



Coast Guard Enterprise GIS

Presenter: Commander Lane Johnson

U.S. Coast Guard Headquarters
Operations Directorate
Office of Information Resources
Systems Management Division

Email: lane.d.johnson@uscg.mil



U.S. COAST GUARD



**Homeland
Security**



Coast Guard Enterprise GIS

- Initially developed to support the MISLE program
- Enterprise Design - Accessible to all CG users

Purpose: Provide GIS data and services to the Coast Guard for a multitude of missions

- Marine Safety
- Port Security
- Port Operations
- Environmental Response
- Incident Management
- Search and Rescue
- Port Intelligence (unclass)



U.S. COAST GUARD

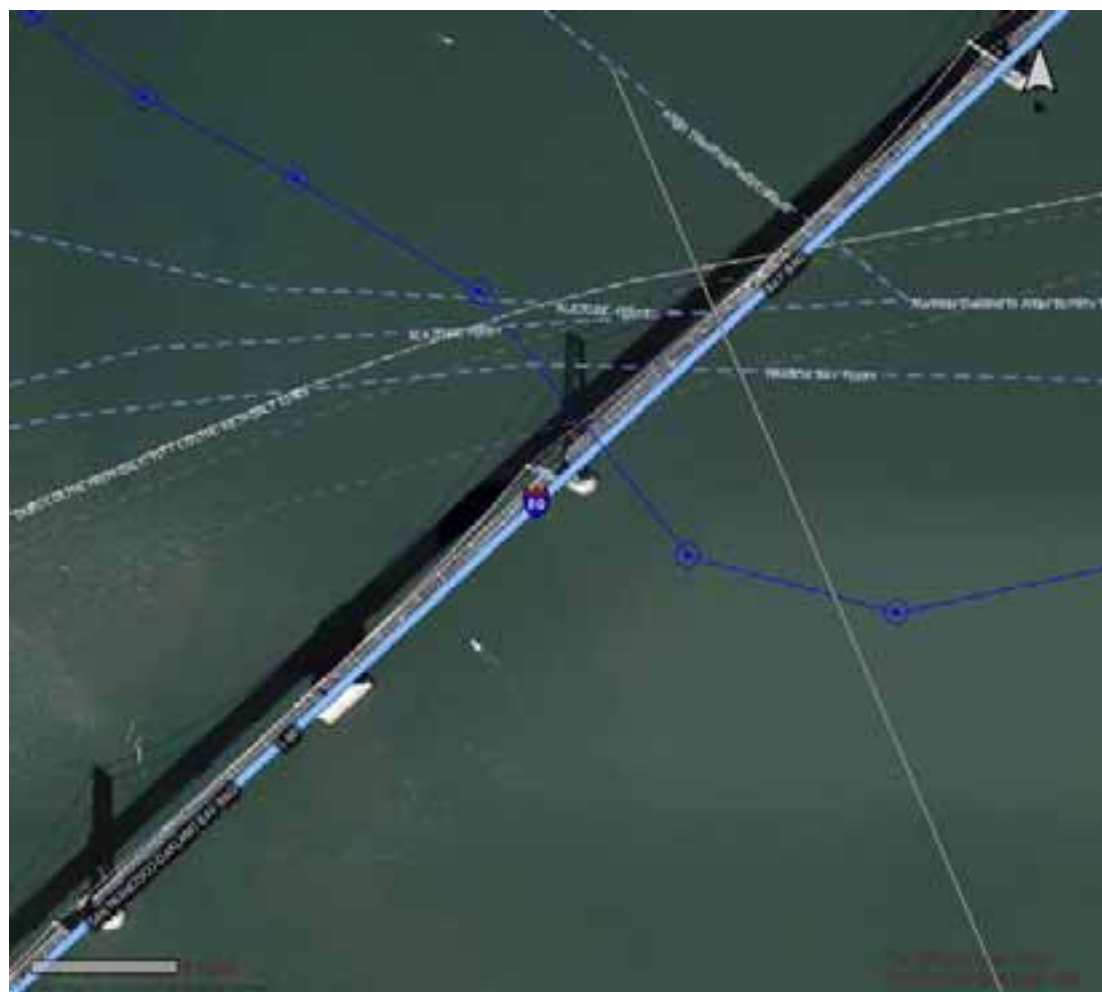


**Homeland
Security**



Marine Casualty Investigations

**M/V COSCO
BUSAN's
historic track data
showing
allision site at
Oakland Bay Bridge
resulting in
subsequent
discharge of
petroleum
into
San Francisco Bay –
aerial photography
overlay & navigation
shipping routes**



U.S. COAST GUARD

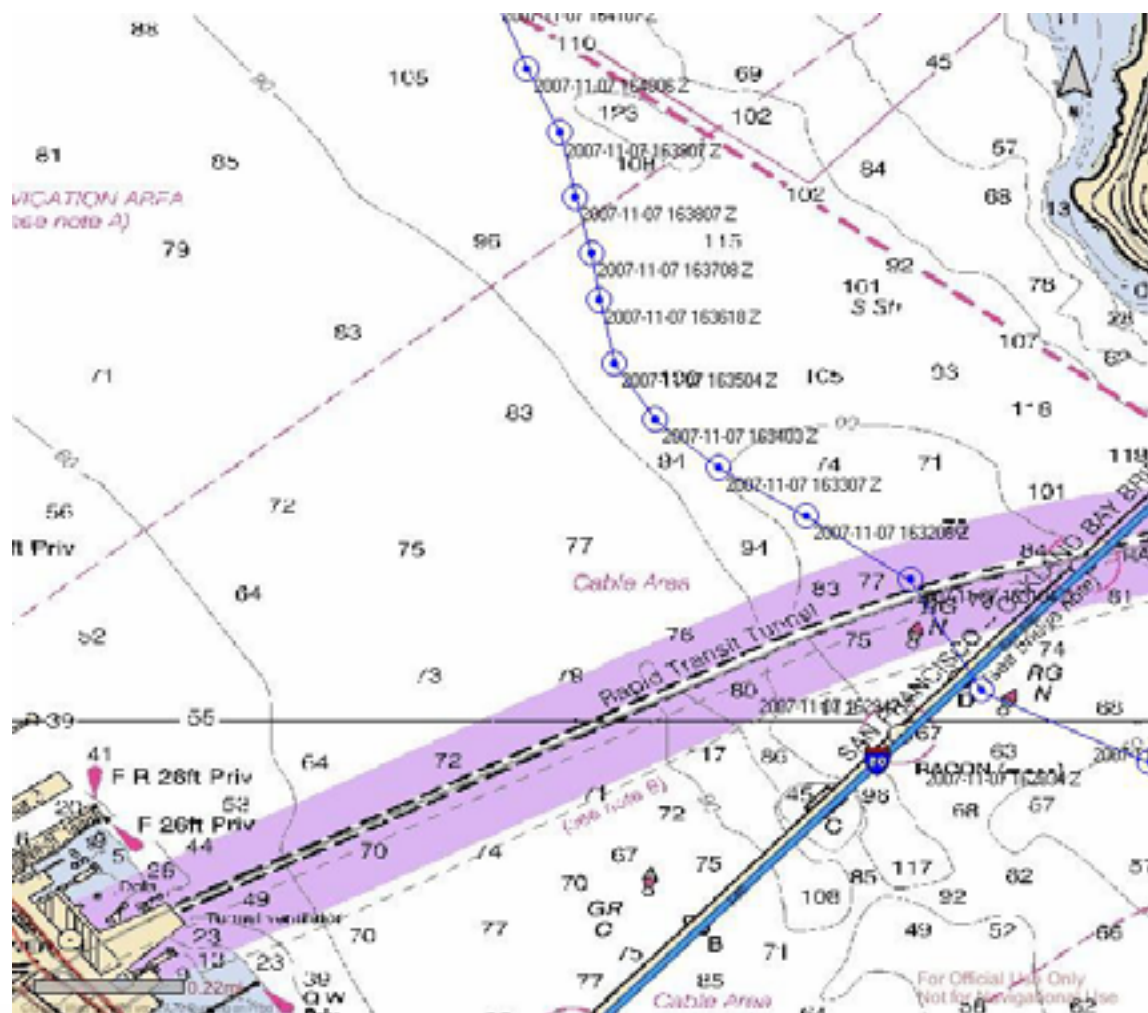


**Homeland
Security**



Marine Casualty Investigations

**M/V COSCO
BUSAN's
historic track data
showing
allision site at
Oakland Bay Bridge
over greater span of
time/distance –
includes raster
nautical chart
overlay & track point
data**



U.S. COAST GUARD



**Homeland
Security**



Coast Guard Enterprise GIS /S

- A web-enabled custom thin client, a UDOP (user defined operational picture)
- A Data Warehouse for static GIS data
 - Contains an extensive library of vector and raster data
 - Alleviates need for local storage and maintenance of large or common data sets
- Accessible to all Coast Guard users
- Sensitive but Unclassified (SBU)



U.S. COAST GUARD



**Homeland
Security**



Coast Guard Enterprise GIS *IS NOT*

- THE Common Operating Picture (COP) for the CG
- The CG's Command and Control system
- Available outside the Coast Guard Data Network
- The solution for all GIS needs in the Coast Guard



U.S. COAST GUARD



**Homeland
Security**



Enterprise GIS Custom Client

Client Requirements

- Web-enabled, thin client architecture
- Typical web client functionality ***plus***
 - Real-time editing capability
 - Ability to display all layers stored in data catalog
 - Extend Identify, Query, Filter, Draw, Find functions
 - Ability to connect to non-spatial GIS data sources
 - Briefing tool
- Enterprise design - Allow for multiple Coast Guard access points & customized views into the GIS client



U.S. COAST GUARD



**Homeland
Security**



Enterprise GIS Custom Client

Client Requirements

- Web-enabled, thin client architecture
- Typical web client functionality ***plus***
 - Real-time editing capability
 - Ability to display all layers stored in data catalog
 - Extend Identify, Query, Filter, Draw, Find functions
 - Ability to connect to non-spatial GIS data sources
 - Briefing tool
- Enterprise design - Allow for multiple Coast Guard access points & customized views into the GIS client



U.S. COAST GUARD



**Homeland
Security**



Enterprise GIS Architecture

- Custom client viewer
 - Developed using Visual Basic and Windows APIs
 - Deployed to users as an ActiveX control through IE
- Web/Map Servers
 - Microsoft IIS
 - ArcIMS 9 (High-availability configuration); ActiveX Connector
 - ArcIMS Image, Metadata, Geo-coding Services
- Data Servers
 - Microsoft SQL Server (Clustered)
 - ArcSDE 9 (SDE C-API adds real-time editing capability)



U.S. COAST GUARD



**Homeland
Security**



Future Architecture

- Custom client viewer
 - Develop using C#, .NET Framework, & ESRI Solutions
 - Deployment Method TBD
- Web/Map Servers
 - Microsoft IIS
 - ArcIMS 9.2, ArcGIS Server 9.2
 - ArcIMS Image, Metadata, Geo-coding Services; WMS
- Data Servers
 - Microsoft SQL Server (Clustered)
 - ArcSDE 9.2 (ArcGIS Server adds real-time editing capability)



U.S. COAST GUARD



**Homeland
Security**



Enterprise GIS Custom Client

Client Requirements

- Web-enabled, thin client architecture
- Typical web client functionality *plus*
 - Real-time editing capability
 - Ability to display all layers stored in data catalog
 - Extend Identify, Query, Filter, Draw, Find functions
 - Ability to connect to non-spatial GIS data sources
 - Briefing tool
- Enterprise design - Allow for multiple Coast Guard access points & customized views into the GIS client



U.S. COAST GUARD



**Homeland
Security**



Activity Type: **Incident Investigation** Activity Status: **Closed - Agency Action Complete** Status as of: **06/04/2002** [Change Status](#)

Activity No. **104081** [Team Lead](#) **MAG** [Transfer Activity](#)

Short Title: **MC93021328 NAVY KEYPORT SPILL** [Reports](#)

Incident Date: **11/25/1993** Prompt Date: **02/02/02**

Case No. **Not Attached to a Case** [Team Members](#)

Originating Unit: **MSD PugetSnd**
Activity Owner: **COMDT MRI**
Controlling Unit: **COMDT MRI**

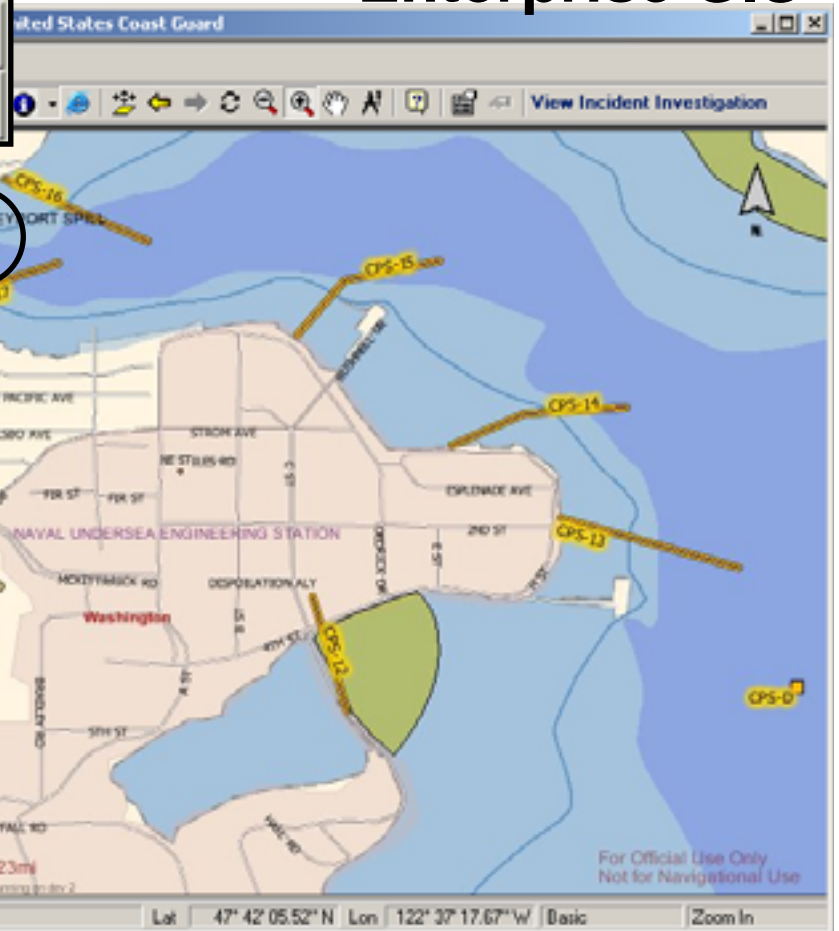
General	Results	Location(s)	Incident Brief
List of Location(s):			
Location Description	Latitude	Longitude	
KEYPORT, WA	47 42.29996 N	122 37.59996 W	

[GIS](#)

Involved Parties and Subjects	Activity Log
Findings of Fact	Evidence
Causal and Human Error Analysis	Enforcement Referral
Correspondence	Use of Force
Safety Recs	Return To Activity Finder

Enterprise GIS

MISLE





Enterprise GIS Custom Client

Client Requirements

- Web-enabled, thin client architecture
- Typical web client functionality *plus*
 - Real-time editing capability
 - Ability to display all layers stored in data catalog
 - Extend Identify, Query, Filter, Draw, Find functions
 - Ability to connect to non-spatial GIS data sources
 - Briefing tool
- Enterprise design - Allow for multiple Coast Guard access points & customized views into the GIS client



U.S. COAST GUARD



**Homeland
Security**

Marine Safety Network GIS - Microsoft Internet Explorer provided

File View Data MISLE Help

Data Catalog

Search GIS Data Catalog

Search Options

☐ Search in Current Map Extent

☒ Overlaps Extent ☐ Within Extent

Category:
Contingency and Response Plans

Keyword:
Booms

Search Catalog

Clear Fields

Catalog Search Results

Item Details

Show all info in dialog.

Name: Booms - WA

Coverage:

Category: Contingency and Res...

Available: Yes: Available as a U...

Layers

Data Catalog

Identif

Status Ready

Lat 47° 42' 20.95" N Lon 122° 37' 44.45" W Basic Zoom In

Search GIS Data Catalog

Search Options

☐ Search in Current Map Extent

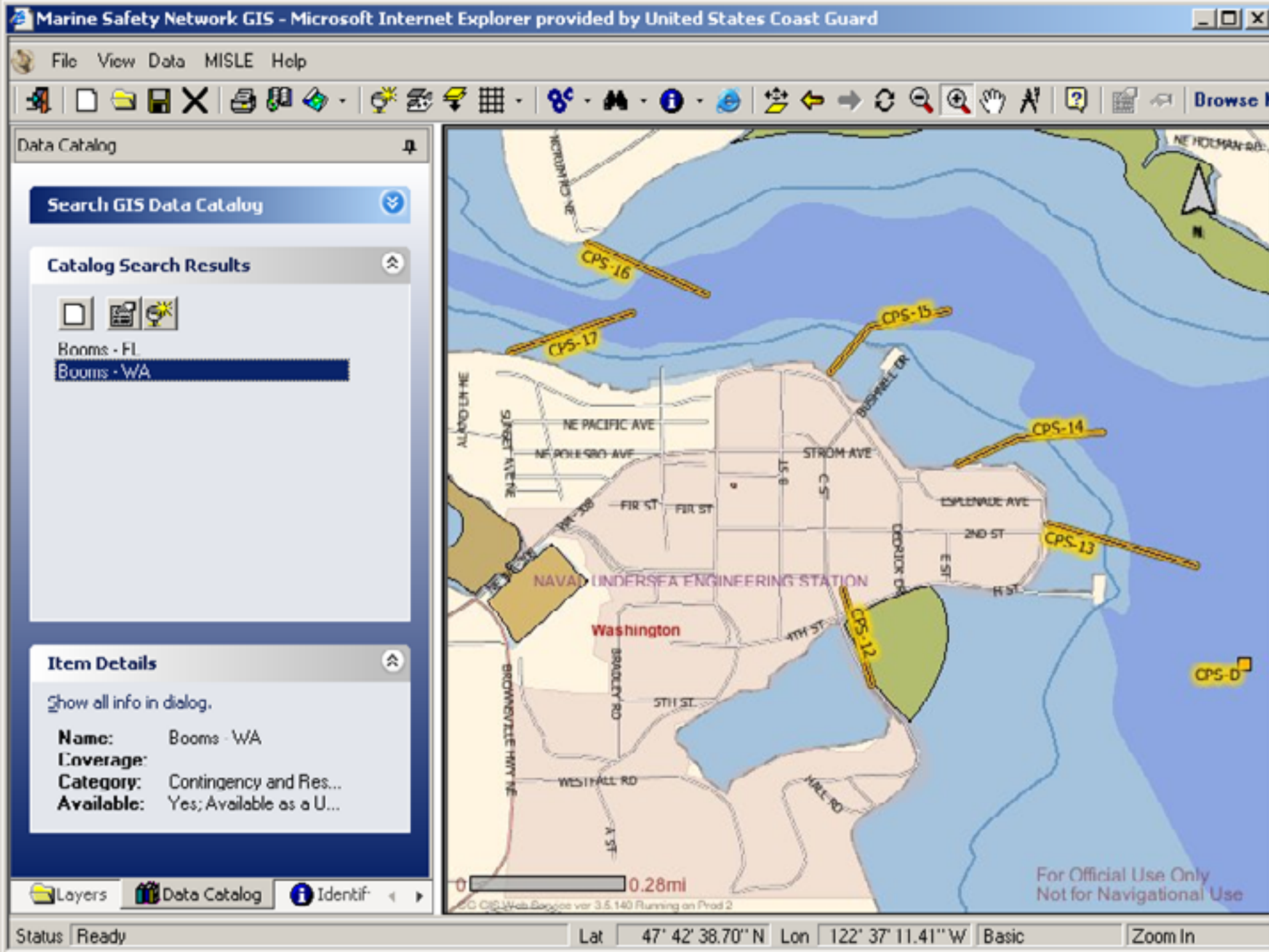
☒ Overlaps Extent ☐ Within Extent

Category:
Contingency and Response Plans

Keyword:
Booms

Search Catalog

Clear Fields





Enterprise GIS Custom Client

Client Requirements

- Web-enabled, thin client architecture
- Typical web client functionality *plus*
 - Real-time editing capability
 - Ability to display all layers stored in data catalog
 - Extend Identify, Query, Filter, Draw, Find functions
 - Ability to connect to non-spatial GIS data sources
 - Briefing tool
- Enterprise design - Allow for multiple Coast Guard access points & customized views into the GIS client



U.S. COAST GUARD



**Homeland
Security**

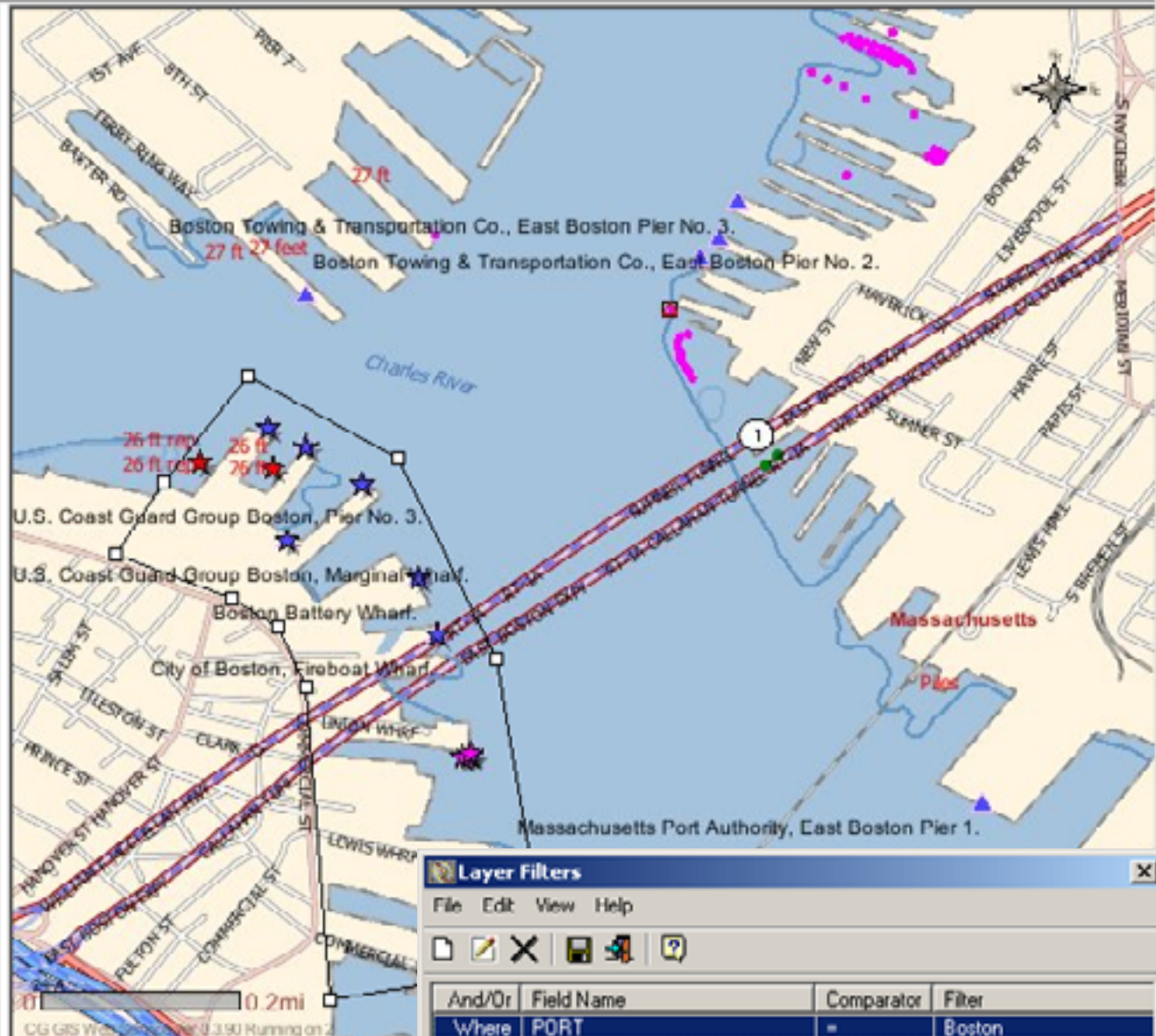
Identify

Identify Results

- Light Structures
- Caution Area Points
- Port Facilities
- Boston Battery Wharf.
- City of Boston, Fireboat Wharf.
- U.S. Coast Guard Group Boston, Marginal Wharf.
- U.S. Coast Guard Group Boston, Pier No. 3.
- U.S. Coast Guard Group Boston, Pier No. 2.
- U.S. Coast Guard Group Boston, Pier No. 1.

Item Details

Field	Value
NAME	Boston Battery Wharf.
LOCATION	Westerly shore, Boston
ADDRESS	379-395 Commercial St
COUNTY	Suffolk
TOWN	Boston
STATE	MA
WTRWY	Boston Inner Harbor
PORT	Boston
MILE	
BANK	
LATITUDE	42.3675
LONGITUDE	-71.049444
OPI	Bay State Lobster Co.
OWNER	Angelo J., James R., J.
PURPOSE	Receipt of seafood m



Layer Filters

And/Or	Field Name	Comparator	Filter
Where	PORT	=	Boston

Д

Geographic Features

Cape Blanco Lighthouse

Physical and cultural features within the United States and its territories. Feature types include: Coast Guard stations, beaches, docks, ferries, landings, lights, lighthouses, marinas, piers, and wharves (ex: Point Reyes Lighthouse).

Map Location

Clear Fields



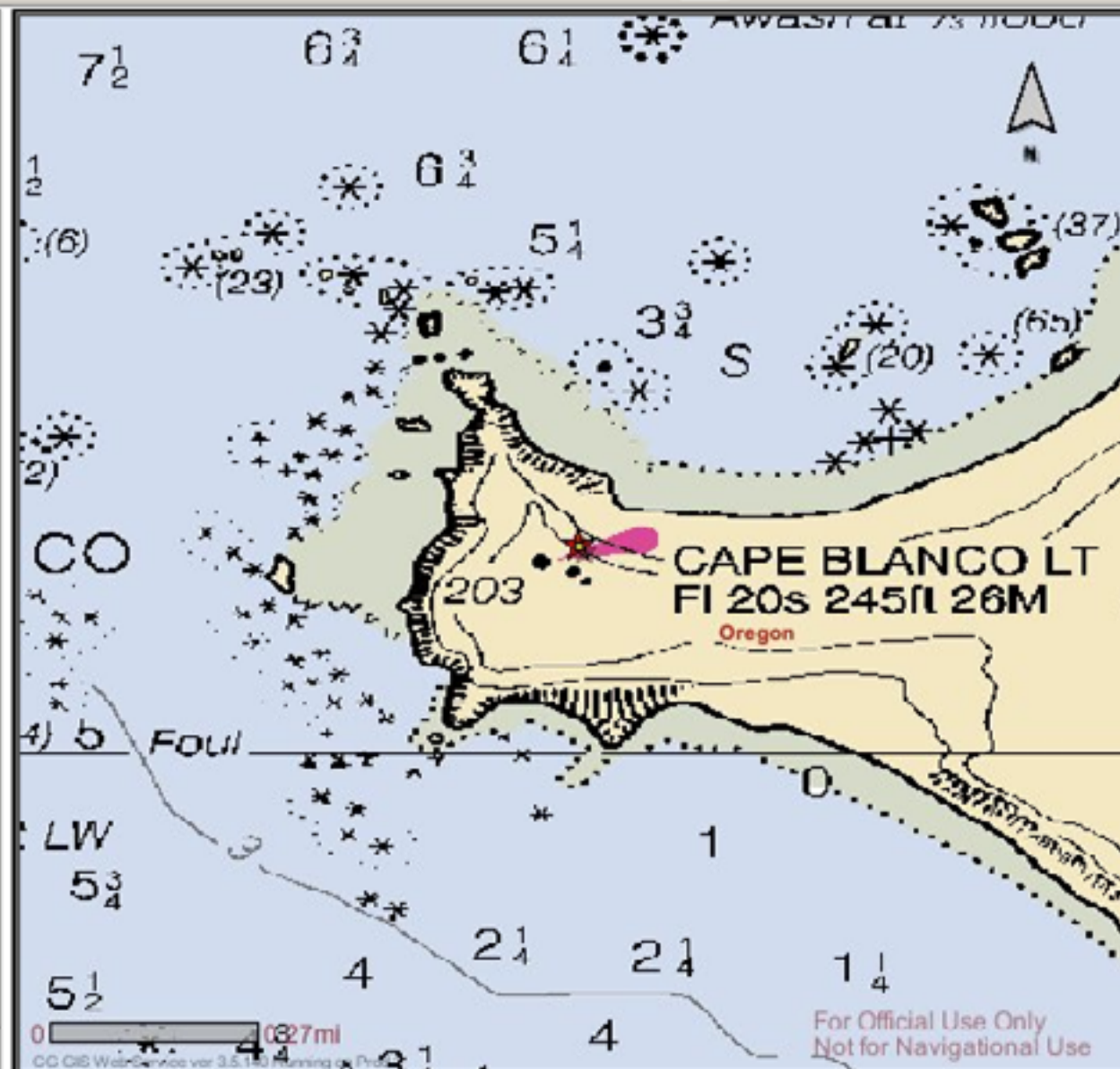
Cape Blanco Lighthouse

 Draw
 Locate
 Database

Status Ready

Lat	42° 50' 11.12" N	Lon	124° 33' 10.56" W	NOAA Charts	Zoom In
-----	------------------	-----	-------------------	-------------	---------

For Official Use Only
Not for Navigational Use





Enterprise GIS Custom Client

Client Requirements

- Web-enabled, thin client architecture
- Typical web client functionality *plus*
 - Real-time editing capability
 - Ability to display all layers stored in data catalog
 - Extend Identify, Query, Filter, Draw, Find functions
 - Ability to connect to non-spatial GIS data sources
 - Briefing tool
- Enterprise design - Allow for multiple Coast Guard access points & customized views into the GIS client

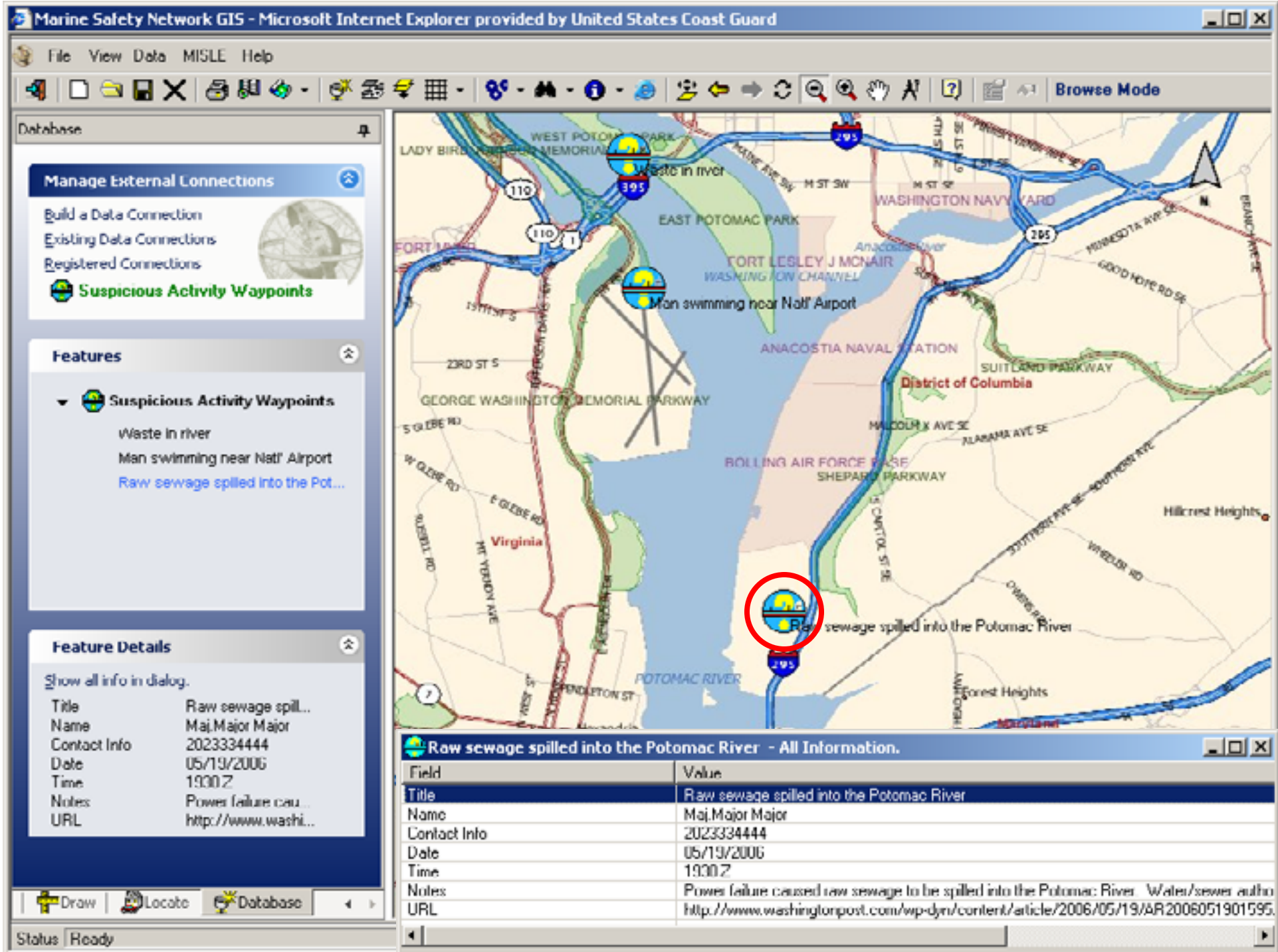


U.S. COAST GUARD



**Homeland
Security**

ID	Title	Name	Contact Info	Date	Time	Notes	URL	Latitude	Longitude
1	Waste in river	John Doe		4/13/2006	0400 Z	Caller observed person throw waste (oil?) into Potomac near tidal basin		38.88	-77.0405
2	Man swimming near Natl' Airport	Norman Conquest	(202) 111-2222	4/13/2006	0630 Z	Man observed swimming around Reagan Natl' Airport boundary. Caller thinks it was a fraternity prank		38.8628	-77.03855
3	Debris from bridge		(703) 222-3333	4/14/2006	0200 Z	Caller observed debris falling off the I-66 bridge (tire?). Said it appeared to be tossed by an individual		38.8924	-77.05829
4	Raw sewage spilled into the Potomac River	Maj. Major Major	(202) 333-4444	5/19/2006	1930 Z	Power failure caused raw sewage to be spilled into the Potomac River. Water/sewer authority suspects disgruntled employee may have sabotaged.	http://www.washingtonpost.com/wp-dyn/content/article/2006/05/19/AR2006051901595.html	38.8207	-77.02054




Marine Safety Network GIS - Microsoft Internet Explorer provide

UNCLASSIFIED

File Edit View Favorites Tools Help

Address <http://images.wsdot.wa.gov/> Go Links

U.S. COAST GUARD Type in a keyword



Done Internet

Feature Details

Show all info in dialog.

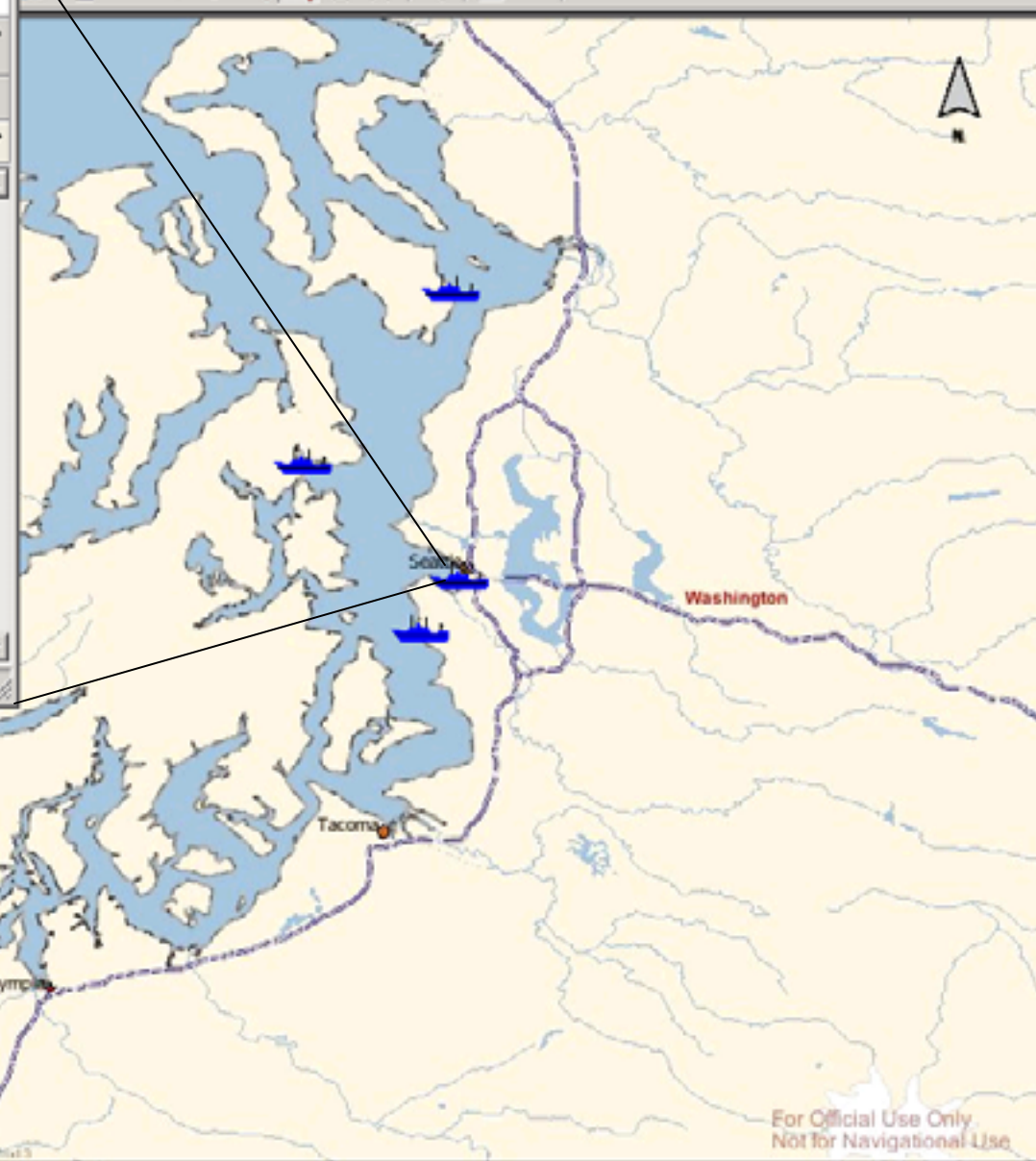
ID	4
Name	Fauntleroy Ferry
URL	http://images.wsd...

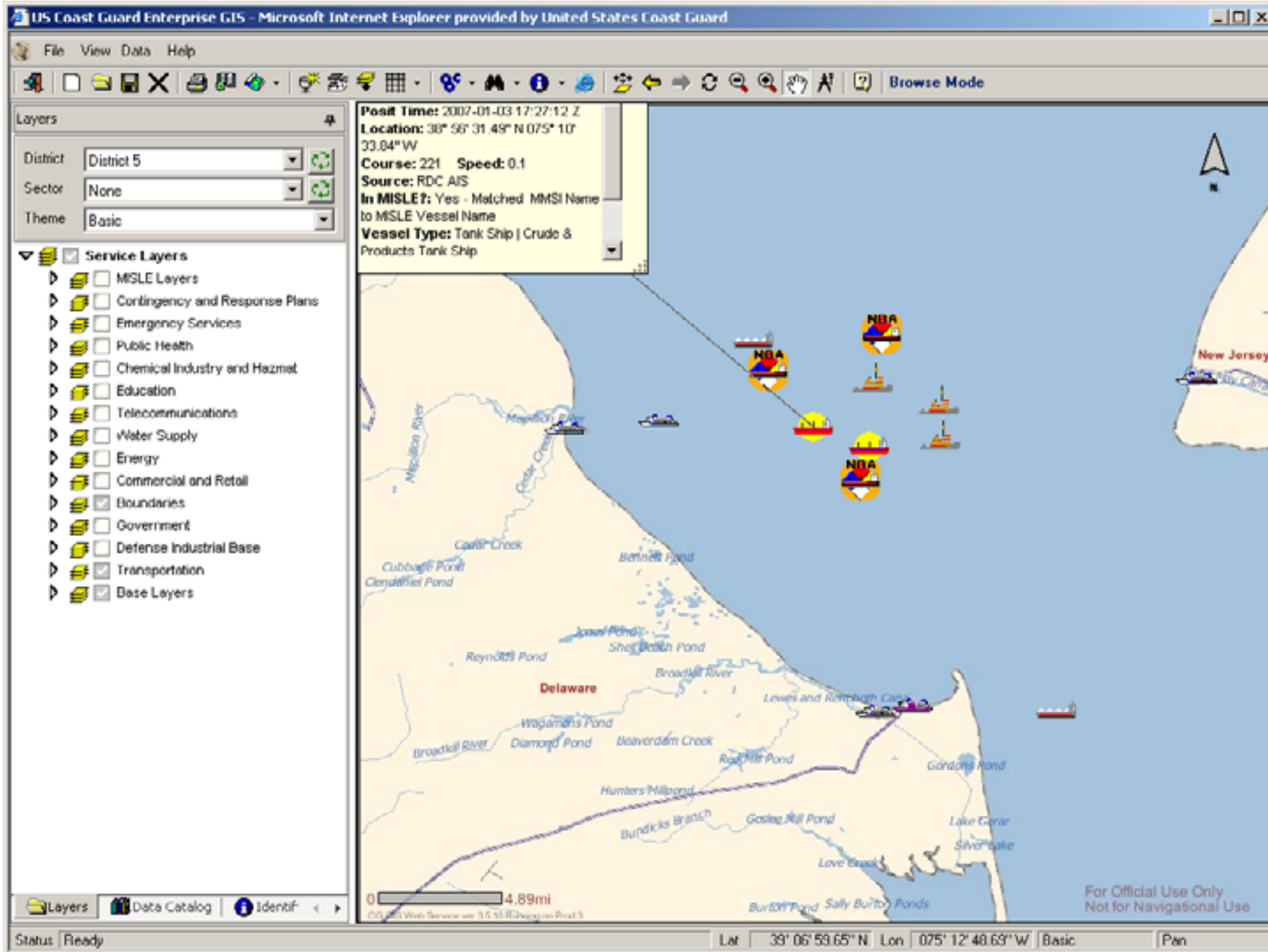
Database Vessel Tracking Pre

Status Ready

Lat 47° 06' 11.10" N Lon 122° 28' 55.76" W Basic Zoom In

Start Inbox - Microsoft ... RE: The Facility Se... Marine Safety Net... Marine Safety Net... <http://images.wsd...> <http://images.w...> Links 9:51 AM









Enterprise GIS Custom Client

Client Requirements

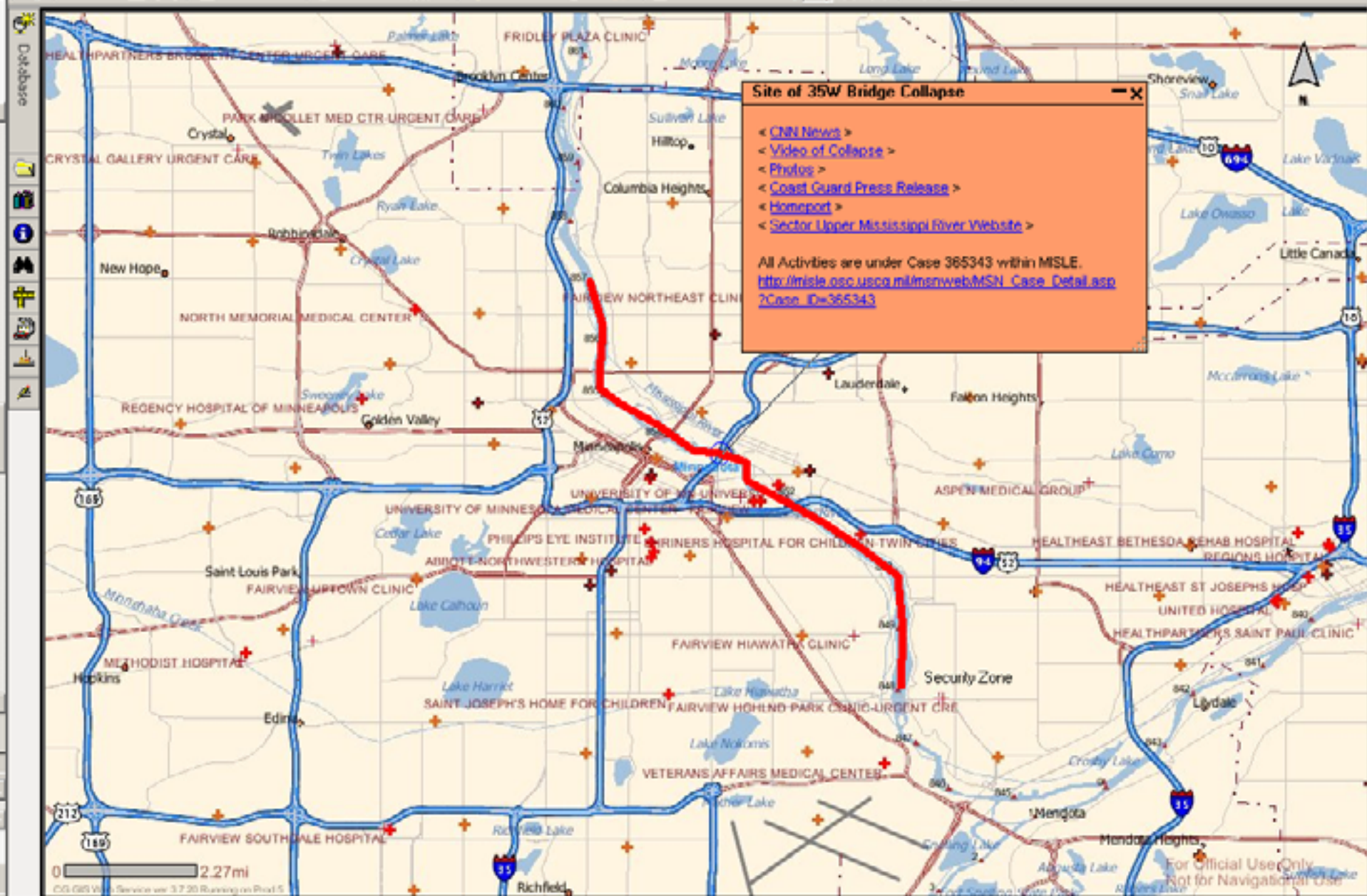
- Web-enabled, thin client architecture
- Typical web client functionality ***plus***
 - Real-time editing capability
 - Ability to display all layers stored in data catalog
 - Extend Identify, Query, Filter, Draw, Find functions
 - Ability to connect to non-spatial GIS data sources
 - Briefing tool
- Enterprise design - Allow for multiple Coast Guard access points & customized views into the GIS client



U.S. COAST GUARD



**Homeland
Security**



File View Data MISLE Help

Presentation

Manage

Existing P
35w/ Bric
Barge Fir
Buona M
Golden G
sector be
Save Curr
Create LI

Create F

Feature

Profiles

Title: MS Irregular Navigation Incident/ 00 00.0 S 000 00.0 W INTERSTATE 35
BRIDGE/011910ZJUG07

Originating Unit: SEC UpperMissRvr 365343

Case Owner: SEC UpperMissRvr

Controlling Unit: SEC UpperMissRvr

Opened By: Coffman, Joel A.

Date Opened: 08/01/2007 9:30:35 PM

Status: Open - In Progress as of: --

Description: [NRC INCIDENT DESCRIPTION] [REPORT TAKEN BY: MST2]

Spell Check: ALLISON[INCIDENT TYPE: F&ED][INCIDENT CAUS (See Notification Incident Description)]

Current Narrative: There are currently no narratives for this case.

Add Narrative

View Narratives

Incident Type: MS Irregular Navigation Incident SMC/IC: District 8

Classification: Mission Area Class OPSUM Status: Case Pends

Mission Area: Maritime Security (Actual) Major

Search and Rescue (SAR) Major

Activities in Case MISLE Notifications NRC Notifications Resources Results Primary Location

Activity ID	Unit	Init.	Activity Type	Resources	Vessels
3014916	Sector Upper M...		Incident Management		
3014922	District 9 (dr)		Incident Management		
3014933	Sector Lake Mi...		Incident Management		
3014939	Atlantic Area		Incident Management		
3014966	District 8 (dr)		Incident Management		
3014992	Sector Upper M...		Resource Sortie	MSD ST PAUL RBS	
3014995	Sector Upper M...		Resource Sortie		
3014998	Sector Upper M...		Resource Sortie	AUX 111	
3014999	Sector Upper M...		Resource Sortie	AUX 103	
3015023	Sector Sault St...		Incident Management		
3015280	Sector Upper M...		Resource Sortie	CG AUX 111	
3015287	Sector Upper M...		Resource Sortie		

Create New Activity Add Existing Activity to Case Remove Activity from Case Open Activity

Case Finder Edit Save SITREP Case History Case Log Case Timeline Home Help

Status: Ready

Lat: 44° 57' 49.92" N Lon: 093° 17' 01.04" W Basic Zoom In



List of Open Cases for Commandant (CG-385):

- ☐ Case #366884 -
- ☐ Case #346384 -
- ☐ Case #320181 -
- ☐ Case #282618 -
- ☐ Case #269532 - SAR Flare (Red/Orange)/ APPROXIMATELY 400FT OFF SHORE OF DUNKIRK/160100ZDEC05
- ☐ Case #268500 -

☒ Unit ☐ Unit Group Commandant (CG-385) Refresh ☐ Show Cases with open IMAs only ☐ Hide

Add Entry to Timeline

Activity: **3014916** Action Type: **Response Communication** Date/Time: ☐ Exclude from SITREP

Message:

☐ Hide

Activity Type: **Incident Management** Activity Status: **Closed - Agency Action Complete** Status as of: **09/07/2007** Change Status

Activity No. **3014916** Activity Title: **MS Irregular Navigation Incident/ 00 00.0 S 000 00** Transfer Activity

MISLE Case#: **365343** Create Incident Action Plan Activity

Incident Type: **MS: Irregular Navigation Incident** Originating Unit: **SEC UpperMissRvr**

Activity Start Date/Time: **01 21 30 Z AUG 07** SMC: **District 8** Activity Owner: **SEC UpperMissRvr**

Controlling Unit: **SEC UpperMissRvr**

QRC **Timeline** **Sortes** **Checksheets**

Sort By: ☒ Date ☒ Ascending ☐ Descending ☐ Unit View Entries For: ☒ Just this Activity ☐ All Activities in the Case

	Start Date/Time	Unit	Action Type	Message	Location	Subject Name	Details Filed
<input type="checkbox"/>	012118Z AUG 07	SEC UpperMis:	Response Communication	Initial Notification - NRC INCIDENT DESCRIPTION		ALLISON, MST2	Notification
<input type="checkbox"/>	012332Z AUG 07	SEC UpperMis:	Response Communication	Rcvd call from AUX Weinstein rptg that he was watching FOX News and that he was seeing rptg of the collapse the		<no subject>	
<input type="checkbox"/>	012345Z AUG 07	SEC UpperMis:	Response Communication	MSD St. Paul I/O rptg that a reserve boat crew has been recalled and a 25' RBS should be getting u/w in aprox 1		<no subject>	
<input type="checkbox"/>	012349Z AUG 07	SEC	Response	Sector CC initiated CIC conference call		<no subject>	



Security

FOR IMMEDIATE RELEASE

Office of External Affairs
U.S. Coast Guard

U.S. Department of
Homeland Security
**United States
Coast Guard**



Date: August 1, 2007

Contact: Lt. j.g. Anastacia Visneski
(618) 610-6855

Press Release

COAST GUARD RESPONDS TO MINNESOTA INTERSTATE BRIDGE COLLAPSE

MINNEAPOLIS - The Coast Guard is responding to the Interstate 35 bridge collapse in Minneapolis, today to assist local fire and police departments, emergency medical services and the state emergency operations center with search and rescue operations.

A 25-foot smallboat crew from the Marine Safety Detachment from St. Paul, Minn., is on scene. An HH-65C Rescue Helicopter crew from Coast Guard Air Station Traverse City, Mich., along with and the Coast Guard Auxiliary in St. Paul, Minn., have been deployed to the scene to conduct search and rescue operations.

Due to the bridge collapse, the Mississippi River has been closed between mile markers 848 to 857.

All media inquiries concerning Coast Guard operations should be directed to Lt. j.g. Anastacia Visneski at (618) 610-6855.

####

U.S. Coast Guard, Saving Lives Since 1790



For Official Use Only
Not for Navigational Use

PRIDE OF AMERICA

AIS Number: 366994450
Post Time: 2007-09-21 13:15:28 Z
Location: 21° 57' 14.04" N 159° 21' 27.21" W
Course: 254 Speed: 0
Source: RDC AIS
In MISLE?: Yes - Matched to MISLE using AIS VIN: 9209221
Vessel Type: Passenger Ship | General (More Than 12, Gross Tonnage >= 100)
Next Port: ,
Facility:
CDC:
PSC Matrix Score:

LE Commercial Vessel Safety

< <http://www.uscgohawaii.com/go/doc/800/171381/> >
< <http://www.uscgohawaii.com/go/doc/800/171091/> >
>< www.uscgohawaii.com/go/doc/800/170701/ >
< http://www.usatoday.com/travel/news/2007-08-27-hawaii-superterry_N.htm >

0 0.59mi

CG GIS Web Service ver 3.6.20 Running on Prod 3

For Official Use Only
Not for Navigational Use



Enterprise GIS Custom Client

Client Requirements

- Web-enabled, thin client architecture
- Typical web client functionality ***plus***
 - Real-time editing capability
 - Ability to display all layers stored in data catalog
 - Extend Identify, Query, Filter, Draw, Find functions
 - Ability to connect to non-spatial GIS data sources
 - Briefing tool
- Enterprise design - Allow for multiple Coast Guard access points & customized views into the GIS client



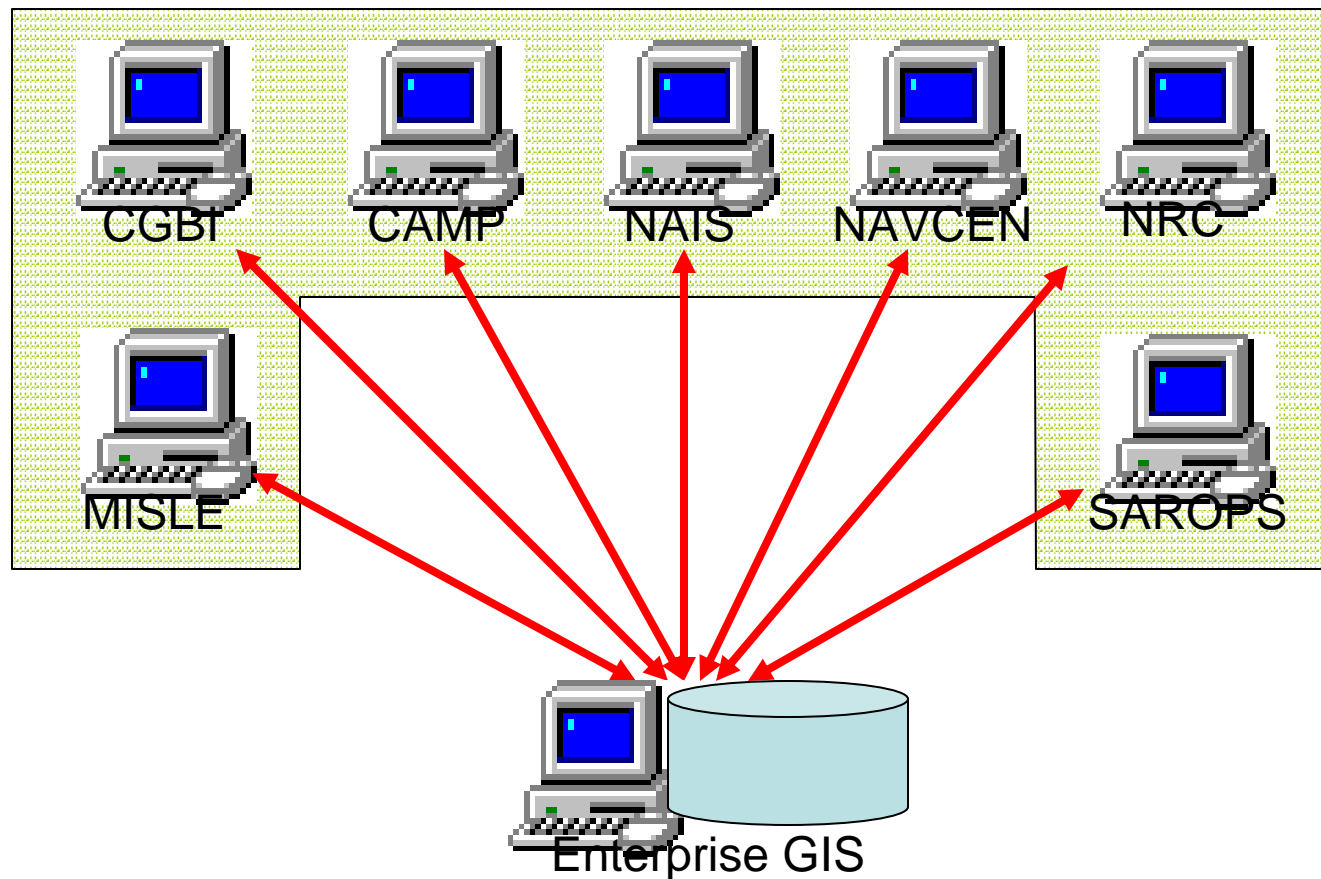
U.S. COAST GUARD



**Homeland
Security**



Programs Interfacing with Enterprise GIS



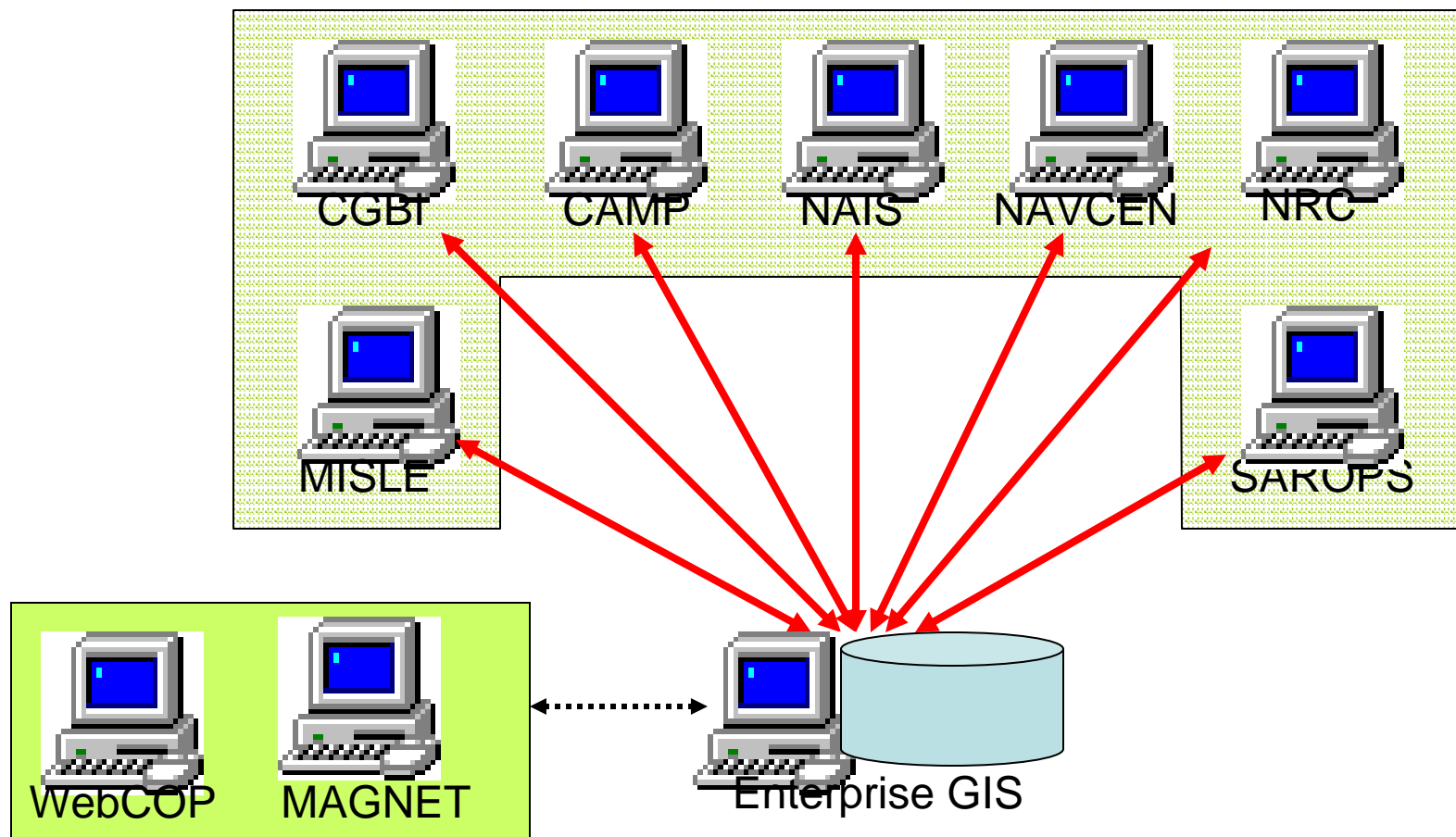
U.S. COAST GUARD



**Homeland
Security**



Programs Interfacing with Enterprise GIS



U.S. COAST GUARD



**Homeland
Security**



Activity Type: **Boarding** Activity Status: **Open - In Progress**

Activity No: 3000517 Status Date: 06/29/2004 Originating Unit: CG OSC

Activity Title/Description: Boarding of HMS GIS Test Activity Owner: CG OSC

Activity Start Date/Time: 06/29/2004 14:40 POC: Postscript Date: Controlling Unit: CG OSC

Team Lead: Lakey, Mike Subject: **ABBY MAR** ID: 1096316

Case No: Not Attached to a Case

Buttons: Transfer Activity, Change Vessel, Change Status

Icons: Operational Controls, Class/Group Membership, Vessel Details, Parties, Documentation/Certificates, Special Notes, Activity Log, Team Members

Use of Force, Refer to Enforcement, Print Summary

Location Description	Latitude	Longitude	Date/Time
HMS GIS Test	28 24.0144 N	080 27.6108 W	2004/06/29 14:40

Buttons: Add Facility, Add Waterway, Add Geo Location, Remove Location

Enterprise GIS

MISLE –
Marine
Information
for Safety and
Law
Enforcement



U.S. COAST GUARD

Layers: Activities

Selected MISLE Data

Identify Results

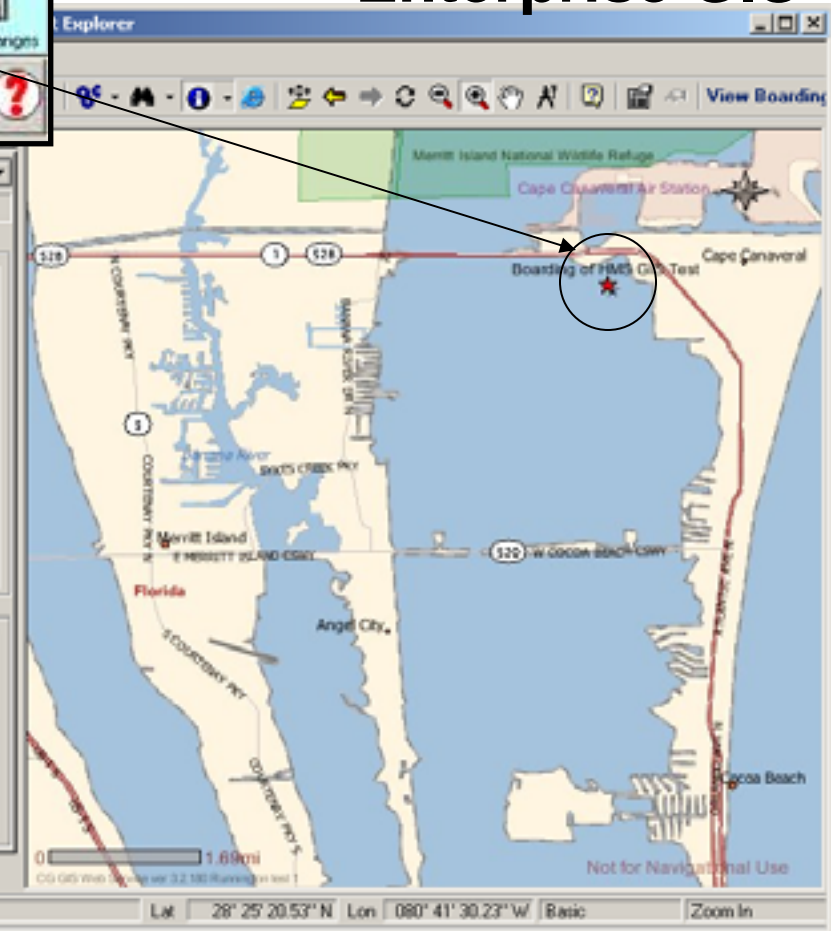
- Activities
- Boarding of HMS GIS Test

Item Details

Field	Value
Activity_Id	3000517
Activity_Type	Boarding
Title	Boarding of HM...
Activity_Status	Open - In Progre...
Status_Date	06/29/2004 2...
Start_Date	06/29/2004 2...
End_Date	NULL
Unit_Or_Origin	CG OSC

Buttons: Display, Legend, Identify, EZ Reports

Status: Ready



CG Business Intelligence



The screenshot displays the CG Business Intelligence web application. The main map shows the state of Hawaii with labels for 'PUU O MAHUKA HEI'U STATE MONUMENT', 'Hawaii', 'CG COMMSTA HONOLULU', and 'CG MSO HONOLULU'. A sidebar on the left contains an 'Identify' panel with a tree view showing 'Maine Safety' and 'Comm Stations', with 'CG MSO HONOLULU' selected. Below this is an 'Item Details' table. The right sidebar shows 'CG MSO' with a 'DEPARTMENT PEOPLE' section containing various metrics and a 'DEPARTMENT TRAINING' section with links for tasks, competencies, and training. The bottom status bar shows 'Status: Ready' and coordinates 'Lat: 21° 42' 01.71" N Lon: 157° 50' 00.00" W'.

Identify Results

- Maine Safety
 - CG MSO HONOLULU
- Comm Stations
 - CG COMMSTA HONOLULU

Item Details

Field	Value
STATUS	M
SCORE	100
ARC_ZIP	96813
ORG_DEPTID	000116
ORG_DEPT_N	CG MSO HONOLULU
ORG_ADDRES	433 ALA MOANA BLVD PI
ORG_CITY	HONOLULU
ORG_STATE	HI
ORG_ZIPCOD	96813
ORG_COUNTR	USA

CG MSO

DEPARTMENT PEOPLE

Employee Count:
Position Count:
Allowance Fill:
Position Fill:
Quality of Match:
Time in Service*:
Time in Grade*:
Time in Position*:
Time at Unit Type*:
Sea Time*:
Dental Deployable:
Physical Compliance:
Currently Weighed:
Turnover:
* = Average Years

[Bottom to Top](#)

DEPARTMENT TRAINING

Tasks
[Sort by Unit](#)
[Sort by Current Status](#)

Competencies
[With Direct Access Qualified](#)
[Without Direct Access Qualified](#)

Training
[Sorted by Unit](#)
[Sorted by Course](#)

Military Outload Homeland Security
CPRE Competencies - no data available

Status: Ready Lat: 21° 42' 01.71" N Lon: 157° 50' 00.00" W

Capital Asset Management Portal



US Coast Guard Enterprise GIS - Microsoft Internet Explorer provided by United States Coast Guard

File View Data Help

Identify

Identify Results

Unit Locations

OPERATIONS SYSTEMS CENTER (OSC)

Item Details

Field	Value
UNIT_ID	4204
PARENT_ID	3970
ATU	49
OPFAC	52301
OPFAC_MOD	
NAME	OPERATIONS ...
SHORTNAME	OSC
UNITTYPE	OSC
SDL_SECTION	8 p
PHONE	(304) 264-2552
ADDRESS1	408 Coast Guar...
ADDRESS2	
CITY	Kearneysville
STATE	WV
POSTALCODE	25430
COUNTRY	
CONGRESSIO	WV02
STATUS	Active

Identify EZ Reports Draw

Status Ready

U.S. Coast Guard
CG Capital Asset Management Portal
U.S. Department of Homeland Security

Hurricane ER What's New RDAC SAM GIS CG-TDM

USCG \HQ \OSC

Notice: Project and property information now pulled from SAM. Read our [CAMP/SAM Info](#)
Viewing project and property data for OPERATIONS SYSTEMS CENTER (OSC)

Assets Projects Documents Applications Contacts

Map Layers Imagery

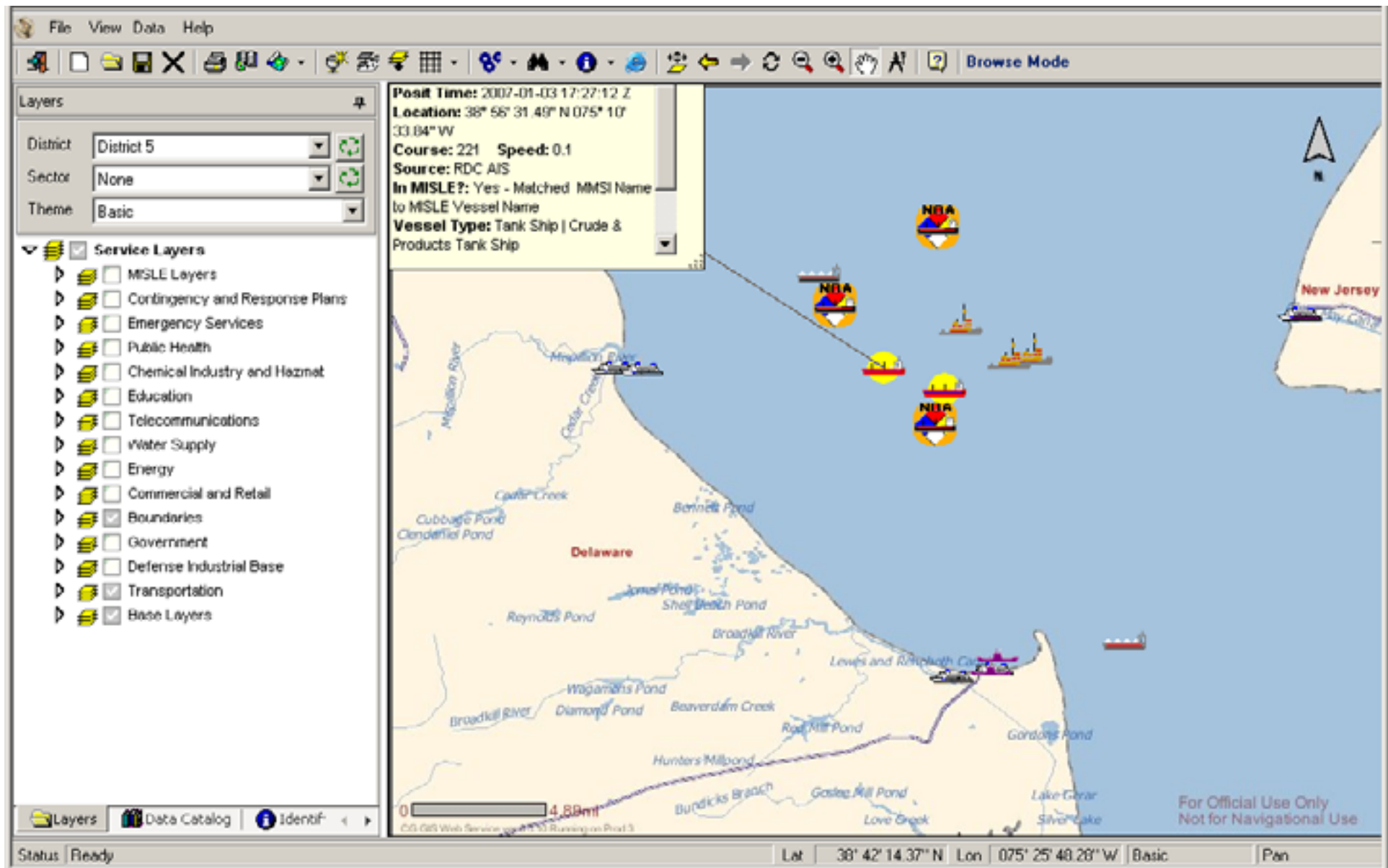
0 12.33mi

CG GIS Web Service ver 3.5.10 Running on Arc 3

Lat 39° 38' 17.74" N Lon 078° 01' 57.16" W Basic Zoom In

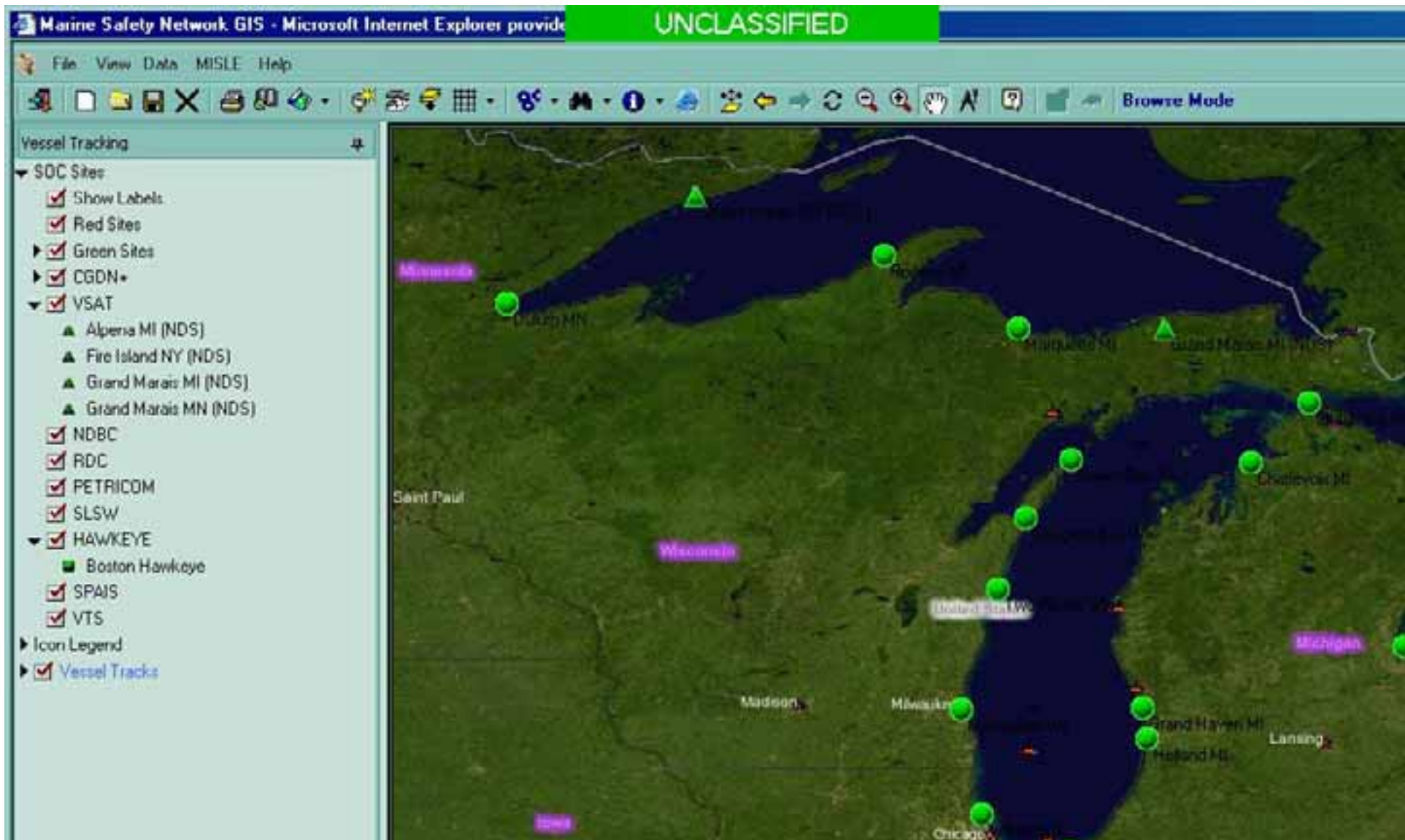
land
ty

NAIS





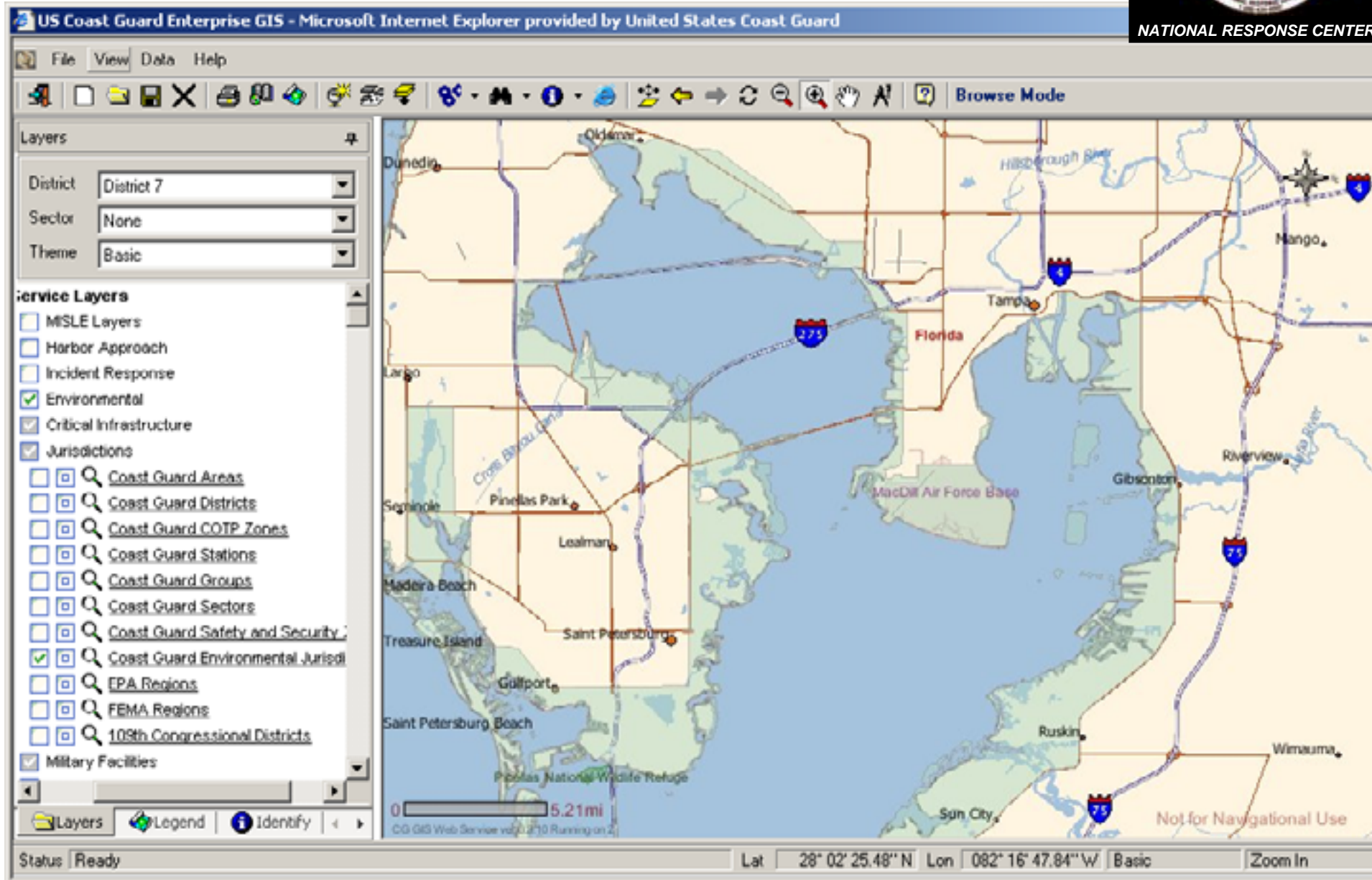
NAVCEN's SOCMON



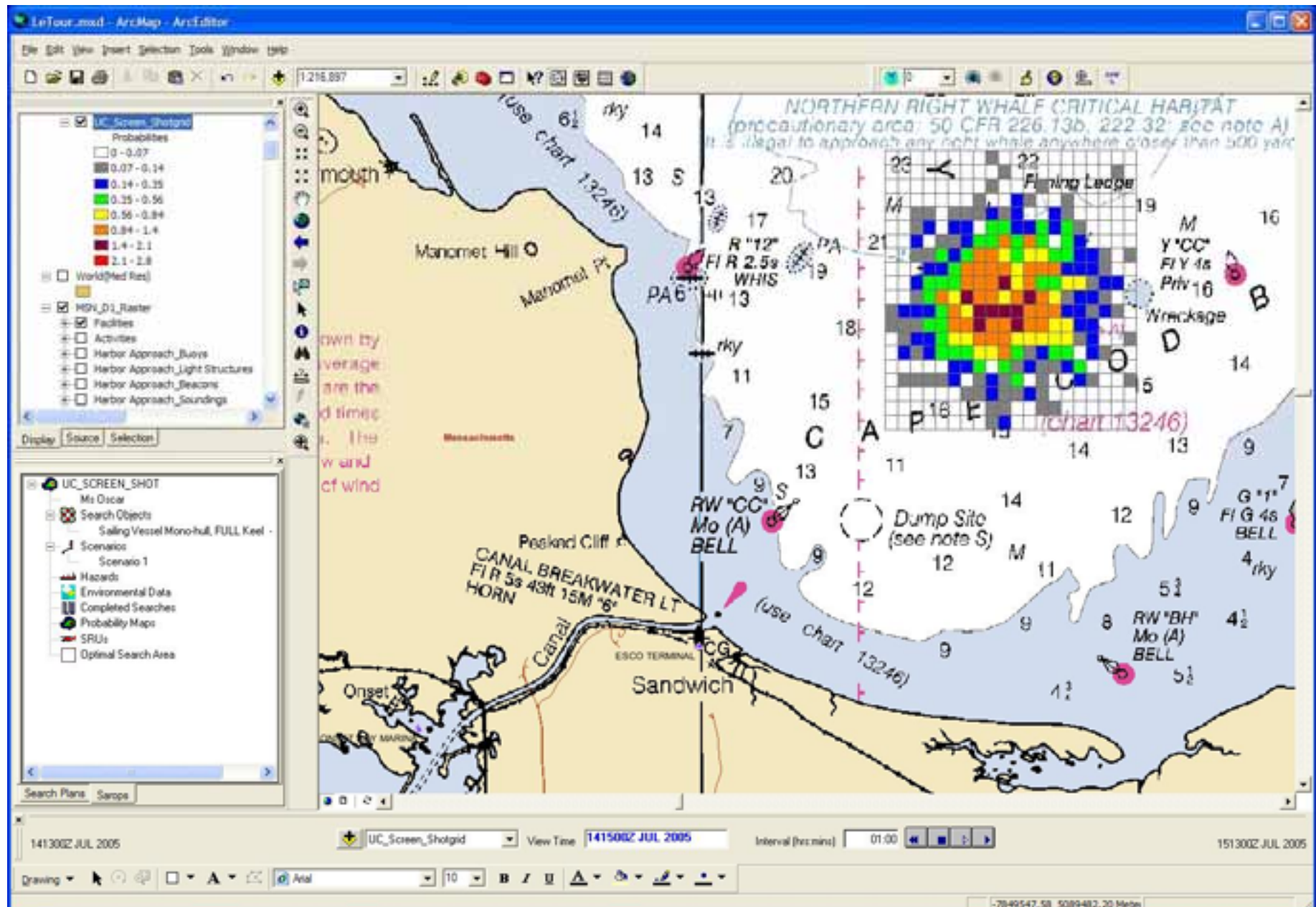
National Response Center



NATIONAL RESPONSE CENTER



SAROPS





Enterprise GIS Data Warehouse

National Data Coverage

- Relevant vector data sets from federal government and industry providers
 - **Focus: Homeland Security Infrastructure Program (HSIP) vector data sets**
- Coast Guard data
 - Jurisdictional/CFR data
 - Program-specific data
- NOAA Raster Nautical Charts
- Aerial Imagery



U.S. COAST GUARD



**Homeland
Security**



Enterprise GIS Data Warehouse

National Data Coverage

- Relevant vector data sets from federal government and industry providers
 - Focus: Homeland Security Infrastructure Program (HSIP) vector data sets
- Coast Guard data
 - Jurisdictional/CFR data
 - Program-specific data
- NOAA Raster Nautical Charts
- Aerial Imagery

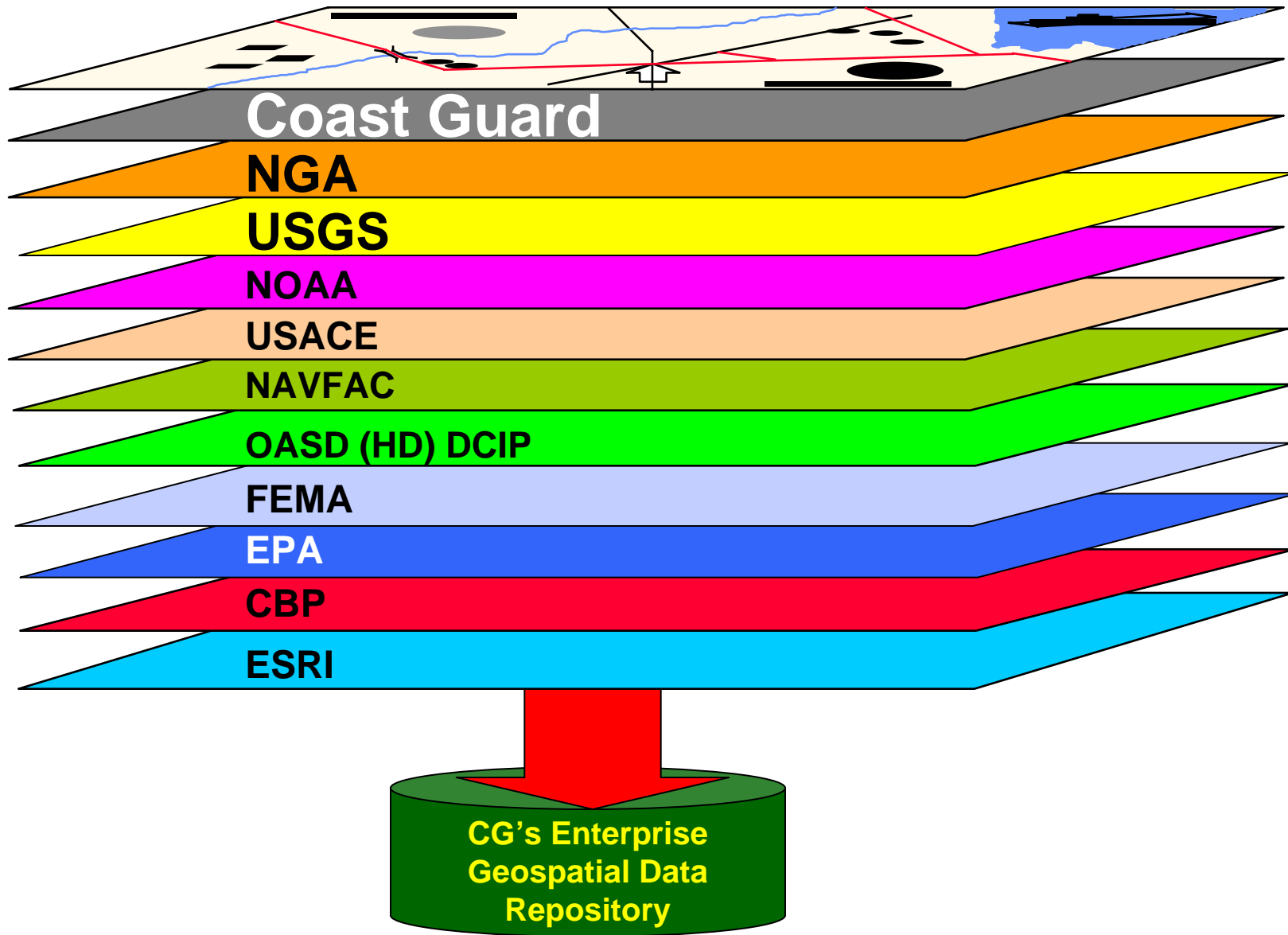


U.S. COAST GUARD



**Homeland
Security**

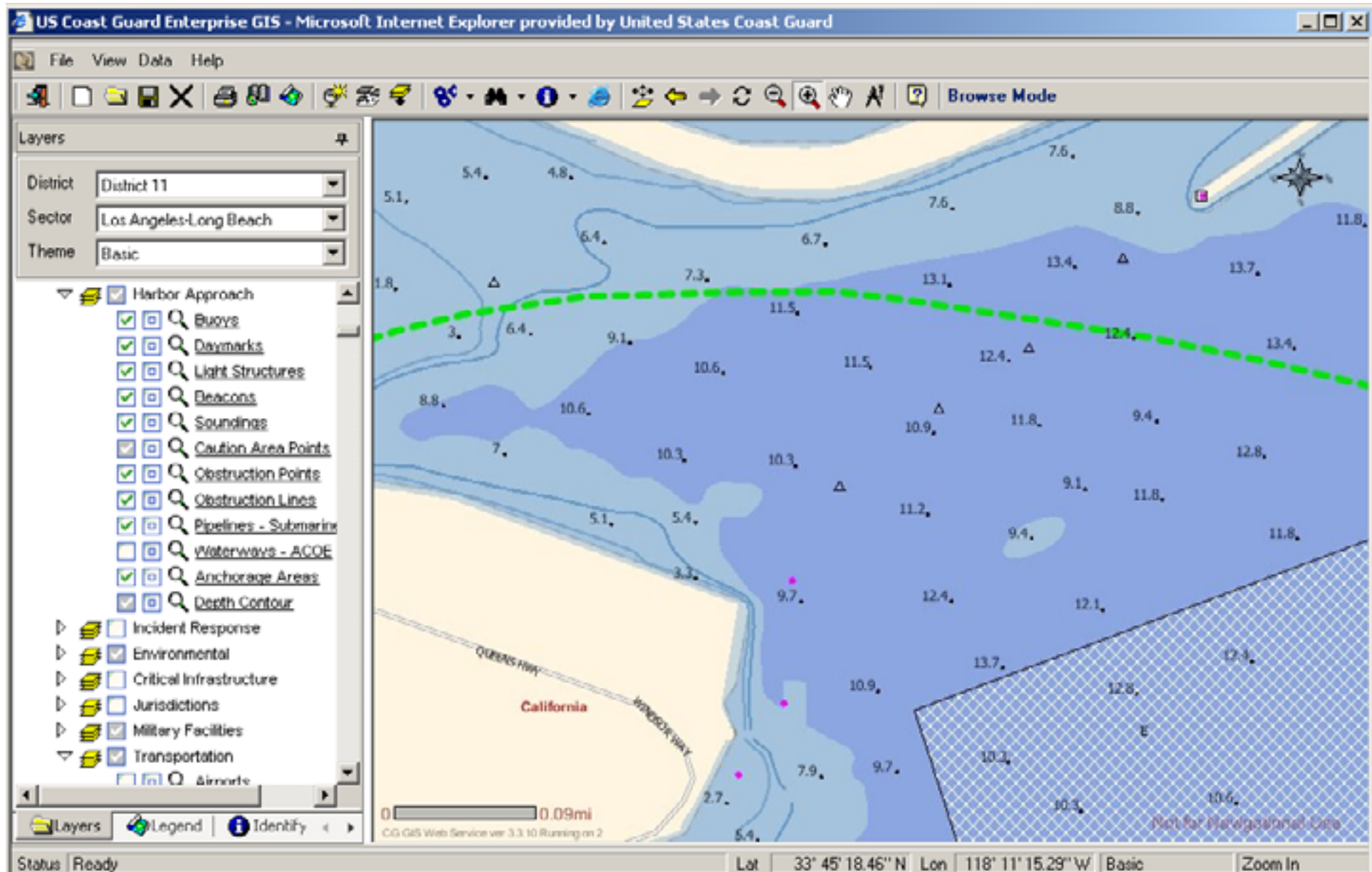
Enterprise GIS *National* Data Providers



U.S. COAST GUARD



**Homeland
Security**





Enterprise GIS Data Warehouse

National Data Coverage

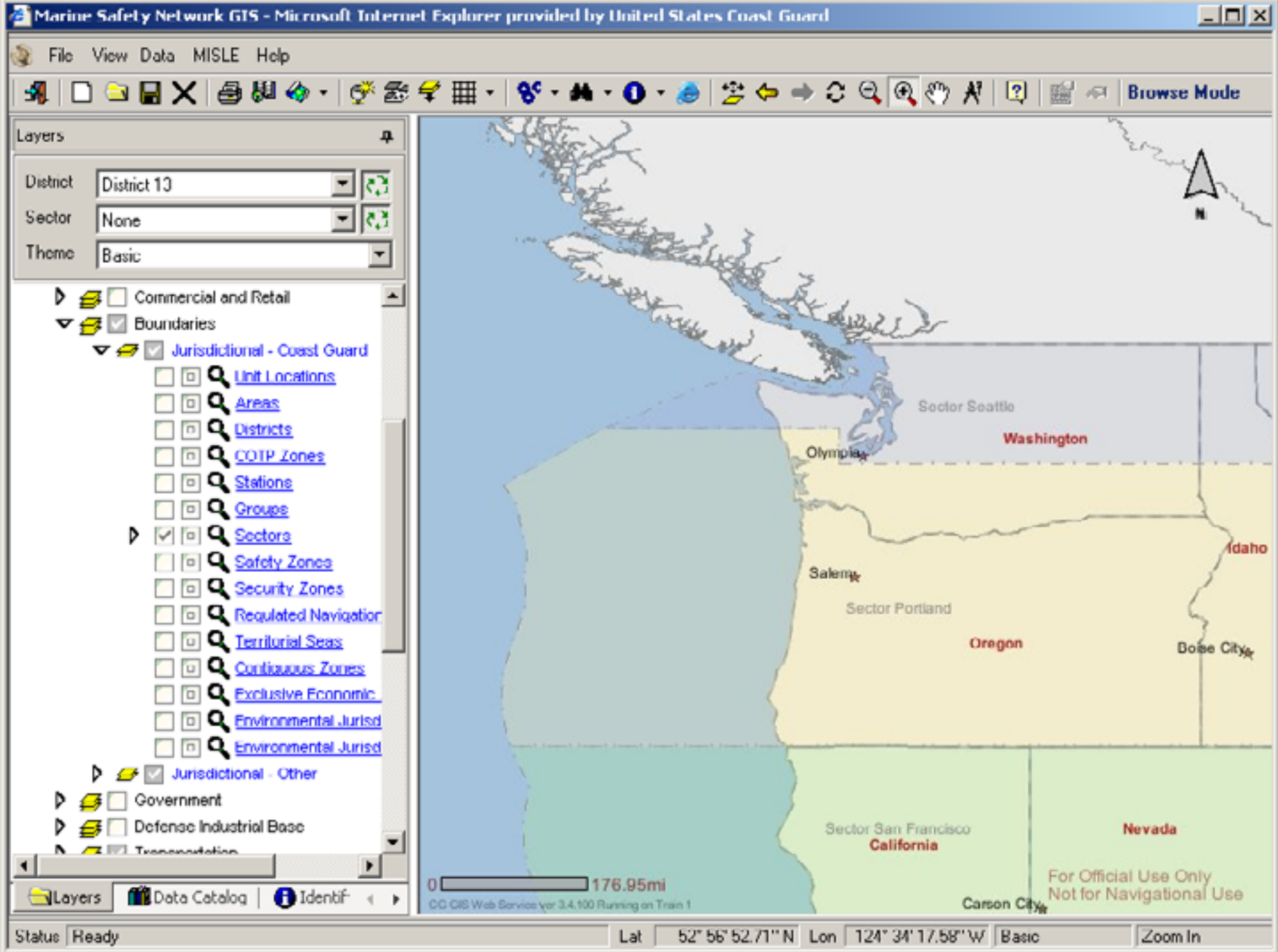
- Relevant vector data sets from federal government and industry providers
 - **Focus: Homeland Security Infrastructure Program (HSIP) vector data sets**
- Coast Guard data
 - Jurisdictional/CFR data
 - Program-specific data
- NOAA Raster Nautical Charts
- Aerial Imagery



U.S. COAST GUARD



**Homeland
Security**



Д



100

2.1

Г

42

t:

6

→

4

L

Lo

B

2

n



U.S. COAST GUARD



**Homeland
Security**



Enterprise GIS Data Warehouse

National Data Coverage

- Relevant vector data sets from federal government and industry providers
 - **Focus: Homeland Security Infrastructure Program (HSIP) vector data sets**
- Coast Guard data
 - Jurisdictional/CFR data
 - Program-specific data (MISLE, SAROPS, etc.)
- NOAA Raster Nautical Charts
- Aerial Imagery



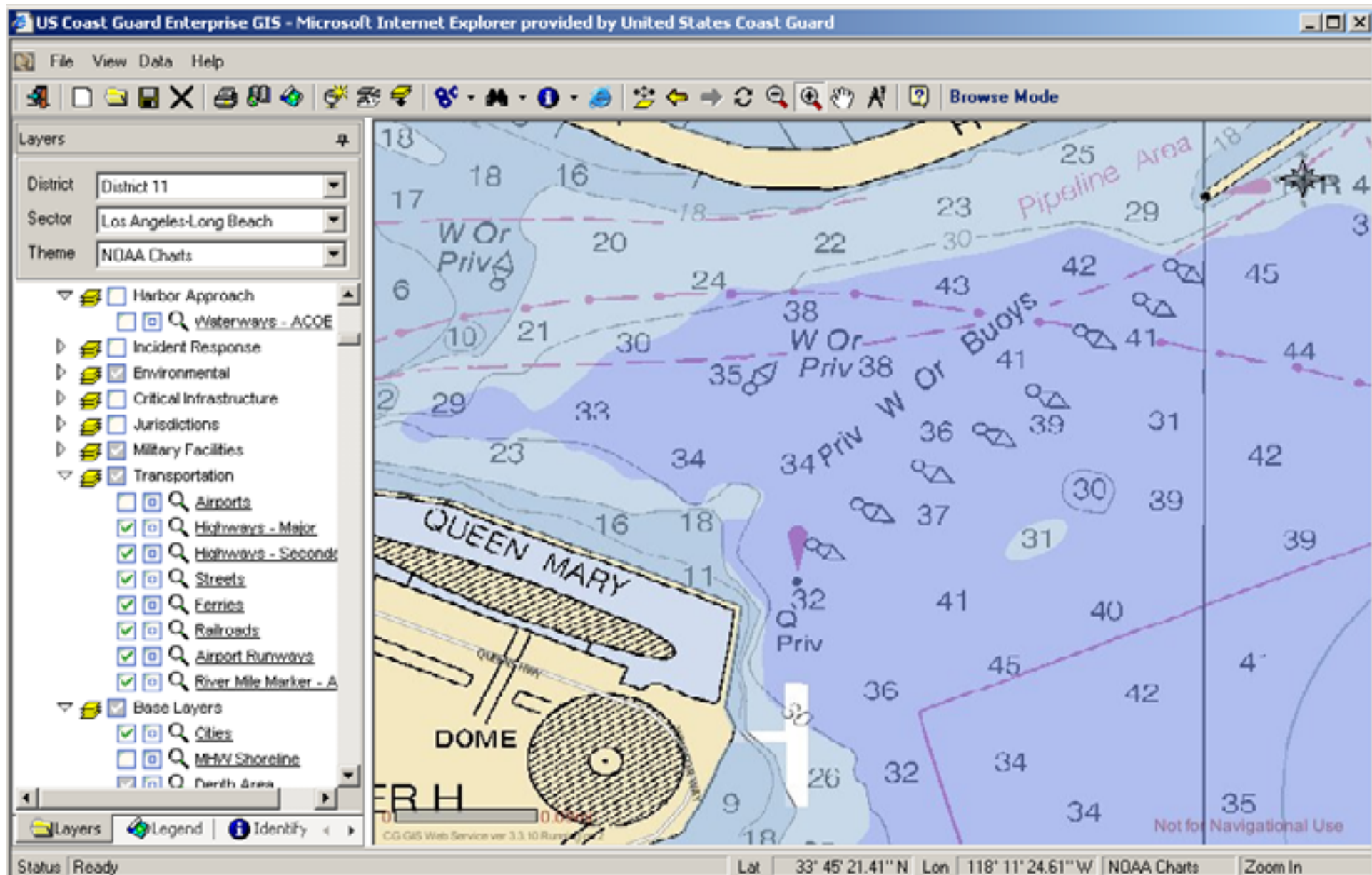
U.S. COAST GUARD



**Homeland
Security**



Raster Nautical Charts

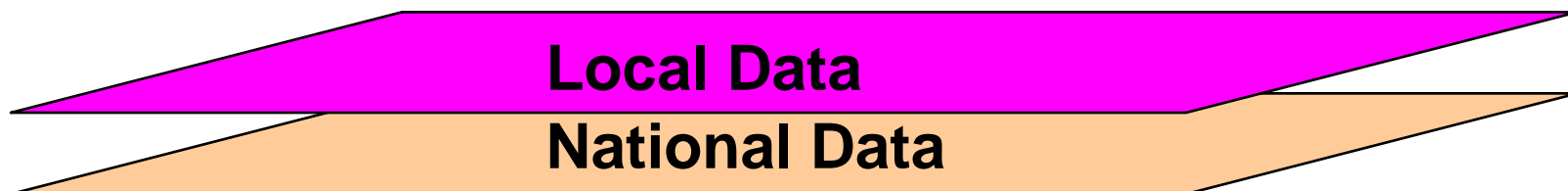




Enterprise GIS Data Warehouse

Local Data Coverage

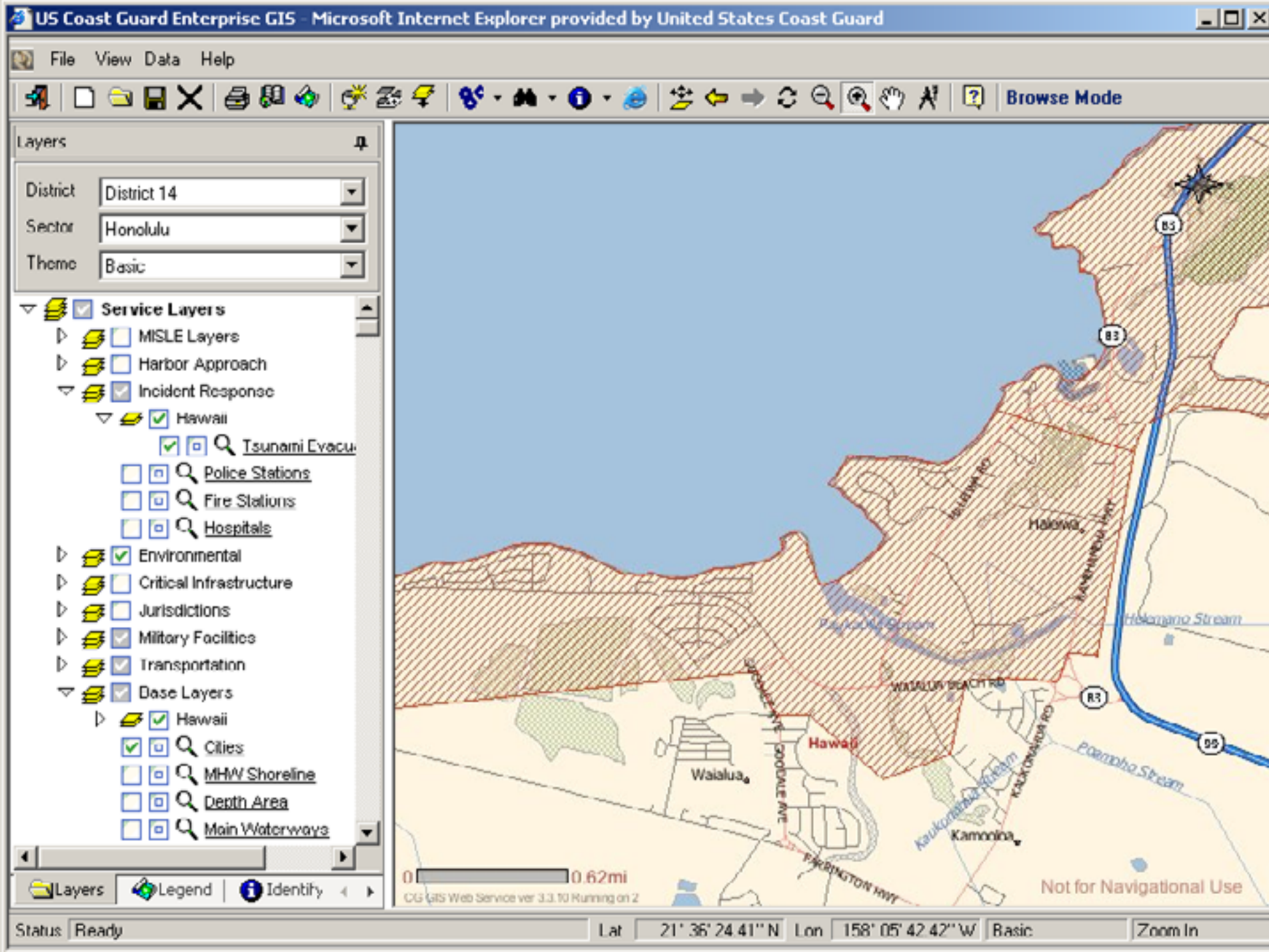
- Collected with focused input from local Coast Guard user bases
- Vector and raster data sets relevant to a region/AOR



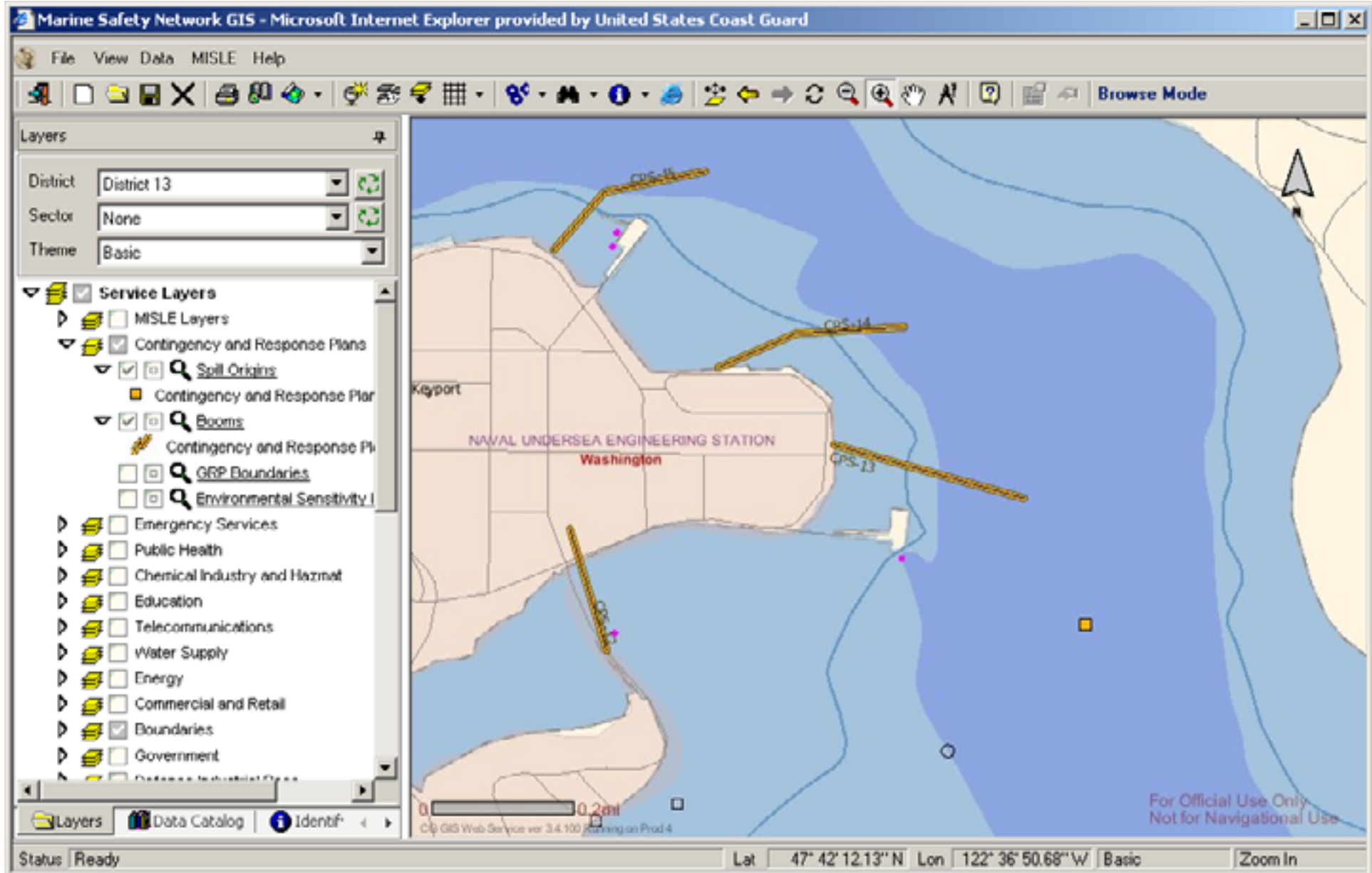
U.S. COAST GUARD



**Homeland
Security**



District 13 Spill Response Layers





Coast Guard Enterprise GIS

Presenter: Commander Lane Johnson

U.S. Coast Guard Headquarters
Operations Directorate
Office of Information Resources
Systems Management Division

Email: lane.d.johnson@uscg.mil



U.S. COAST GUARD



**Homeland
Security**