



# Coast Guard Enterprise GIS

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Operations Directorate  
Office of Information Resources  
Systems Management Division

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**U.S. COAST GUARD**



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Security**



# Coast Guard Enterprise GIS

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- 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)



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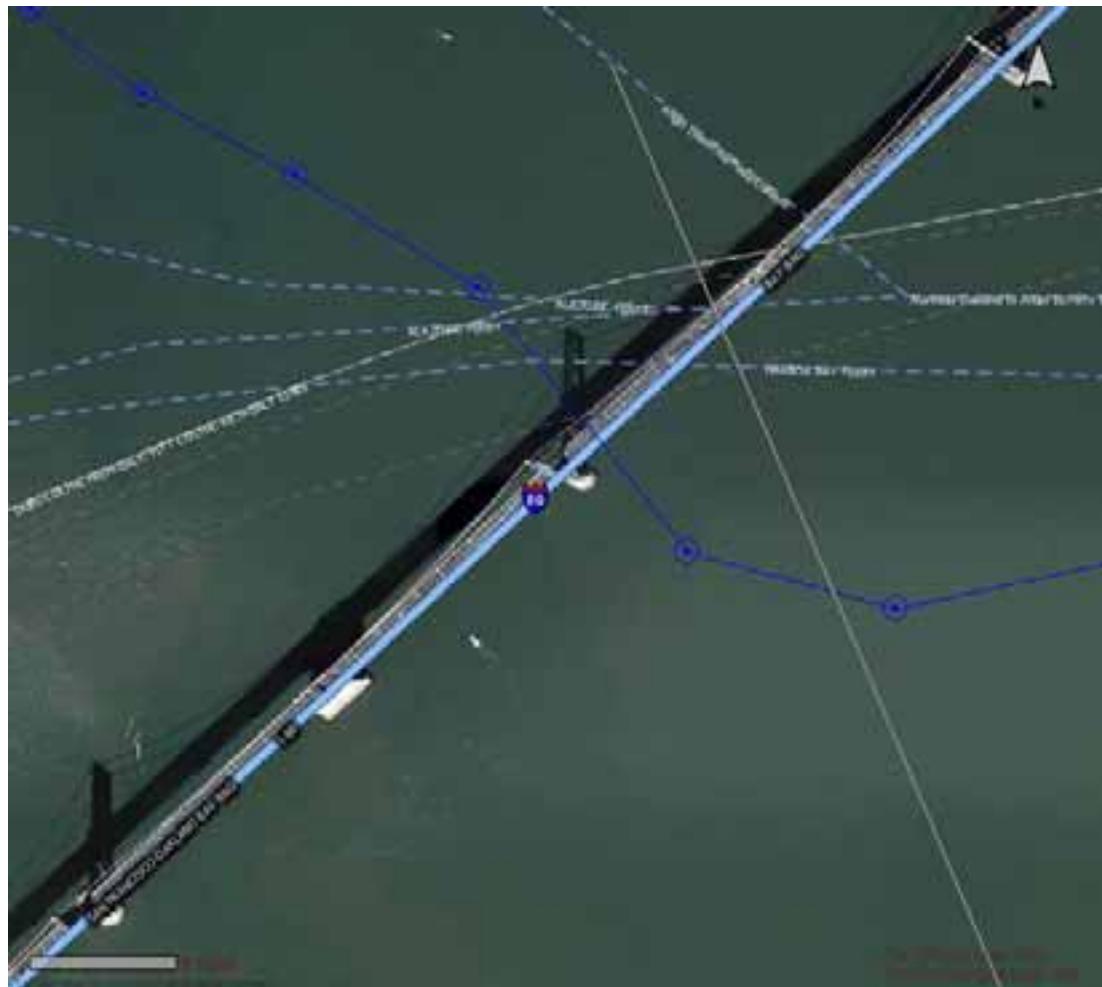


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# Marine Casualty Investigations

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



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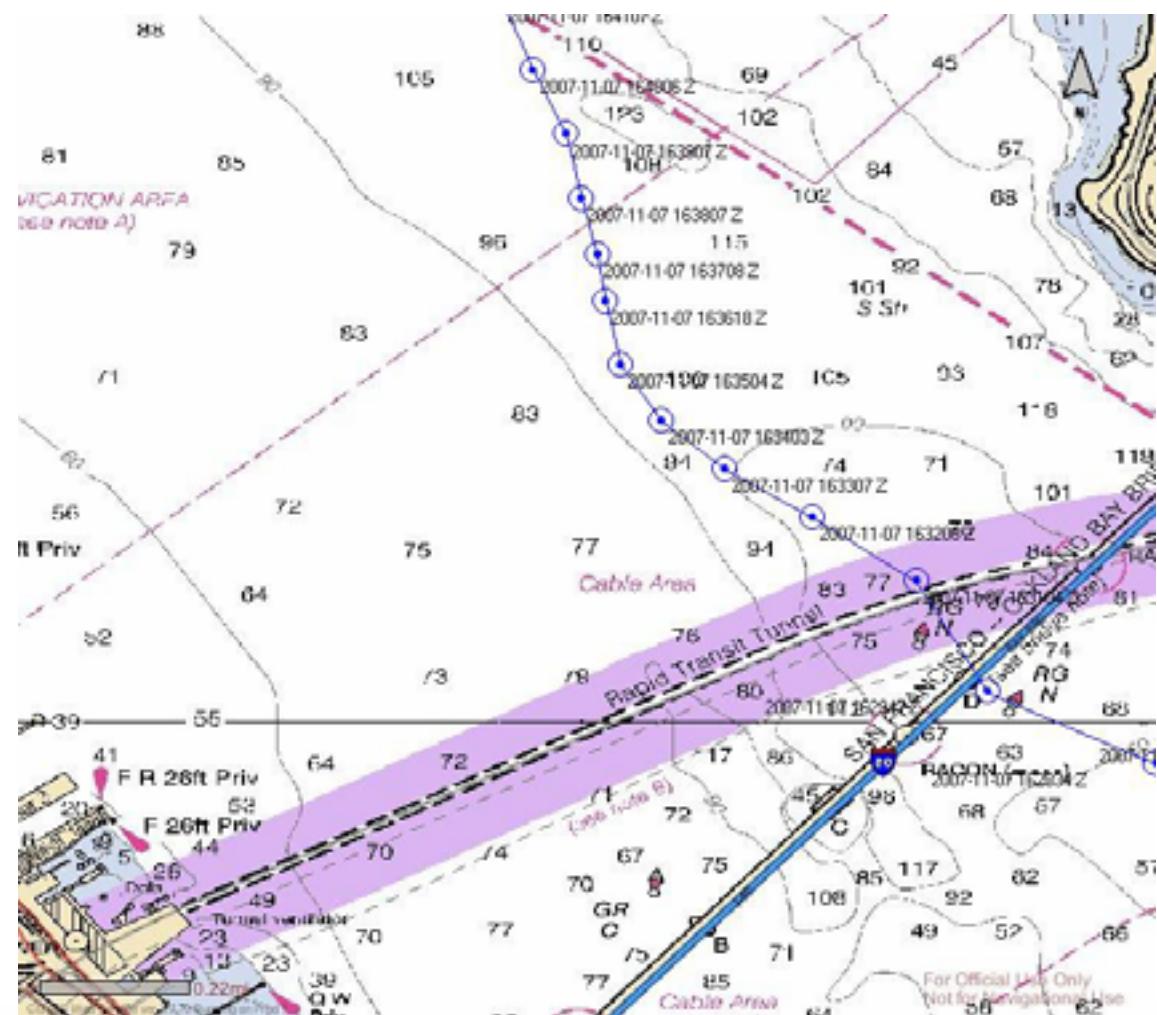


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# Marine Casualty Investigations

**M/V COSCO  
BUSAN's  
historic track data  
showing  
collision 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

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- 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)



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# Coast Guard Enterprise GIS *IS NOT*

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- 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



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# Enterprise GIS Custom Client

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## 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



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# Enterprise GIS Architecture

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- 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)



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# Future Architecture

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- 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)





# Enterprise GIS Custom Client

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Activity Type: **Incident Investigation** Activity Status: **Closed - Agency Action Complete**

Status as of: 06/04/2007

Activity No. 104081

Team Lead | **MA6**

Short Title: MC93021328 NAVY KEYPORT SPILL

Incident Date: 11/25/1993

Prompt Date:  

Originating Unit:

MSD Puget Sound  
Anti-Submarine

### Activity Overview

#### **GUIDE WORDS**

Case No.  Not Attached to a Case

### Team Members

Transfer Activity

General      Results      Location(s)      Incident Brief

List of Location(s):

Location Description	Latitude	Longitude
KEYPORT, WA	47.4229996 N	122.3759996 W

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

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Marine Safety Network GIS - Microsoft Internet Explorer provided by the U.S. Coast Guard

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 Response Plans

Available: Yes: Available as a U...

Layers Data Catalog Identify

0 0.28mi

For Official Use Only  
Not for Navigational Use

Search GIS Data Catalog

Search Options

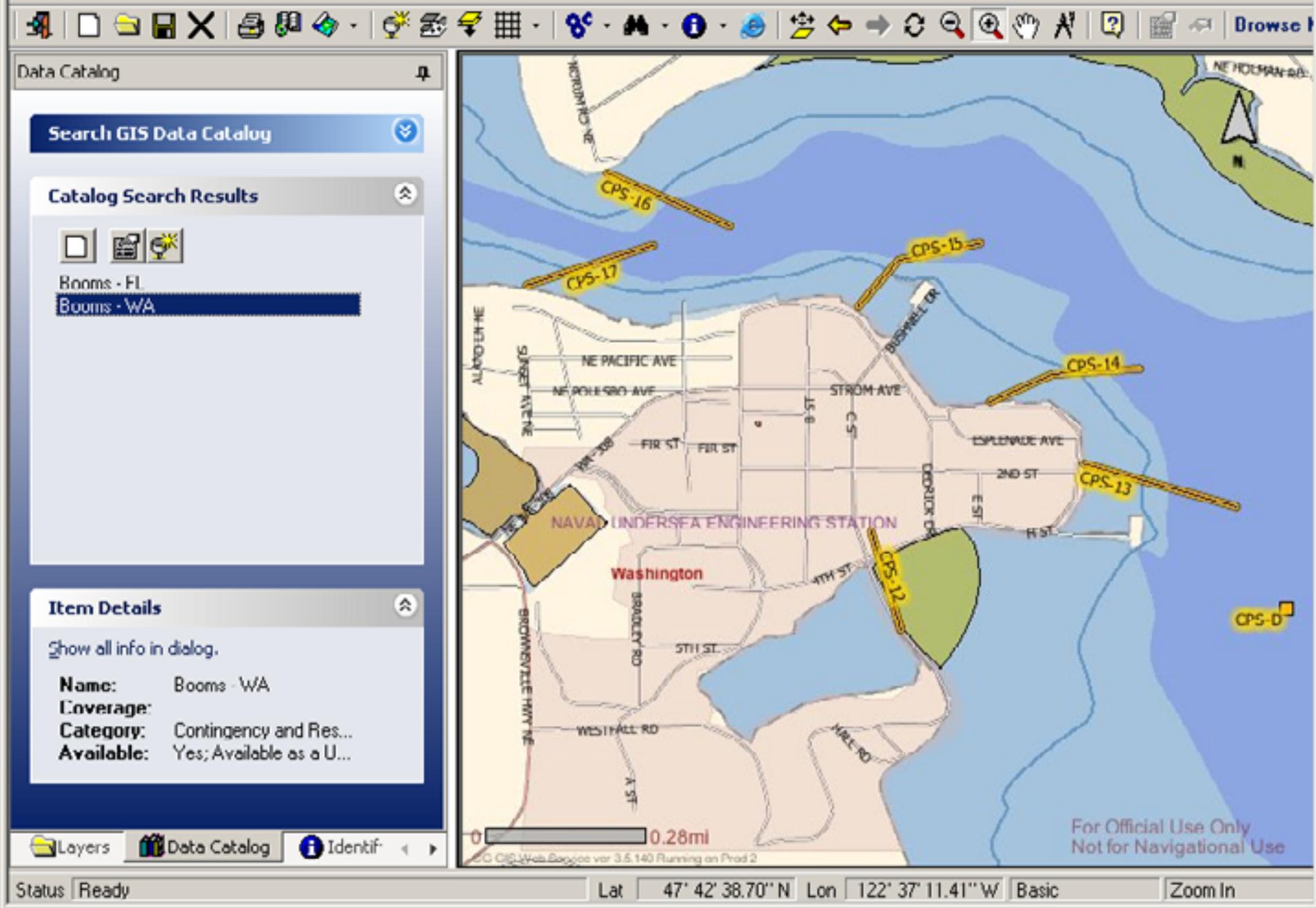
Search in Current Map Extent

Overlaps Extent  Within Extent

Category: Contingency and Response Plans

Keyword: Booms

Search Catalog Clear Fields





# Enterprise GIS Custom Client

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Marine Safety Network GIS - Microsoft Internet Explorer provided by HSL(I)

File View Data MISLE Help

Toolbar: File, View, Data, MISLE, Help, Print, Save, Open, Zoom In, Zoom Out, Pan, Hand, Magnifying Glass, Help, Browser Mode

Items: User Defined Geographic Features

Item Details: Security Zone

Map View: Aerial satellite view of Boston, Massachusetts, showing the North End and the Seaport area. A red polygon highlights a 'Security Zone' located in the North End. The map includes labels for Commercial St, North St, State St, Northern Ave, Congress St, and Summer St. Major roads like I-90, MASS PIKE, and I-93 are also visible. A compass rose is in the top right corner.

Scale: 0 to 0.5 km

Status: Ready

Coordinates: Lat 42° 21' 27.57" N, Lon 071° 03' 32.31" W

Basics: Basic

Buttons: Zoom In

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

File View Data Help

Identify Results

- Light Structures
- Caution Area Points
- Port Facilities

Boston Battery Wharf.  
City of Boston, Fireboat Wharf.  
U.S. Coast Guard Group Boston, Margin  
U.S. Coast Guard Group Boston, Pier N  
U.S. Coast Guard Group Boston, Pier N  
U.S. Coast Guard Group Boston, Pier N

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	
RANK	
LATITUDE	42.3675
LONGITUDE	-71.049444
OPR	Bay State Lobster Co.
OWNER	Angelo J., James R., J.
PURPOSE	Receipt of seafood; m

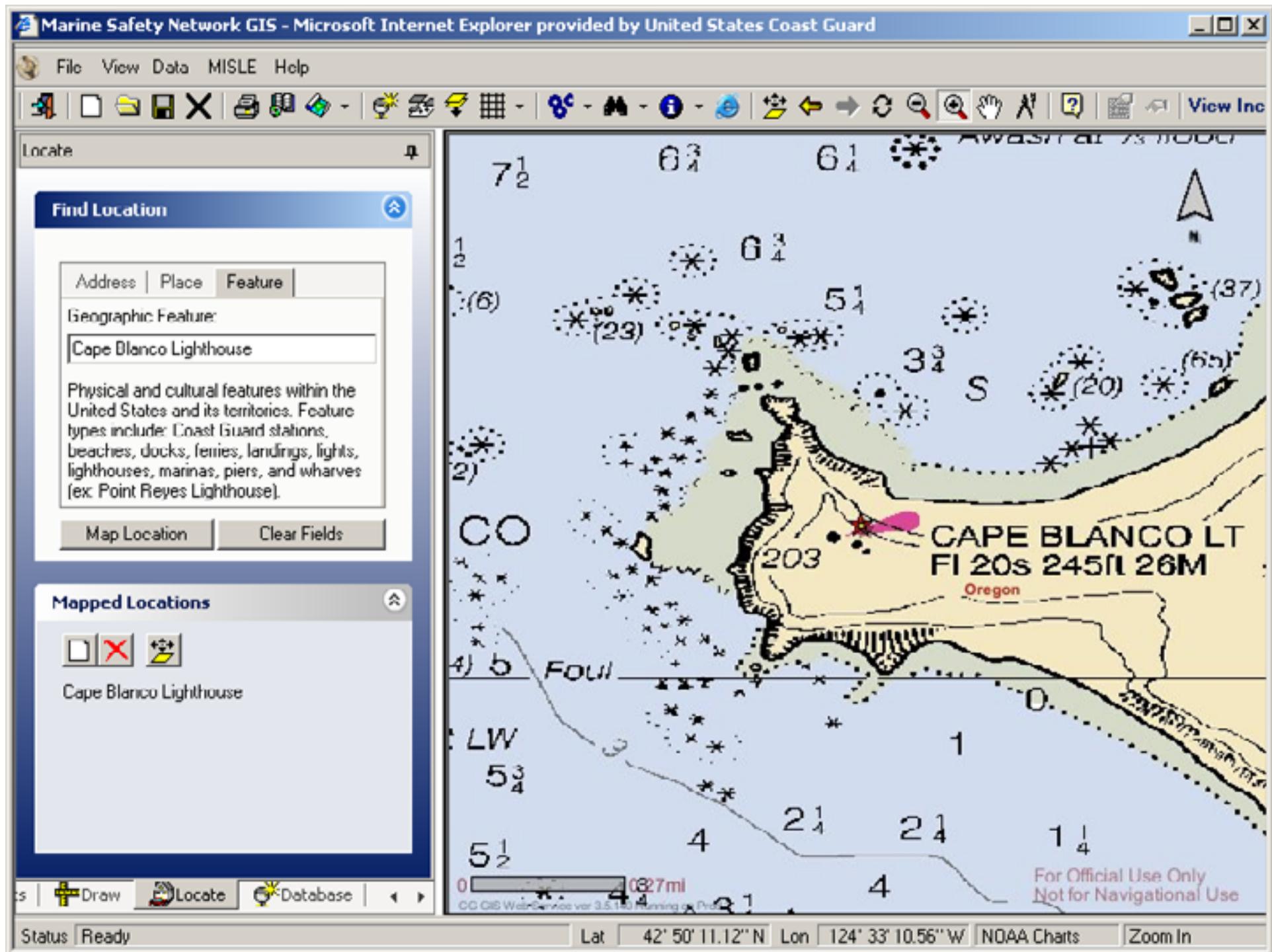
Layer Filters

And/Or	Field Name	Comparator	Filter
Where	PORT	=	Boston

Identify EZ Reports

CG GIS Web Client 0.390 Running on 2003-07-10 14:42:22

Lat 42° 22' Status Ready





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Marine Safety Network GIS - Microsoft Internet Explorer provided by United States Coast Guard

File View Data MISLE Help

Database Manage External Connections Build a Data Connection Existing Data Connections Registered Connections

Features

Feature Details

Enterprise GIS External Data Connection Wizard Select Data Source

Welcome to the Enterprise GIS External Database Connection Wizard. This wizard guides you through the process of creating a connection to an external data source with a spatial (e.g. latitude and longitude) component.

Select a database of a type supported, a table within that database, and data fields that uniquely identify and describe each record in the table.

Name: Suspicious Activity Waypoints  
Database: C:\Documents and Settings\Suspicious Activity.xls  
Table: 'Suspicious Activity'\$  
Label Field: Title  
Id Field: ID

Change Icon

Draw Locate Database CG GIG Web Service

Version 0.4.60 < Back Next > Cancel Finish

OK Cancel

Microsoft Excel - Suspicious Activity

A	B	C	D	E	F	G	H	I	J
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	<b>Power failure caused raw sewage to be spilled into the Potomac River. Water/sewer authority suspects disgruntled employee may have sabotaged.</b>	<a href="http://www.washingtonpost.com/wp-dyn/content/article/2006/05/19/AR2006051901595.html">http://www.washingtonpost.com/wp-dyn/content/article/2006/05/19/AR2006051901595.html</a>	38.8207	-77.02054

Marine Safety Network GIS - Microsoft Internet Explorer provided by United States Coast Guard

File View Data MISLE Help

Browse Mode

Database

Manage External Connections

Build a Data Connection  
Existing Data Connections  
Registered Connections

**Suspicious Activity Waypoints**

Features

**Suspicious Activity Waypoints**

- Waste in river
- Man swimming near Nat'l Airport
- Raw sewage spilled into the Pot...

Feature Details

Show all info in dialog.

Title	Raw sewage spill...
Name	Maj. Major Major
Contact Info	2023344444
Date	05/19/2006
Time	1900Z
Notes	Power failure cau...
URL	<a href="http://www.washi...">http://www.washi...</a>

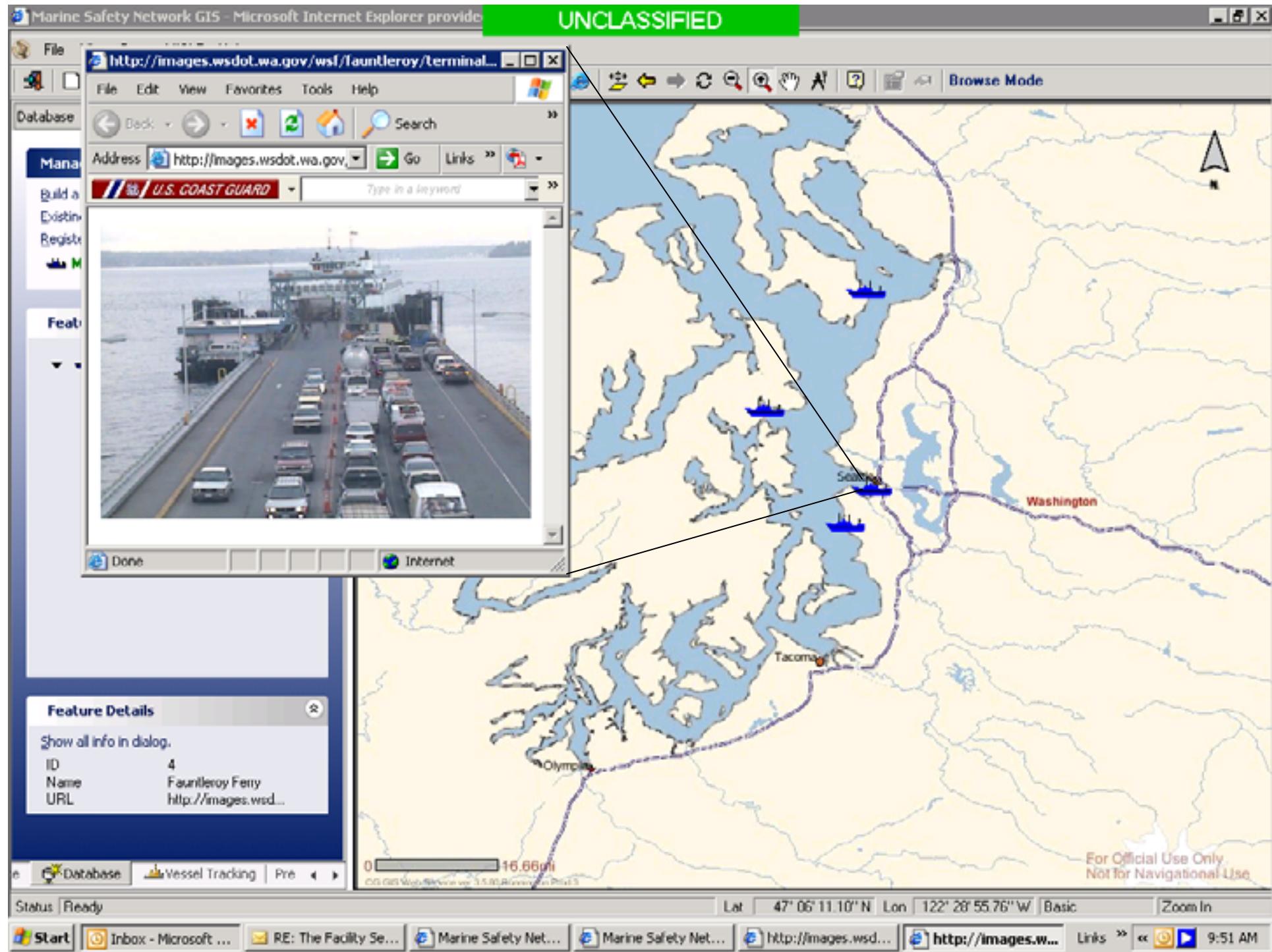
Draw Locate Database

Status Ready

**Raw sewage spilled into the Potomac River - All Information.**

Field	Value
Title	Raw sewage spilled into the Potomac River
Name	Maj. Major Major
Contact Info	2023344444
Date	05/19/2006
Time	1900Z
Notes	Power failure caused raw sewage to be spilled into the Potomac River. Water/sewer autho...
URL	<a href="http://www.washingtonpost.com/wp-dyn/content/article/2006/05/19/AR2006051901595">http://www.washingtonpost.com/wp-dyn/content/article/2006/05/19/AR2006051901595</a>

UNCLASSIFIED



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

File View Data Help

Layers X Browse Mode

District: District 5  
Sector: None  
Theme: Basic

Posit Time: 2007-01-03 17:27:12 Z  
Location: 39° 06' 59.65" N 075° 12' 48.63" W  
Course: 221 Speed: 0.1  
Source: RDC AIS  
In MISLE?: Yes - Matched MMSI Name to MISLE Vessel Name  
Vessel Type: Tank Ship | Crude & Products Tank Ship

New Jersey

Service Layers

- MISLE Layers
- Contingency and Response Plans
- Emergency Services
- Public Health
- Chemical Industry and Hazmat
- Education
- Telecommunications
- Water Supply
- Energy
- Commercial and Retail
- Boundaries
- Government
- Defense Industrial Base
- Transportation
- Base Layers

For Official Use Only  
Not for Navigational Use

Layers Data Catalog Identify

0 4.89mi

Lat: 39° 06' 59.65" N Lon: 075° 12' 48.63" W Basic Pan

Status: Ready





# Enterprise GIS Custom Client

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## Client Requirements

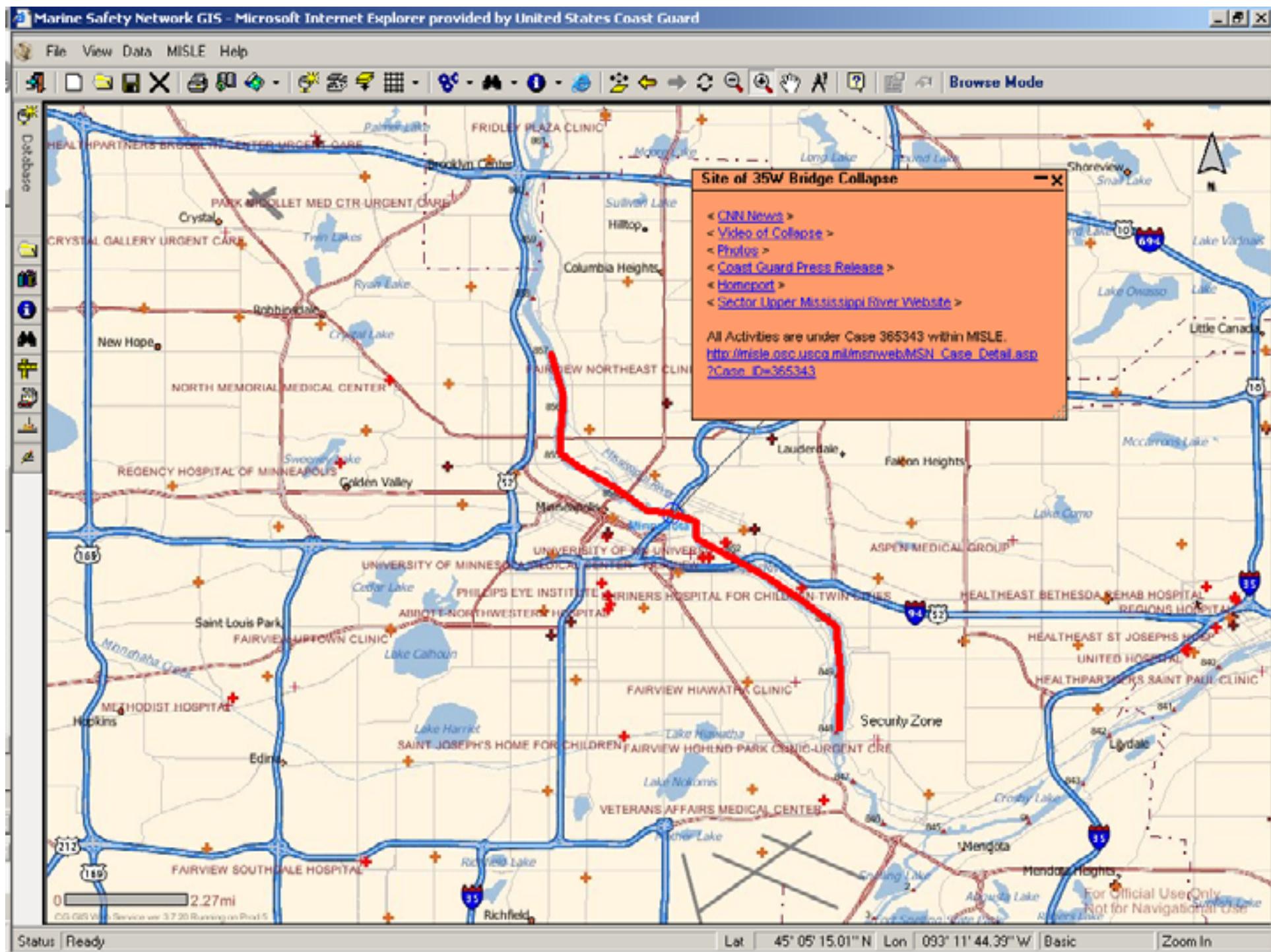
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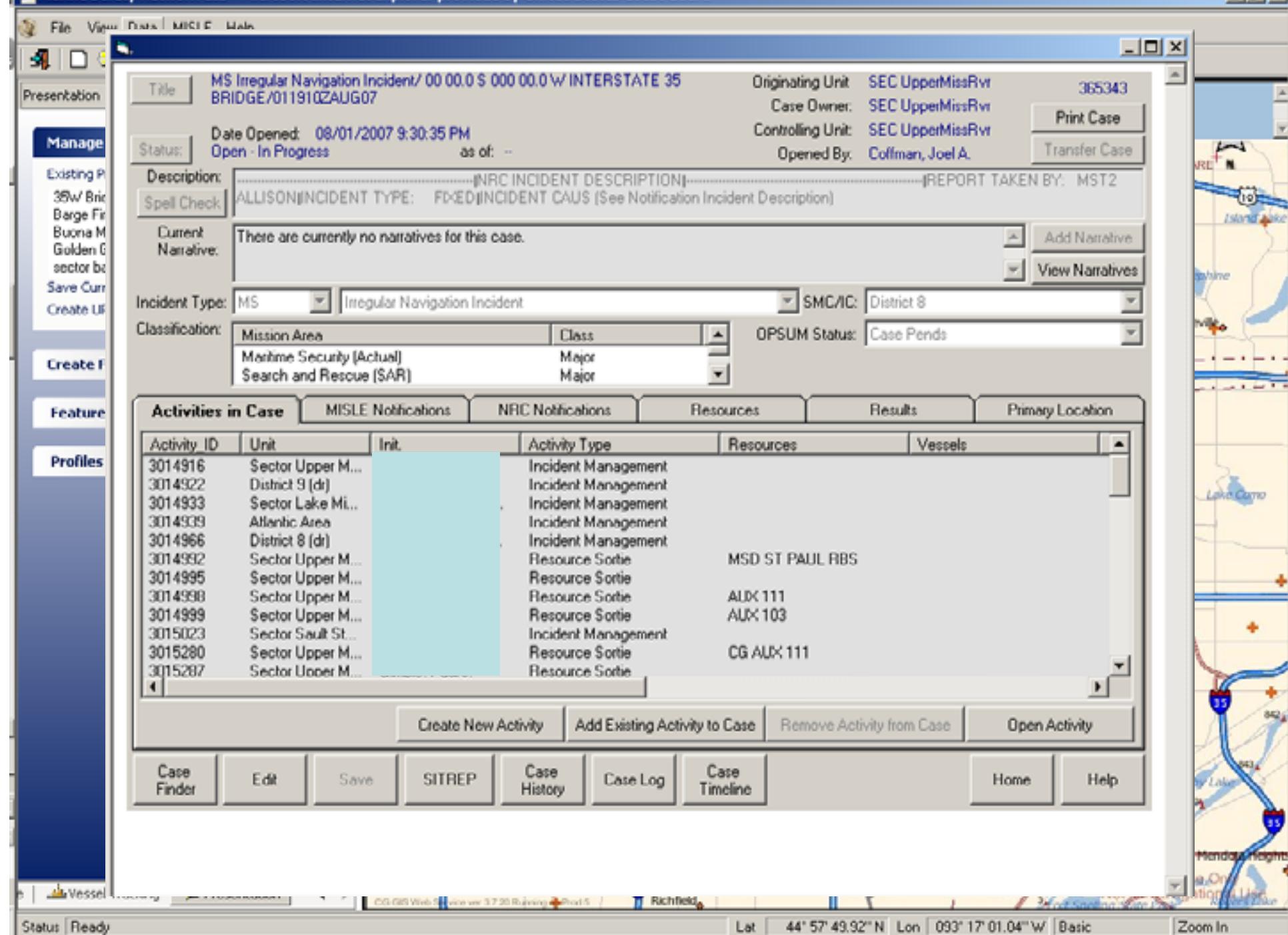


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List of Open Cases for Commandant (CG-385):

- Case #366884 -
- Case #346384 -
- Case #320181 -
- Case #282618 -
- Case #269532 - SAR Flare (Red/Orange)/ APPROXIMITLY 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:   Create Timeline Entry  Hide

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

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

MISLE Case#: **365343**  Create Incident Action Plan Activity **Originating Unit: SEC UpperMissRvr**  
Incident Type: **MS: Irregular Navigation Incident** Activity Owner: **SEC UpperMissRvr**  
Activity Start Date/Time: **01 21 30Z AUG 07**   SMC: **District 8** Controlling Unit: **SEC UpperMissRvr**

**QRC** **Timeline** **Sorties** **Checklists**

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
012118Z AUG 07	SEC UpperMis	Response Communication	Initial Notification - NRC INCIDENT DESCRIPTION		ALLISON, MST2	Notification
012332Z AUG 07	SEC UpperMis	Response Communication	Rcvd call from AUX Weinstein rptg that he was watching FOX News and that he was seeing pths of the collapse the		(no subject)	
012345Z AUG 07	SEC UpperMis	Response Communication	MSD St. Paul I/O rpts that a reserve boat crew has been recalled and a 25' RBS should be getting u/w in approx 1		(no subject)	
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 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*



Marine Safety Network GIS - Microsoft Internet Explorer provided by United States Coast Guard

File View Data MISLE Help

Toolbar icons: Home, Back, Forward, Stop, Refresh, Search, etc.

Browse

**PRIDE OF AMERICA**

AIS Number: 366994450  
Posit 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:

**IE Commercial Vessel Safety**

< <http://www.uscofhawaii.com/ku/doc/800/171391/> >  
< <http://www.uscofhawaii.com/ku/doc/800/171091/> >  
> [www.usatoday.com/travel/news/2007-08-27-hawaii-supererry\\_N.htm](http://www.usatoday.com/travel/news/2007-08-27-hawaii-supererry_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

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## Client Requirements

- Web-enabled, thin client architecture
- Typical web client functionality ***plus***
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**U.S. COAST GUARD**

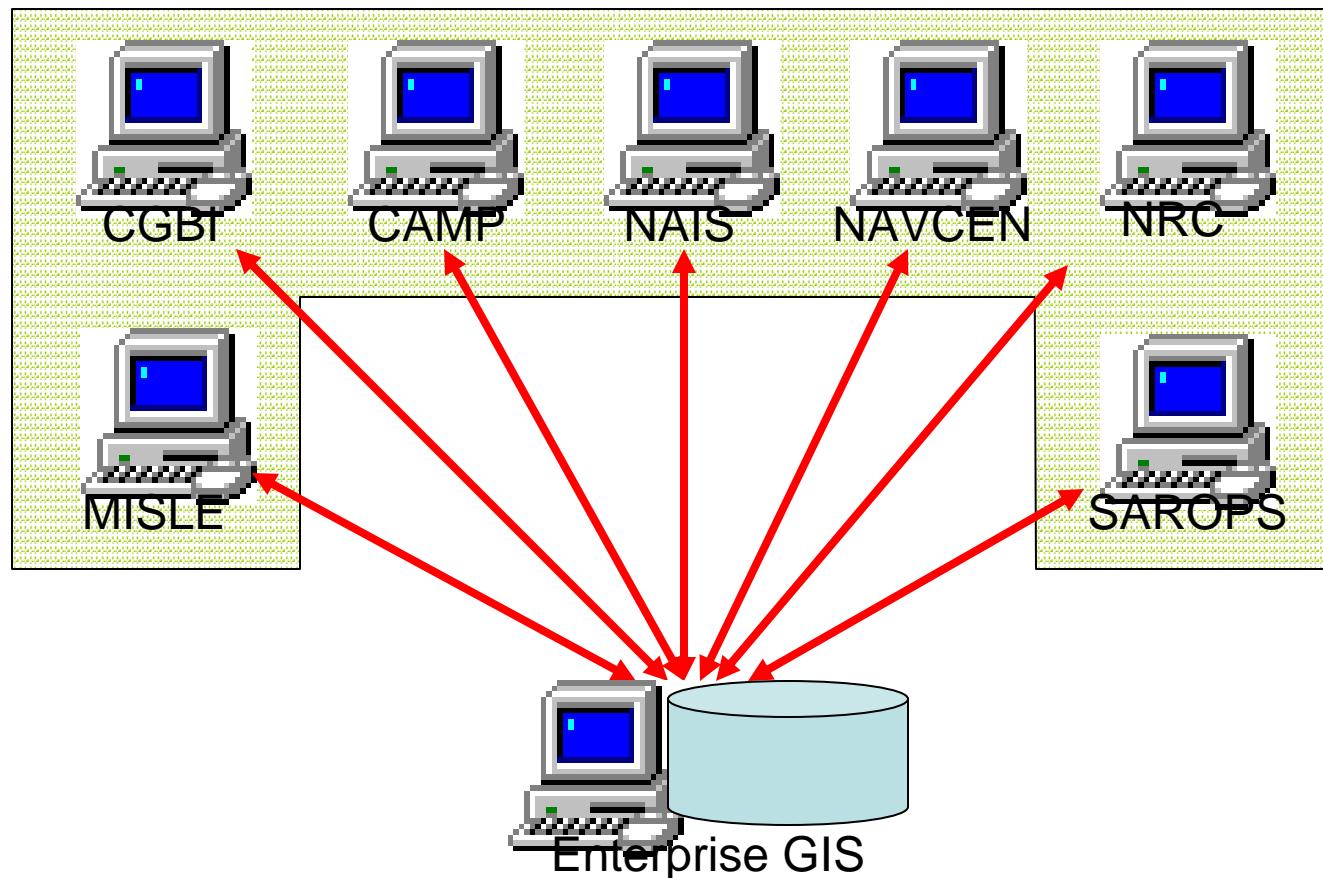


**Homeland  
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# Programs Interfacing with Enterprise GIS

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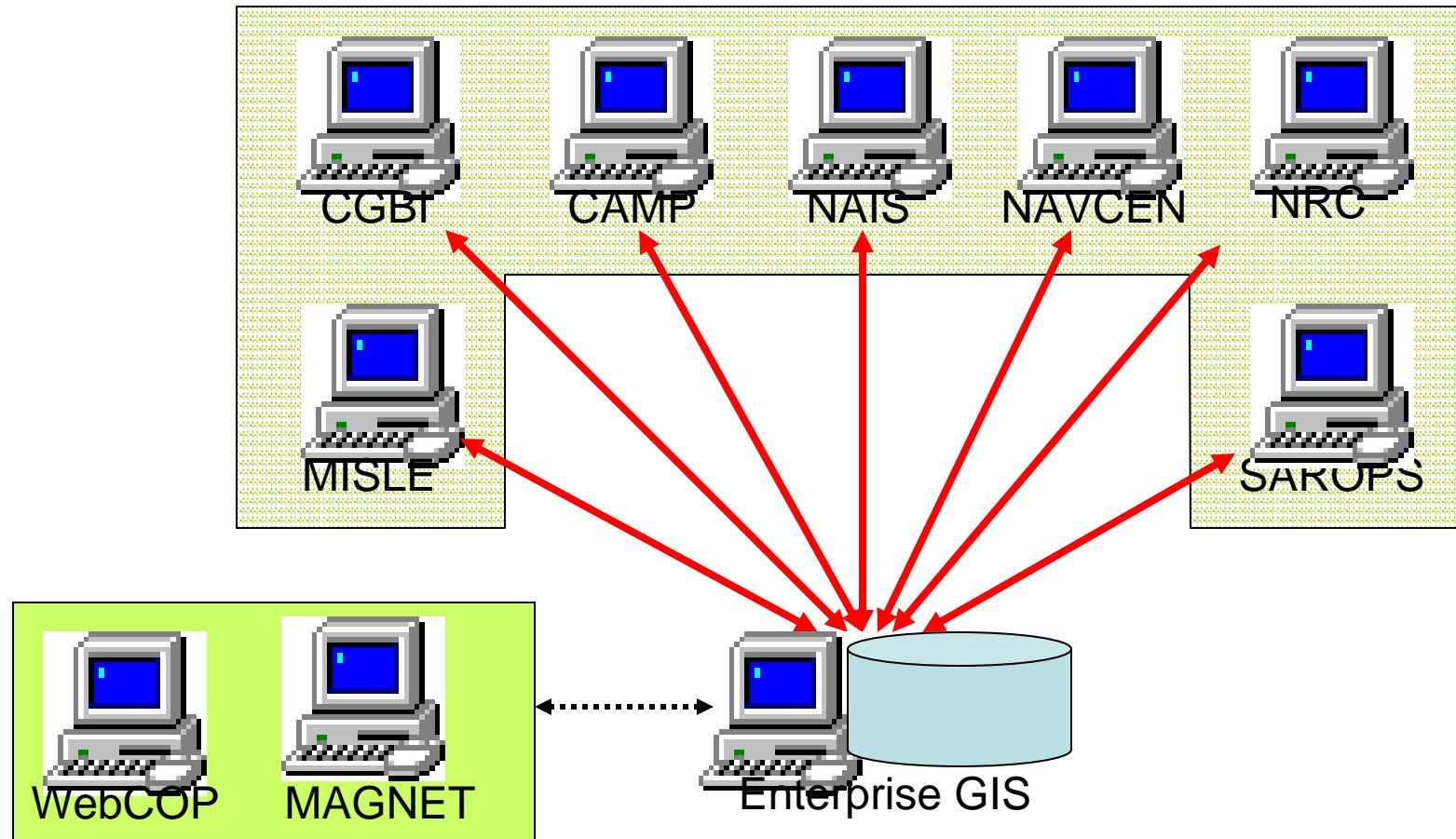
**U.S. COAST GUARD**



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# Programs Interfacing with Enterprise GIS



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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      Report Date:      Controlling Unit: CG OSC

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

Case No: Not Attached to a Case      POC:      Transfer Activity

Change Vessel      Change Status

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

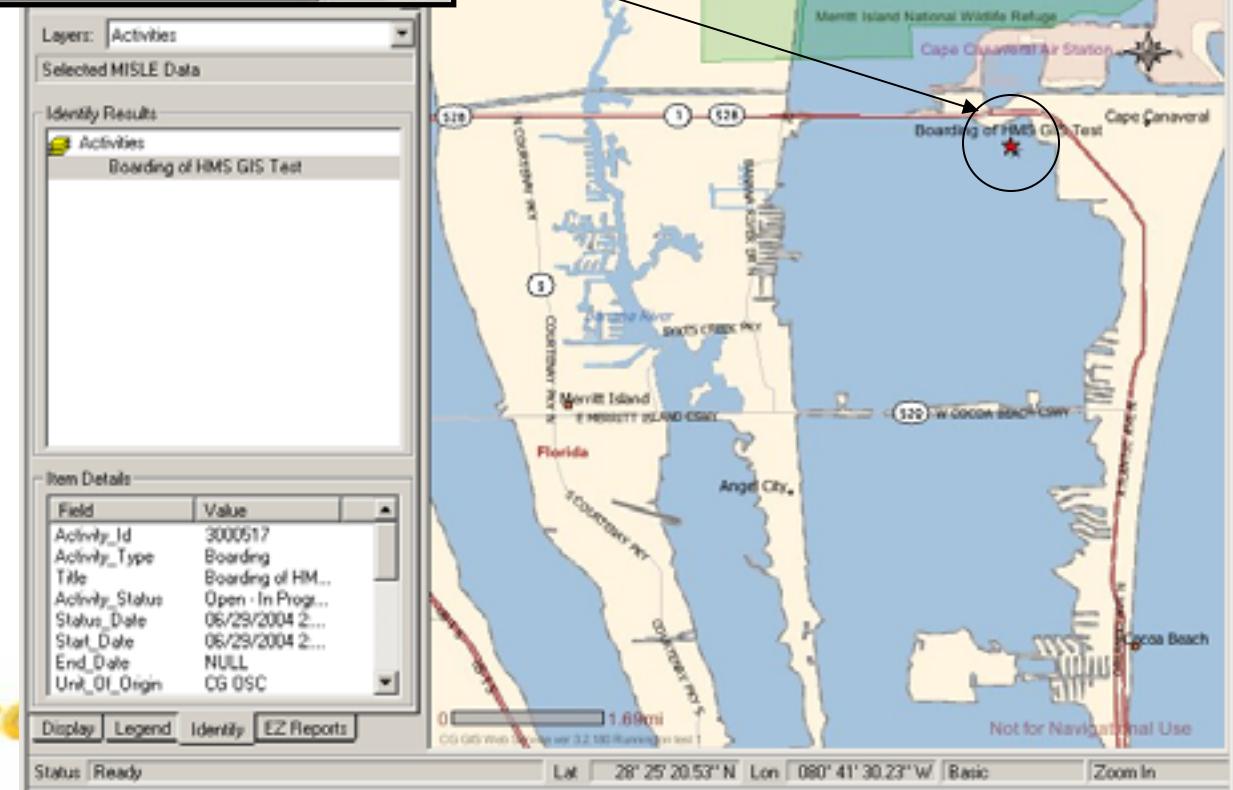
Boarding Data      Locations      Summary      Narrative

Location Description	Latitude	Longitude	Date/Time
HMS GIS Test	29 24.0144 N	000 27.6190 W	2004/06/29 14:40

Add Facility      Add Waterway      Add Geo Location      Remove Location      Home      ?

# MISLE – Marine Information for Safety and Law Enforcement

## Enterprise GIS



U.S. COAST GUARD



# CG Business Intelligence

File View Data Help

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_ADDRESS	433 ALA MOANA BLVD PI
ORG_CITY	HONOLULU
ORG_STATE	HI
ORG_ZIPCODE	96813
ORG_COUNTR	USA

Layers Identify EZ Reports

CG MSO Web Service ver 3.4.60 Running on 2

Lat: 21° 42' 01.71" N Lon: 17.97 mi

Status: Ready

**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

**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



# 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_SECTIO	B.p
PHONE	(304) 264-2552
ADDRESS1	408 Coast Guar...
ADDRESS2	
CITY	Kearneysville
STATE	WV
POSTALCODE	25430
COUNTRY	
CONGRESSIO	WV02
LATITUDE	39° 38' 17.74" N
LONGITUDE	78° 01' 57.16" W

Identify

EZ Reports

Drawn

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

USCG 1 HQ 1 OSC

Notice: Project and property information now pulled from SAM. Read our CAMP/SAM Integration Guide for more information.

Assets Projects Documents Applications Contacts

Map Layers Imagery

OPERATIONS SYSTEMS CENTER (OSC)

Greencastle Military Reservation, Pennsylvania

Fort Ritchie Military Reservation, West Virginia

Catoctin Mountain Park, Maryland

Fort Detrick, Maryland

Monocacy National Battlefield, Maryland

Antietam National Battlefield, Maryland

Fort Ritchie-Sharpsburg Site, Maryland

Harpers Ferry National Historical Park, West Virginia

Harpers Ferry National Park, West Virginia

Virginia

National Naval Medical Center, Bethesda, Maryland

George Washington Memorial Parkway, Maryland

National Arboretum, Washington D.C.

Fort Meade, Maryland

Anacostia Naval Station, Washington D.C.

Boeing Air Force Base, Maryland

George Washington Memorial Parkway, Maryland

Fort Detrick, Maryland

Fort Belvoir Military Reservation, Virginia

Land

Property

12.33mi

CG GIS Web Service Ver 3.6.10 Running on Prod 3

Lat: 39° 38' 17.74" N Lon: 78° 01' 57.16" W Basic Zoom In



# NAIS

File View Data Help

Layers

District: District 5  
Sector: None  
Theme: Basic

Service Layers

- MISLE Layers
- Contingency and Response Plans
- Emergency Services
- Public Health
- Chemical Industry and Hazmat
- Education
- Telecommunications
- Water Supply
- Energy
- Commercial and Retail
- Boundaries
- Government
- Defense Industrial Base
- Transportation
- Base Layers

Posit Time: 2007-01-03 17:27:12 Z  
Location: 38° 56' 31.49" N 075° 10' 03.84" W  
Course: 221 Speed: 0.1  
Source: RDC AIS  
In MISLE?: Yes - Matched MMSI Name to MISLE Vessel Name  
Vessel Type: Tank Ship | Crude & Products Tank Ship

For Official Use Only  
Not for Navigational Use

Layers Data Catalog Identify

Status Ready

Lat 30° 42' 14.37" N Lon 075° 25' 40.28" W Basic Pan



# NAVCEN's SOCMON

Marine Safety Network GIS - Microsoft Internet Explorer provides UNCLASSIFIED

File View Data MISLE Help

Browser Mode

Vessel Tracking

SDC Sites

- Show Labels
- Red Sites
- Green Sites
- CGDN\*
- VSAT
  - Alpena MI (NDS)
  - Fire Island NY (NDS)
  - Grand Marais MI (NDS)
  - Grand Marais MN (NDS)
- NDBC
- RDC
- PETRICOM
- SLSW
- HAWKEYE
  - Boston Hawkeye
  - SPADS
  - VTS

Icon Legend

Vessel Tracks

The map displays the Great Lakes (Superior, Michigan, Huron, Erie, and Ontario) and surrounding coastal areas. It features a legend for vessel tracks and SDC sites. SDC sites are marked with green circles and triangles, while vessel tracks are shown as blue lines. Key locations labeled include Alpena MI, Fire Island NY, Grand Marais MI, Grand Marais MN, Duluth MN, Saint Paul, Wisconsin, Chicago, Milwaukee, Madison, Grand Haven MI, Holland MI, and Lansing. The map also shows state boundaries for Minnesota, Wisconsin, Michigan, and Indiana.

# National Response Center



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

File View Data Help

Browse Mode

Layers

District: District 7

Sector: None

Theme: Basic

Service Layers

MISLE Layers

Harbor Approach

Incident Response

Environmental

Critical Infrastructure

Jurisdictions

[Coast Guard Areas](#)

[Coast Guard Districts](#)

[Coast Guard COTP Zones](#)

[Coast Guard Stations](#)

[Coast Guard Groups](#)

[Coast Guard Sectors](#)

[Coast Guard Safety and Security](#)

[Coast Guard Environmental Jurisdiction](#)

[EPA Regions](#)

[FEMA Regions](#)

[109th Congressional Districts](#)

Military Facilities

Layers Legend Identify

Not for Navigational Use

0 5.21mi

CG GIS Web Service v02.010 Running on 2

Lat 28° 02' 25.48" N Lon 082° 16' 47.84" W Basic Zoom In

Dunedin Oldsmar Hillsborough Bay Mango

Largo 275 Tampa

Cross Bayou Canal

Seginole Pinellas Park Lealman MacDill Air Force Base

Madera Beach

Treasure Island Saint Petersburg

Gulfport Sun City

Saint Petersburg Beach Ruskin Wimauma

Pebble National Wildlife Refuge

CG GIS Web Service v02.010 Running on 2

Not for Navigational Use

0 5.21mi

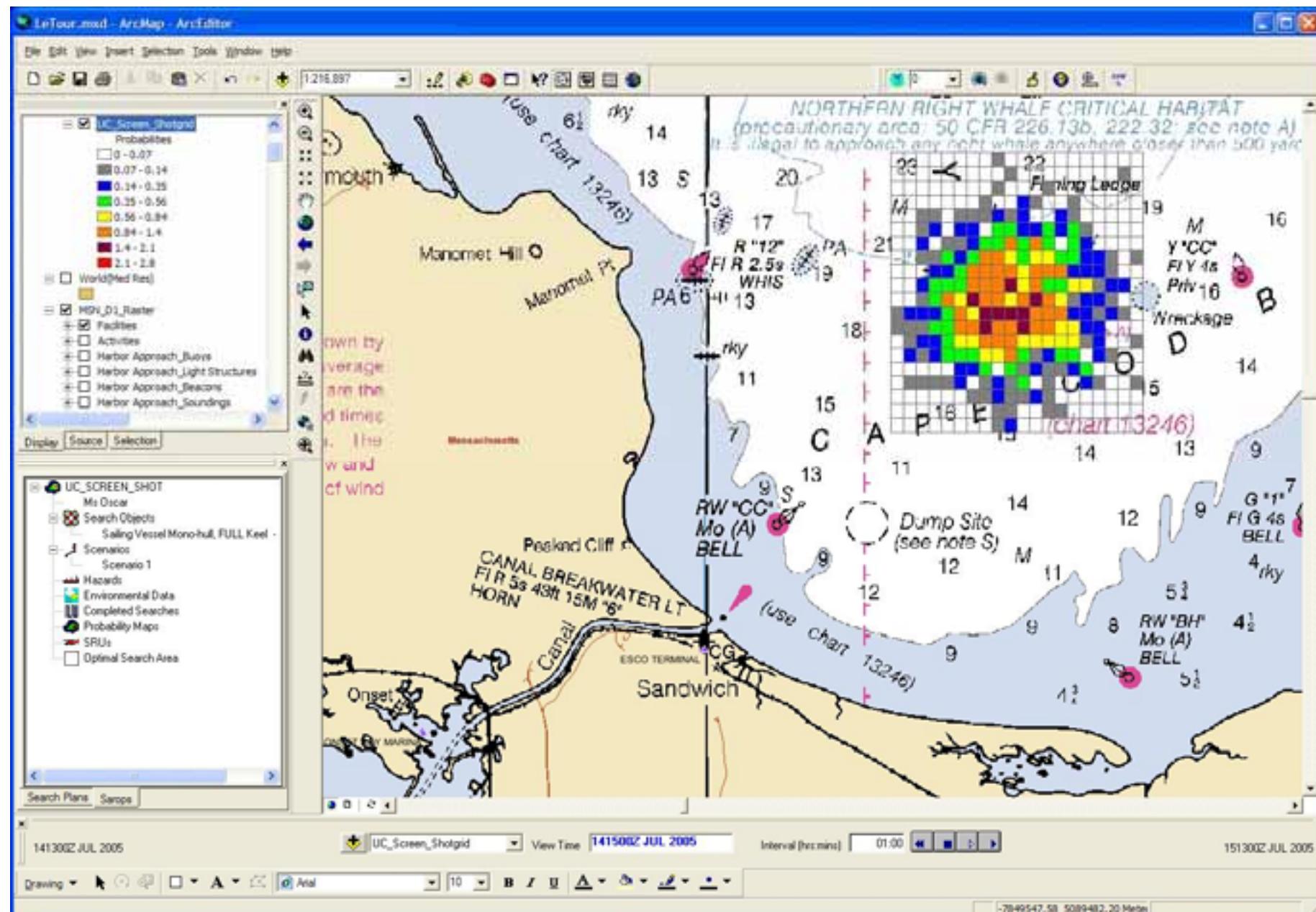
CG GIS Web Service v02.010 Running on 2

Lat 28° 02' 25.48" N Lon 082° 16' 47.84" W Basic Zoom In

Status Ready

Lat 28° 02' 25.48" N Lon 082° 16' 47.84" W Basic Zoom In

# SAROPS





# Enterprise GIS Data Warehouse

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## 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

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## 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

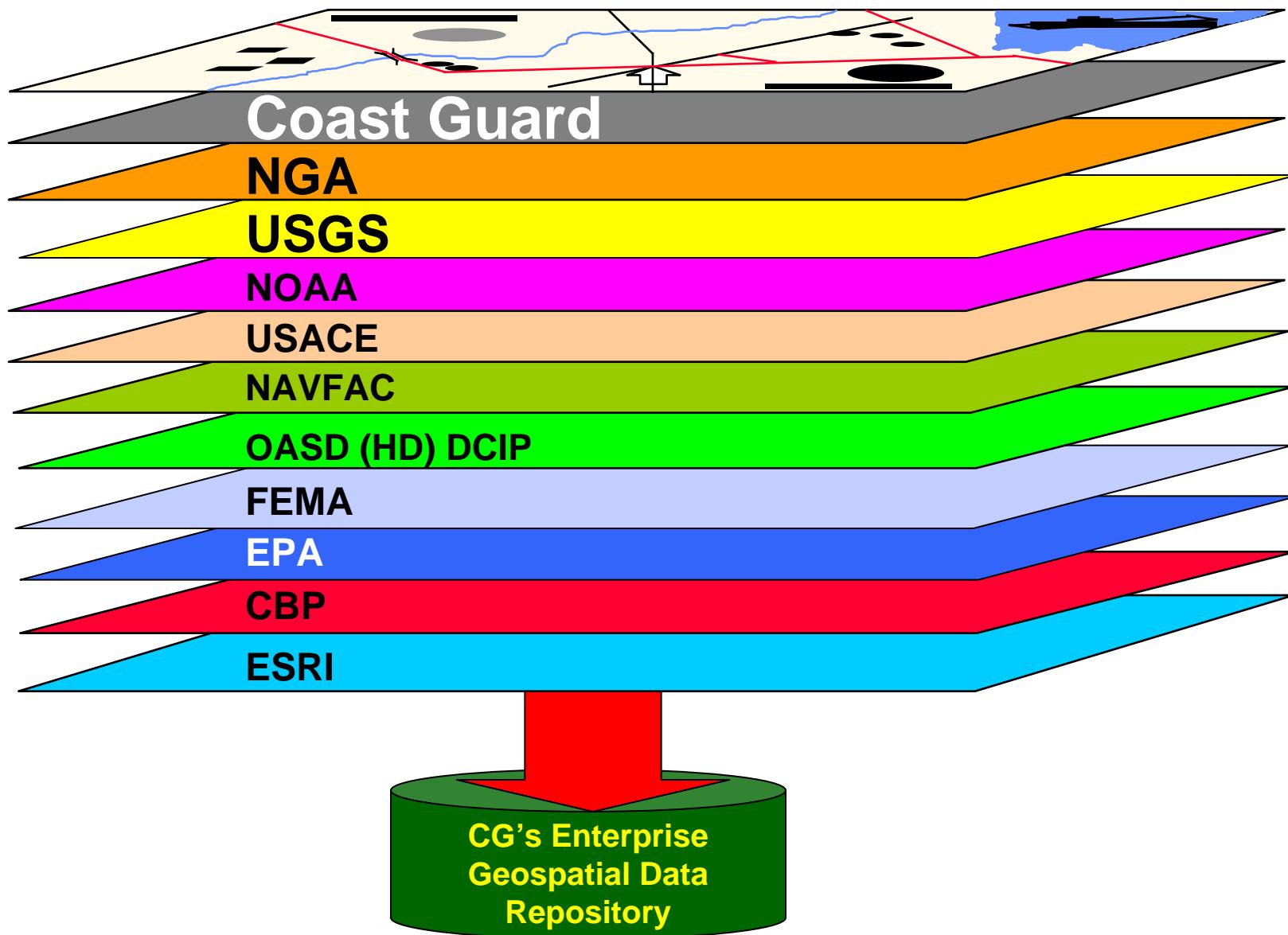


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# Enterprise GIS *National* Data Providers



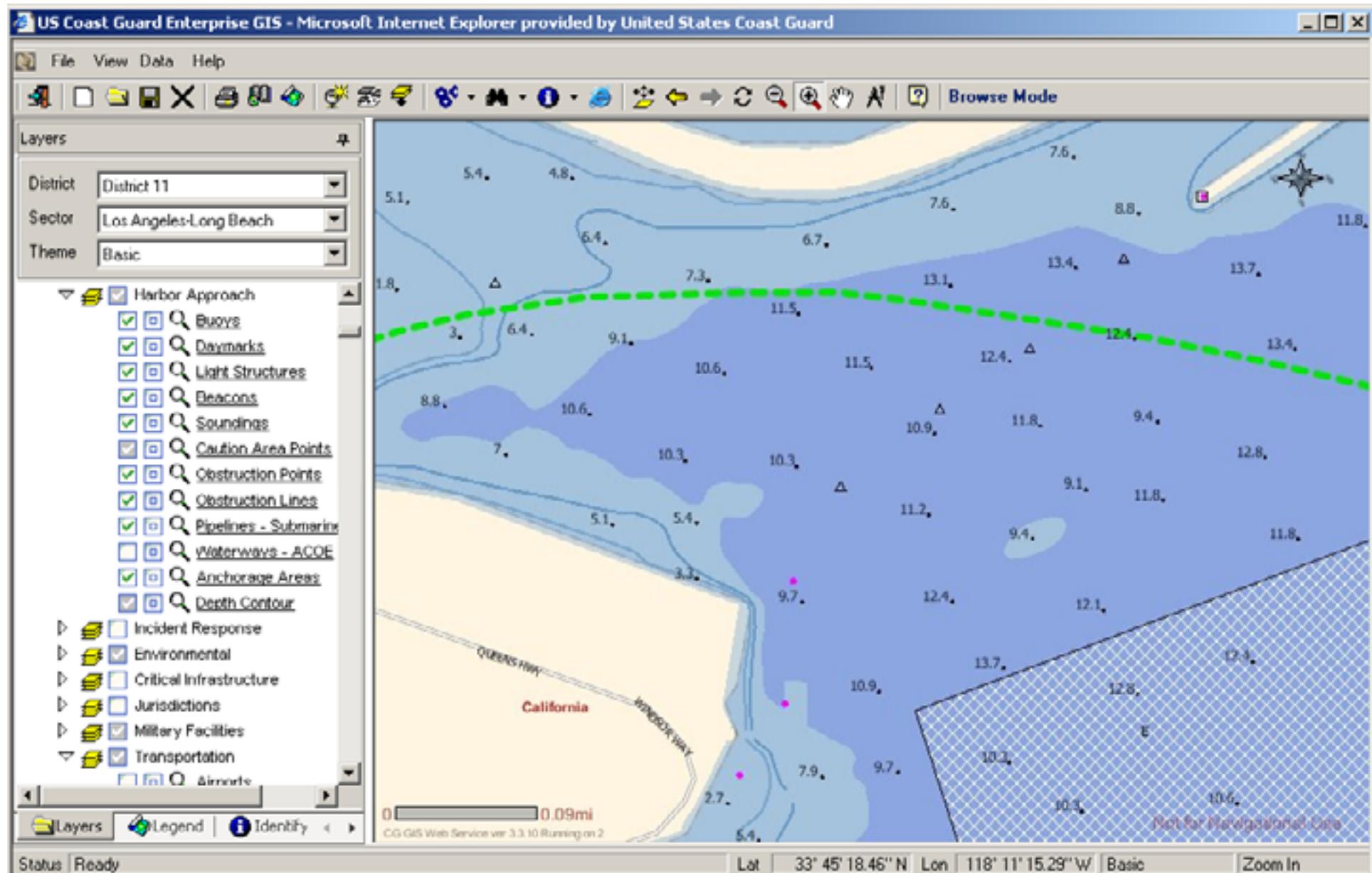
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# NOAA ENC Vector Data





# Enterprise GIS Data Warehouse

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## 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**



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Marine Safety Network GIS - Microsoft Internet Explorer provided by United States Coast Guard

File View Data MISLE Help

Browse Mode

Layers

District: District 10

Sector: None

Theme: Basic

Commercial and Retail

Boundaries

Jurisdictional - Coast Guard

- Unit Locations
- Areas
- Districts
- COTP Zones
- Stations
- Groups
- Sectors
- Safety Zones
- Security Zones
- Regulated Navigation
- Territorial Seas
- Continuous Zones
- Exclusive Economic
- Environmental Jurisdiction
- Environmental Jurisdiction

Jurisdictional - Other

Government

Defense Industrial Base

Transportation

0 176.95mi

CC GIS Web Service ver 3.4.100 Running on Train 1

N

Washington

Olympia

Sector Seattle

Idaho

Salem

Sector Portland

Oregon

Bonneville

California

Carson City

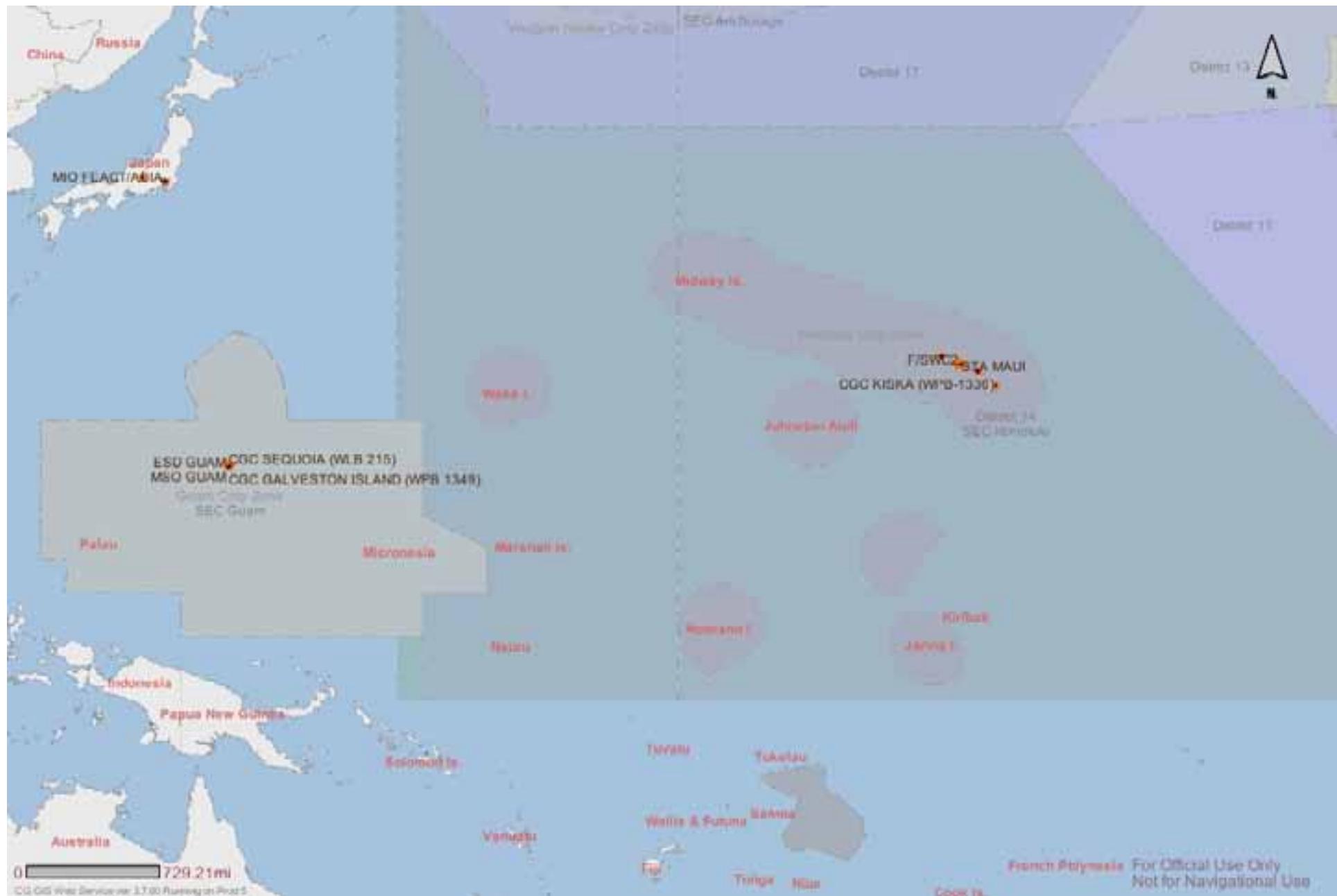
Nevada

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Layers Data Catalog Identify

Status Ready

Lat 52° 56' 52.71" N Lon 124° 34' 17.58" W Basic Zoom In



## **U.S. COAST GUARD**



## Homeland Security



## Layers

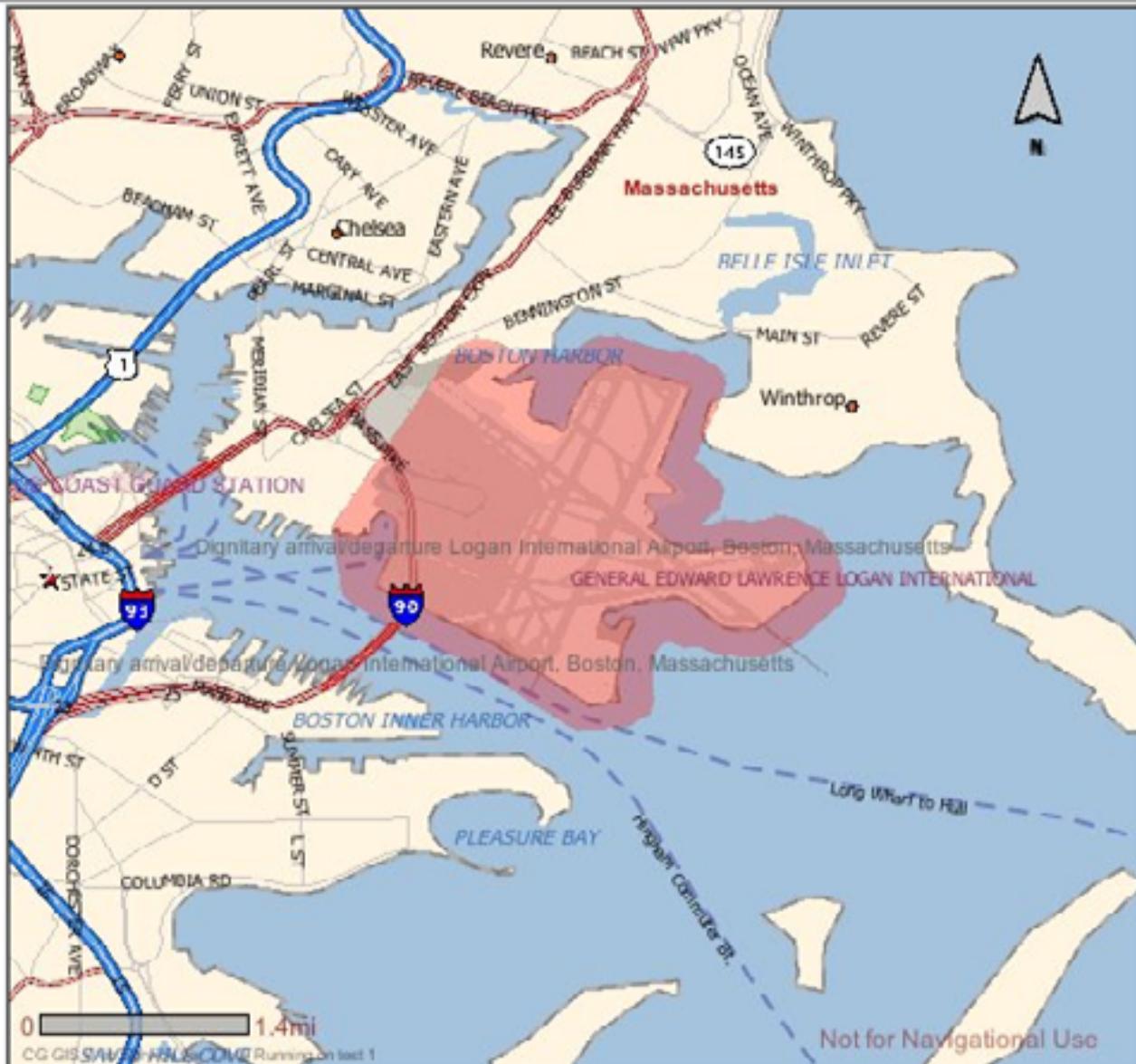
District

Sector

Theme Basic

 Service Layers

- MISLE Layers
- Lat/Long Grids
- Harbor Approach
- Incident Response
- Environmental
- Critical Infrastructure
- Jurisdictions**
  - Boston**
    - Coast Guard Areas**
    - Coast Guard District**
    - Coast Guard COTP**
    - Coast Guard Station**
    - Coast Guard Groups**
    - Coast Guard Sector**
    - Coast Guard Safety**
    - Coast Guard Security**
    - Coast Guard Regula**
    - Coast Guard Environ**





**U.S. COAST GUARD**



**Homeland  
Security**



# Enterprise GIS Data Warehouse

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## 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  
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# Raster Nautical Charts



# Enterprise GIS Data Warehouse

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## Local Data Coverage

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

Local Data

National Data



**U.S. COAST GUARD**



**Homeland  
Security**

File View Data Help



## Layers

District: District 14  
Sector: Honolulu  
Theme: Basic

## Service Layers

- ▷ MISLE Layers
- ▷ Harbor Approach
- ▷ Incident Response
  - ▷ Hawaii
    - [Tsunami Evacuation](#)
    - [Police Stations](#)
    - [Fire Stations](#)
    - [Hospitals](#)
  - ▷ Environmental
  - ▷ Critical Infrastructure
  - ▷ Jurisdictions
  - ▷ Military Facilities
  - ▷ Transportation
  - ▷ Dase Layers
    - ▷ Hawaii
      - [Cities](#)
      - [MHW Shoreline](#)
      - [Depth Area](#)
      - [Main Waterways](#)



Status Ready

Lat 21° 36' 24.41" N Lon 158° 05' 42.42" W Basic

Zoom In



# District 13 Spill Response Layers

Marine Safety Network GIS - Microsoft Internet Explorer provided by United States Coast Guard

File View Data MISLE Help

Layers

District: District 13

Sector: None

Theme: Basic

Service Layers

- MISLE Layers
- Contingency and Response Plans
  - Spill Origins
  - Booms
  - GRP Boundaries
  - Environmental Sensitivity
- Emergency Services
- Public Health
- Chemical Industry and Hazmat
- Education
- Telecommunications
- Water Supply
- Energy
- Commercial and Retail
- Boundaries
- Government

Keyport  
NAVAL UNDERSEA ENGINEERING STATION  
Washington

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0.2mi

Lat: 47° 42' 12.13" N Lon: 122° 36' 50.68" W Basic Zoom In





# Coast Guard Enterprise GIS

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**Presenter:** Commander Lane Johnson

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

Email: [lane.d.johnson@uscg.mil](mailto:lane.d.johnson@uscg.mil)



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