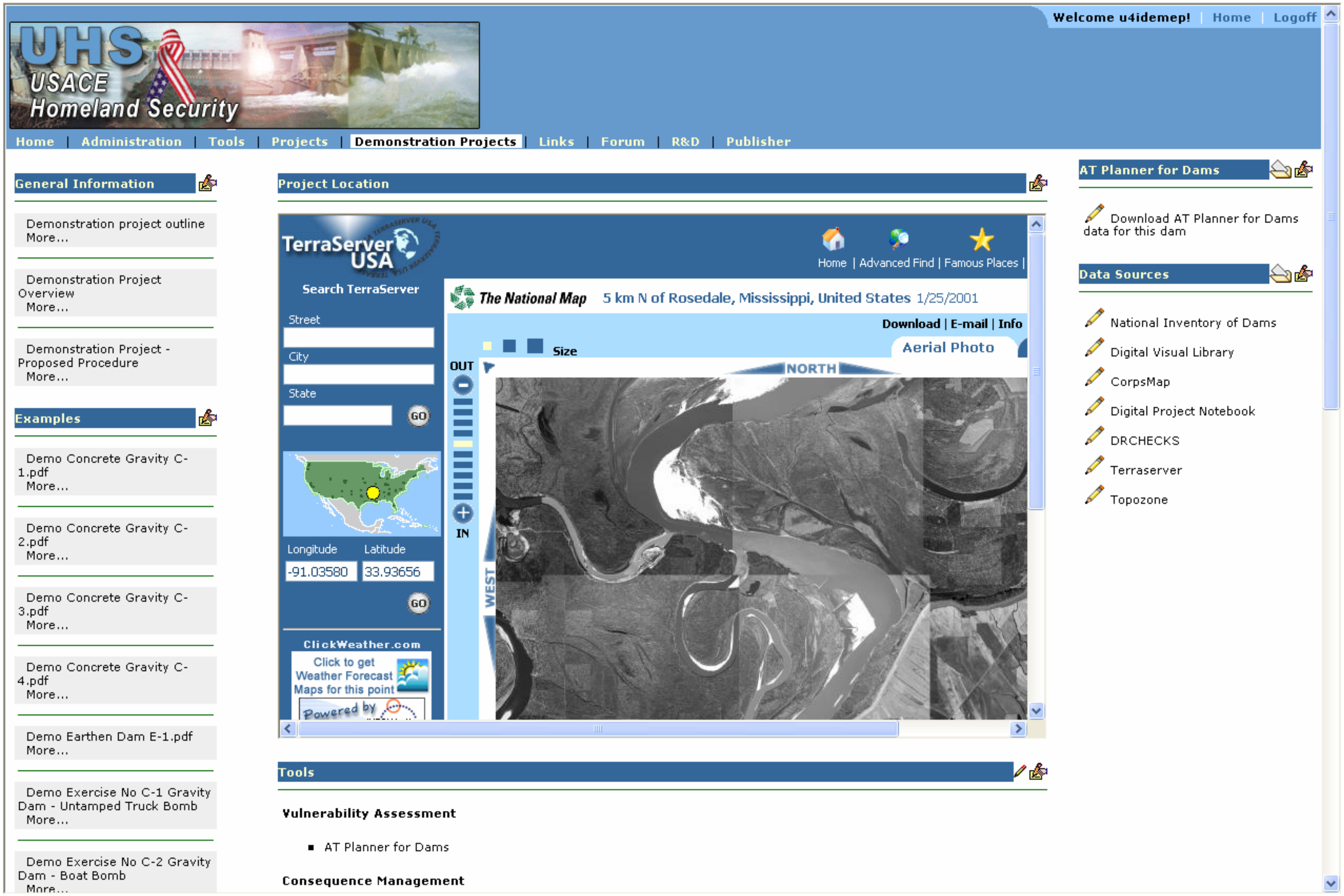
Lock and Dam No 26
Clark Bridge
Ellis Island
Alton Slough
133
Internet

Demonstration Project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General Information

Demonstration project outline
More...

Demonstration Project Overview
More...

Demonstration Project - Proposed Procedure
More...

Examples

Demo Concrete Gravity C-1.pdf
More...

Demo Concrete Gravity C-2.pdf
More...

Demo Concrete Gravity C-3.pdf
More...

Demo Concrete Gravity C-4.pdf
More...

Demo Earthen Dam E-1.pdf
More...

Demo Exercise No C-1 Gravity Dam - Untamped Truck Bomb
More...

Demo Exercise No C-2 Gravity Dam - Boat Bomb
More...

Project Location

TerraServer USA
Home | Advanced Find | Famous Places |
Search TerraServer
Street
City
State
GO
Longitude
Latitude
GO
ClickWeather.com
Click to get Weather Forecast Maps for this point
Powered by
The National Map
Download | E-mail | Info
Size
Aerial Photo
OUT
IN
NORTH
WEST

5 km N of Rosedale, Mississippi, United States 1/25/2001

Longitude: -91.03580
Latitude: 33.93656

Tools

Vulnerability Assessment

- AT Planner for Dams

Consequence Management

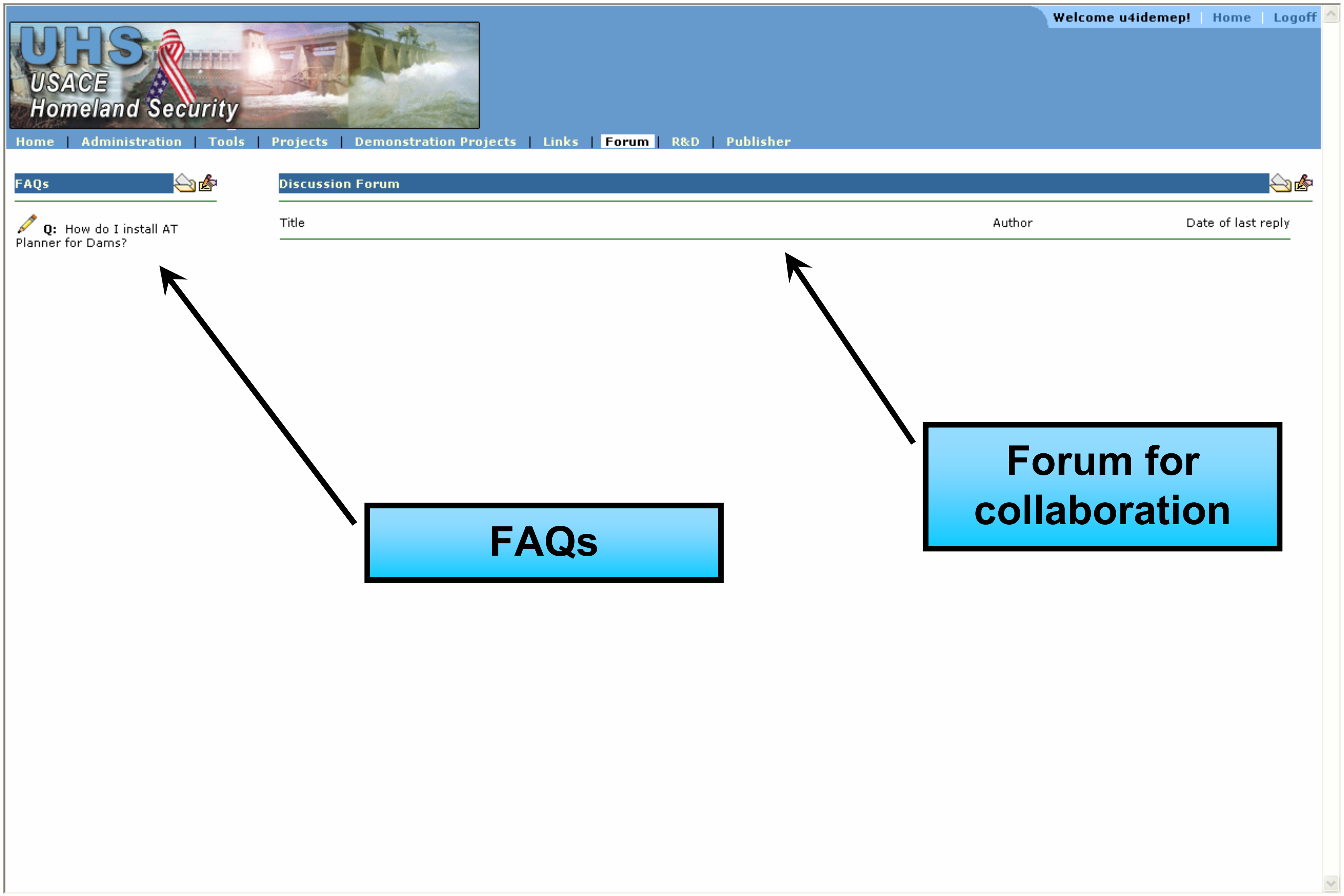
AT Planner for Dams

Download AT Planner for Dams data for this dam

Data Sources

- National Inventory of Dams
- Digital Visual Library
- CorpsMap
- Digital Project Notebook
- DRCHECKS
- Terraserver
- Topozone

FAQs and Forum


Welcome u4idemep! | Home | Logoff
UHS
USACE Homeland Security
Home | Administration | Tools | Projects | Demonstration Projects | Links | Forum | R&D | Publisher

FAQs

Q: How do I install AT Planner for Dams?

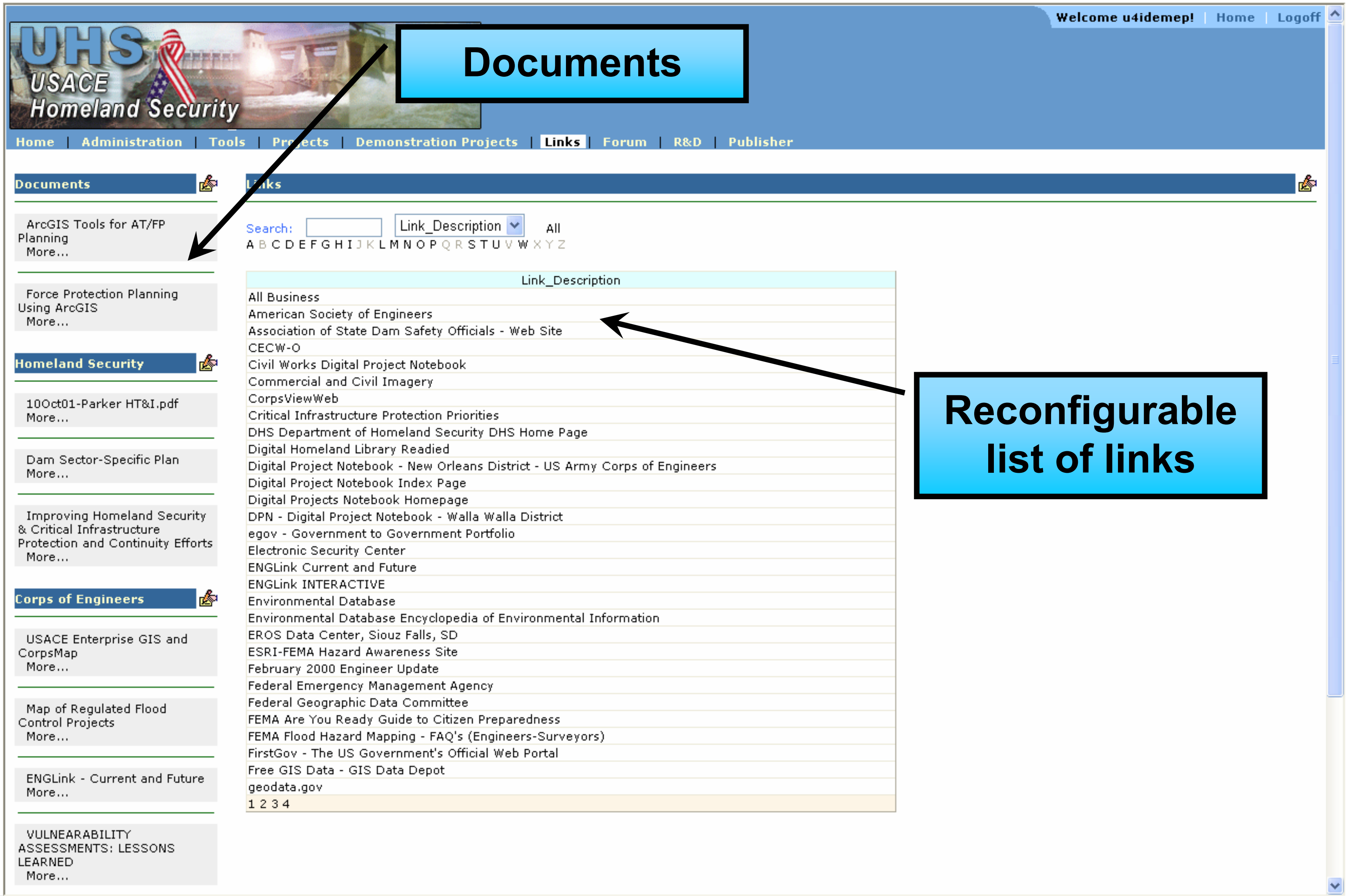
Discussion Forum

Title	Author	Date of last reply

FAQs

Forum for collaboration

Links



Documents

Reconfigurable list of links

Welcome u4idemep! | Home | Logoff

UHS USACE Homeland Security

Home | Administration | Tools | Projects | Demonstration Projects | Links | Forum | R&D | Publisher

Documents

ArcGIS Tools for AT/FP Planning
More...

Force Protection Planning Using ArcGIS
More...

Homeland Security

10Oct01-Parker HT&I.pdf
More...

Dam Sector-Specific Plan
More...

Improving Homeland Security & Critical Infrastructure Protection and Continuity Efforts
More...

Corps of Engineers

USACE Enterprise GIS and CorpsMap
More...

Map of Regulated Flood Control Projects
More...

ENGLink - Current and Future
More...

VULNEARABILITY ASSESSMENTS: LESSONS LEARNED
More...

Links

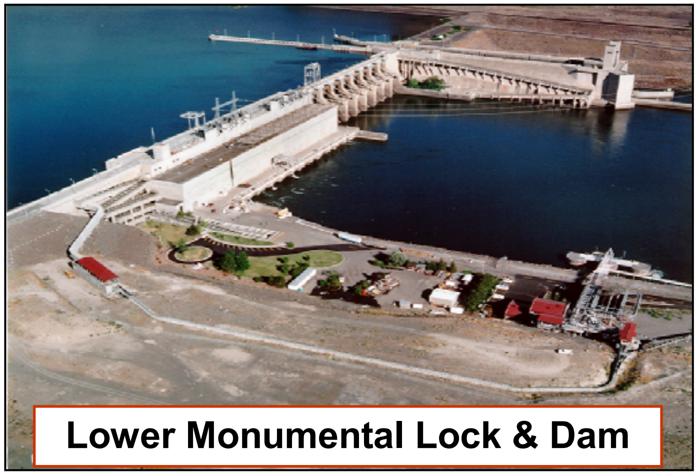
Search: Link_Description All

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

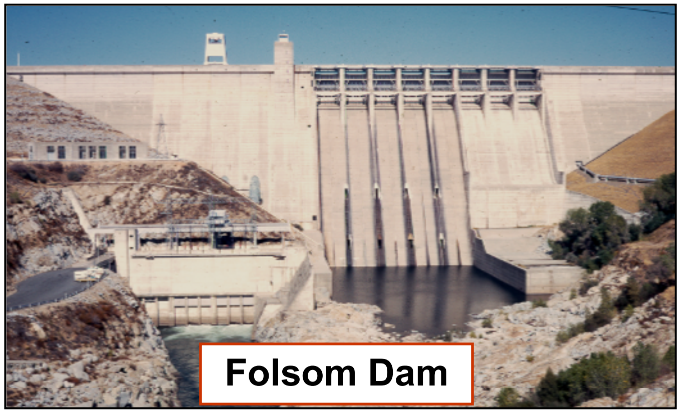
Link_Description
All Business
American Society of Engineers
Association of State Dam Safety Officials - Web Site
CECW-O
Civil Works Digital Project Notebook
Commercial and Civil Imagery
CorpsViewWeb
Critical Infrastructure Protection Priorities
DHS Department of Homeland Security DHS Home Page
Digital Homeland Library Readied
Digital Project Notebook - New Orleans District - US Army Corps of Engineers
Digital Project Notebook Index Page
Digital Projects Notebook Homepage
DPN - Digital Project Notebook - Walla Walla District
egov - Government to Government Portfolio
Electronic Security Center
ENGLink Current and Future
ENGLink INTERACTIVE
Environmental Database
Environmental Database Encyclopedia of Environmental Information
EROS Data Center, Siouz Falls, SD
ESRI-FEMA Hazard Awareness Site
February 2000 Engineer Update
Federal Emergency Management Agency
Federal Geographic Data Committee
FEMA Are You Ready Guide to Citizen Preparedness
FEMA Flood Hazard Mapping - FAQ's (Engineers-Surveyors)
FirstGov - The US Government's Official Web Portal
Free GIS Data - GIS Data Depot
geodata.gov
1 2 3 4

Future R&D

R&D in support to Baseline Security Posture and USACE Homeland Security Strategic Plan (FY07-11).

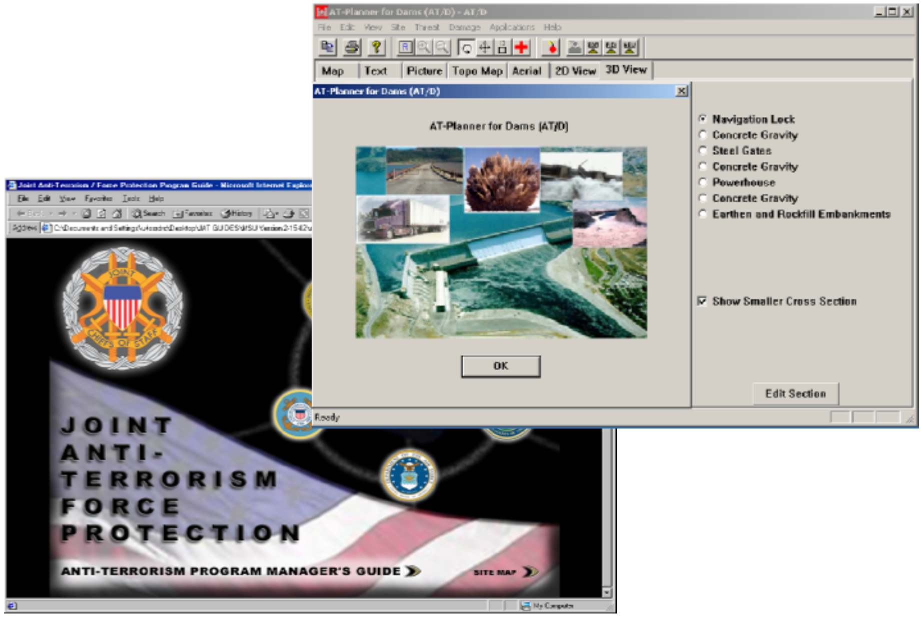


Lower Monumental Lock & Dam



Folsom Dam

- **Integrated assessment procedures.**
- **Standardized risk/vulnerability procedures for evaluation of post-BSP security upgrades.**



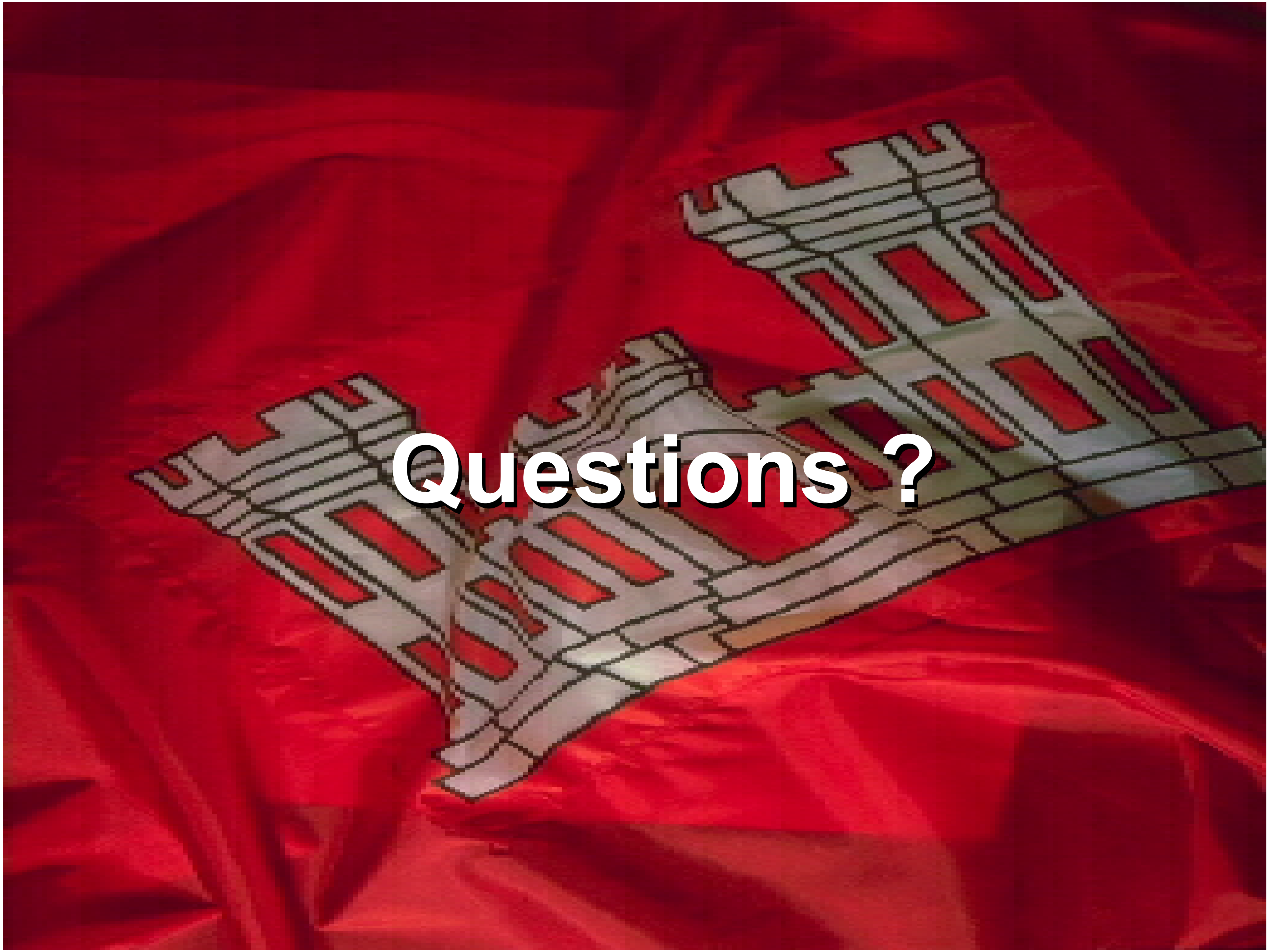
AT-Planner for Dams (AT/D) - AT/D
File Edit View Site Threat Damage Applications Help
Map
Text
Picture
Topo Map
Aerial
2D View
3D View
AT-Planner for Dams (AT/D)
AT-Planner for Dams (AT/D)
OK
Edit Section
Ready
Joint Anti-Terrorism / Force Protection Program Guide - Microsoft Internet Explorer
File Edit View Favorites Tools Help
JOINT
CHIEFS OF STAFF
JOINT ANTI-TERRORISM FORCE PROTECTION
ANTI-TERRORISM PROGRAM MANAGER'S GUIDE
SITE MAP
My Computer

● Navigation Lock
○ Concrete Gravity
○ Steel Gates
○ Concrete Gravity
○ Powerhouse
○ Concrete Gravity
○ Earthen and Rockfill Embankments

☑ Show Smaller Cross Section

Summary

- Portal will provide:
  - Features
    - Secure easy access
    - Collaboration tools (forum), Lite GIS, Content management, Automated retrieval of data
  - Documents and Data
    - Data for district projects (RAM-D reports, design documents, ATP-D data files, etc.)
    - Sources of data (ENGLink, DPN, Corps sites, NSDI clearinghouse nodes, etc.)
  - Tools
    - RAM-D, ATP-D, R&D tools, other security related tools



Questions ?