

US EPA Region 9 Emergency Response Program Geospatial Tools



**Timely and Accurate Situational Awareness
for
Preparedness, Effective Decision-Making
and
Rapid Response**

COPs, Viewers and Real-Time Field Data Collection

[Air](#)

[Chemicals and Toxics](#)

[Climate Change](#)

[Emergencies](#)

[Greener Living](#)

[Health and Safety](#)

[Land and Cleanup](#)

[Pesticides](#)

[Waste](#)

[Water](#)

**About EPA Region 9
(Pacific Southwest)**

- [News & Events](#)
- [A-Z Index](#)

Region 9

Alaska, Hawaii, Nevada, Pacific Islands, Tribal Nations

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Emergency Response

EPA Region 9's Emergency Response Program – with federal on-scene coordinators (FOSCs) based in San Francisco and Signal Hill, California, and Carson City, Nevada – responds to environmental disasters, hazardous materials releases, and inland oil spills that threaten human health and/or the environment.

Other duties include participating in emergency preparedness drills, and counter-terrorism drills and planning. The EPA's Emergency Response Section assists other federal, state, tribal and local governments when an emergency requires additional resources and expertise.

Reporting Oil or Chemical Spills



Sampling drums

The top priority of EPA's emergency response program is to eliminate any danger to the public and the environment posed by hazardous substance releases and oil spills. To help fulfill this mission, EPA requires that the person or organization responsible for a release or spill notify the federal government when the amount reaches a federally-determined limit. EPA has established [reporting requirements](#) for hazardous substance releases and oil spills to identify when the federal

government should be notified. States also may have separate reporting requirements. All it takes is a single telephone call to the [National Response Center](#) at 1 (800) 424-8802.

Emergency Response & Removal Sites

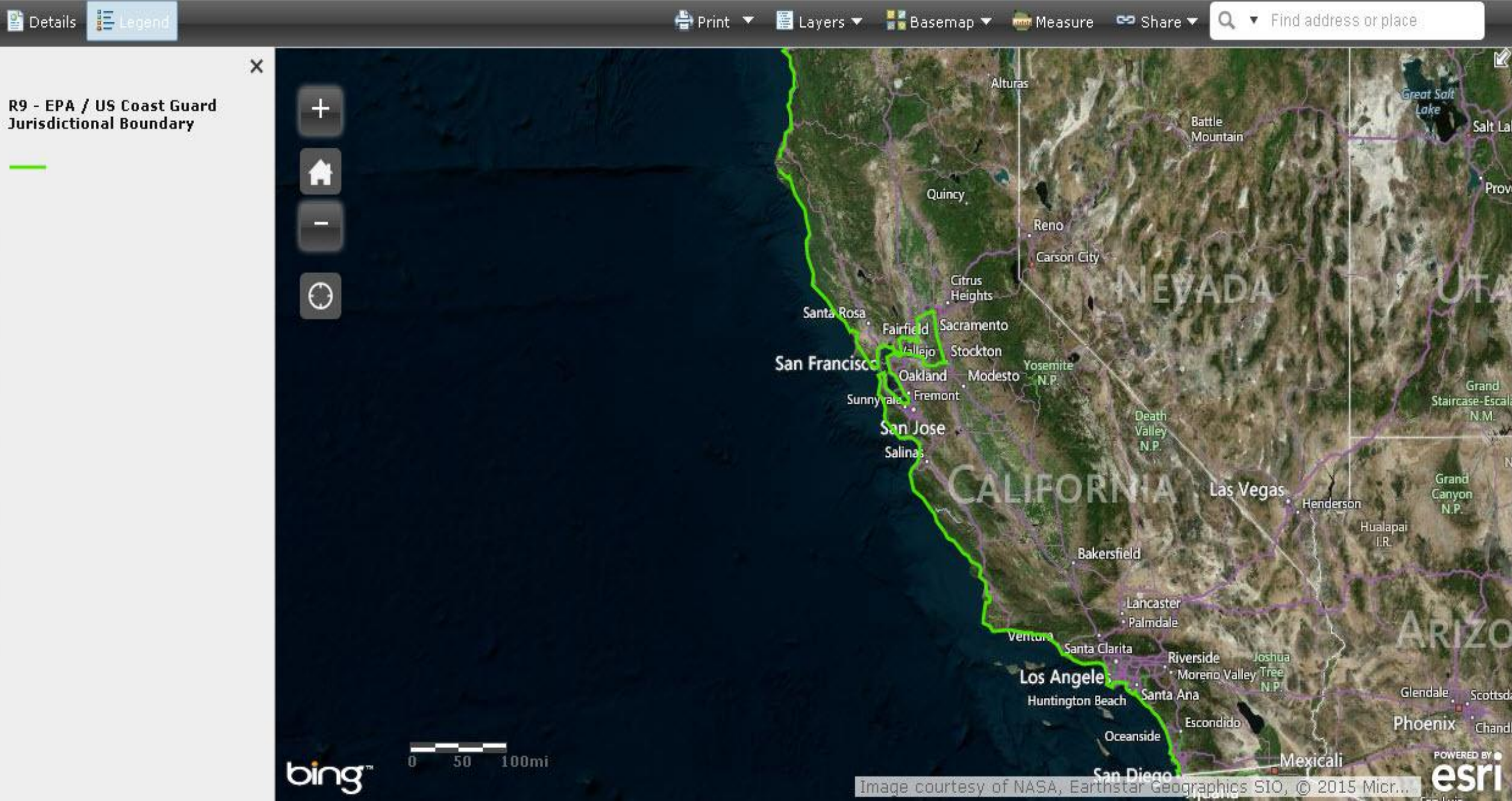


To contact a Region 9 Duty Officer for oil or chemical spills in Arizona, California, Nevada, Hawaii and the Pacific Islands please call **(800) 300-2193**. This number is staffed 24 hours per day, 7 days per week.

National Links

- [EPA National Emergency Response Home](#)
- [EPA's On-Scene Coordinator Home](#)
- [EPA National Contingency Plan Overview](#)

Region 9 - US EPA / US Coast Guard Jurisdictional Boundary



EPA OSC Website



This site is intended to be a tool to help streamline the work of OSCs and provide them a forum to share information and lessons learned with OSCs around the country.

EPA On Scene Coordinator (OSC) WebSite

Welcome to the EPA OSC WebSite. This site is intended to be a resource for EPA OSCs to access, track and share information with OSCs throughout the country. ([more...](#))

News

Voluntary Exercise Program (VEP) for On-Scene Coordinators and designated Special Team Members

The Voluntary Exercise Program (VEP) is established for EPA On-Scene Coordinators (OSCs) and designated Special Teams Members (STs) to maintain and improve their overall mental and physical state of readiness through regular physical conditioning so that they can safely perform their assigned job duties and to reduce the probability and severity of occupational injuries and illnesses. Please visit www.epa.osc.net/vep for additional information.

Please see [the documents section](#) of the website for the following:

EPA OSC Web Sites - recent updates

Name	City	State	Updated
CES Environmental Services, Inc.	Houston	TX	2/26/2015
Mansfield VOC Plume	Mansfield	OH	2/25/2015
ERT Standard Operating Procedures	Edison	NJ	2/25/2015
Jacamar Fire Response	Springboro	OH	2/25/2015
CSX Mt. Carbon Crude Derailment	Mt. Carbon	WV	2/25/2015

[More Websites](#)

OSC Task Force

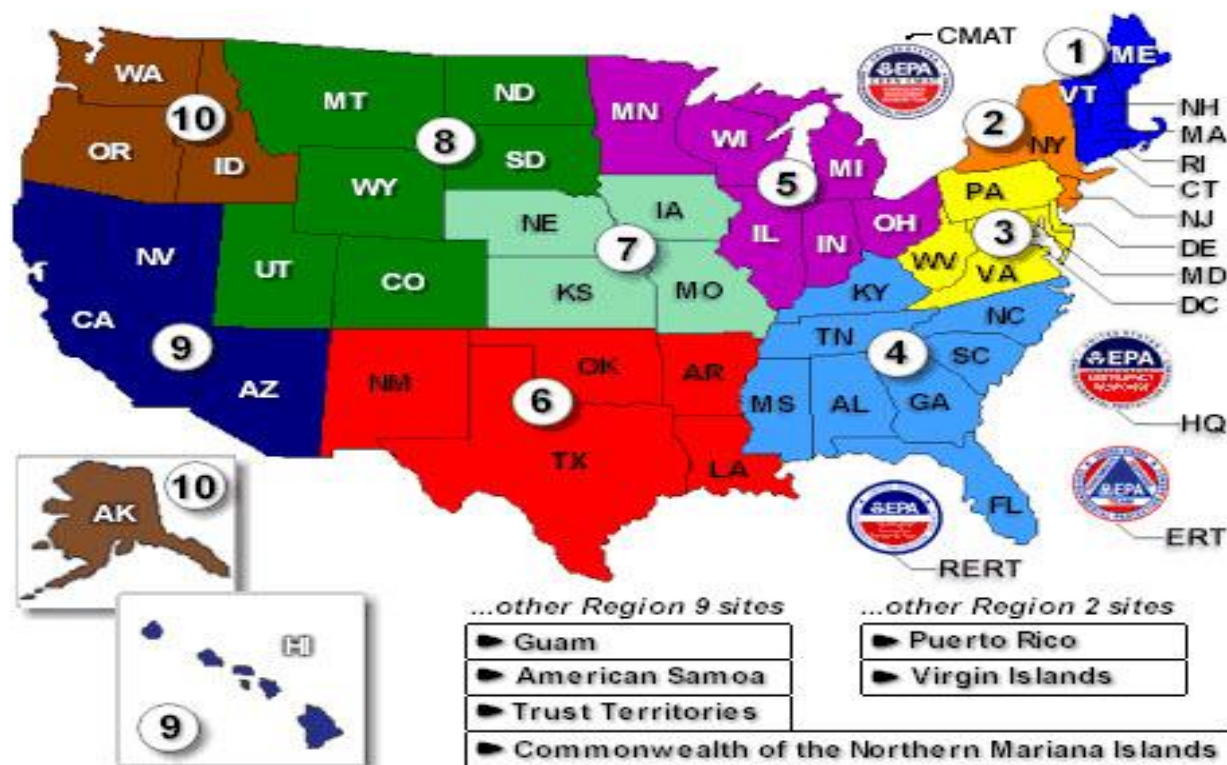
The [OSC Readiness Task Force](#) was originally created in 1982. The Task Force comprises 2 OSCs from each Region (serving 3-year terms), plus Removal Manager and Headquarters representatives.

The OSC Task Force has put together a [Toolbox Guide](#) to assist EPA On-Scene Coordinators (OSCs) and Federal Classification Series (FCS) 1102 Contracting Officers (COs) by outlining the general procedures for the acquisition of goods and services required to respond to certain environmental releases, threats and/or discharges.

Blue Book

[A collection of field related resources](#)

Select a Region to see a list of Web Sites or [List All Web Sites](#)



EPA OSC Web Sites - recent updates

Name	City	State	Updated
CES Environmental Services, Inc.	Houston	TX	2/26/2015
Mansfield VOC Plume	Mansfield	OH	2/25/2015
ERT Standard Operating Procedures	Edison	NJ	2/25/2015
Jacamar Fire Response	Springboro	OH	2/25/2015
CSX Mt. Carbon Crude Derailment	Mt. Carbon	WV	2/25/2015

[More Websites](#)

Region 1	Region 4	Region 7	Region 10	RERT
Region 2	Region 5	Region 8	ERT	CMAT
Region 3	Region 6	Region 9	HQ	

Categories

WebEOC

[All Links](#)
WebEOC

WebEOC is a web-based crisis management system designed for supporting the ICS method of response management for significant incidents, in addition to providing a unique toolset for supporting Daily Operations in the Regional Response Centers and the HQ Emergency Operations Center.

ERT is supporting the implementation of the WebEOC system by all the regions and HQ. Demonstration and training on WebEOC is being provided as part of an ERT initiative to present the RRC Workflow concept to the regions and HQ.

[Login to WebEOC](#) (Please set your browser to enable pop-ups for WebEOC)

Supported Browsers and Devices

WebEOC is best viewed with Internet Explorer v8.0 or higher. Other supported browsers include Chrome, Firefox and Safari. Mobile devices supported include the iPad, iPhone and Android browsers.

Note – Pop-ups must be allowed for this website or you will not be able to login, and boards will not function properly. You must also allow cookies. See your Computer Administrator if you require assistance with these settings. For the iPad/iPhone using Safari, you can enable pop-ups by selecting Settings | Safari | uncheck "Block Pop-ups".

For more information regarding WebEOC, please see the [WebEOC User Guide](#)

ERT Software Support: 800-999-6990

Email: ERTSupport@epa.gov

Related Links

[ESI WebSite](#)

ONE EPA Workplace GeoPlatform

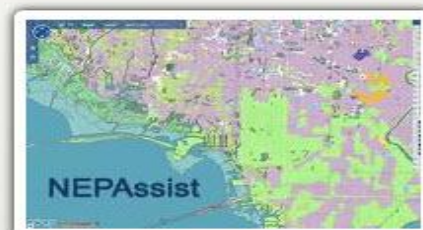


[EPA Home](#) | [Privacy and Security Notice](#) | [Comments and Suggestions](#) | [Contact Us](#)

EPA Featured Maps



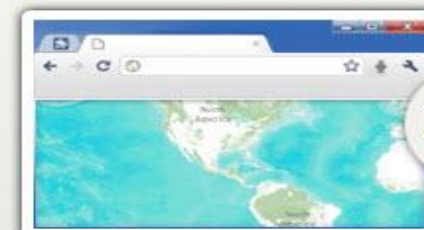
[EPA International Programs](#)



[Map: NEPAassist](#)



[EPA Map of Tribal Areas](#)



[Facilities Covered by the Rule](#)

Welcome to the EPA GeoPlatform Online!

The GeoPlatform Online is EPA's instance of ArcGIS Online and provides mapping, analysis, and collaboration capabilities to EPA staff, contractors, and partners.

You can use the EPA GeoPlatform Online to create maps and applications along with accessing geospatial information and tools provided by other users. Please refer to the informational links below to get started with EPA GeoPlatform Online.

For more information on how to use EPA GeoPlatform Online, be sure to:

- Read about [accessing EPA GeoPlatform Online](#);
- Learn about [training resources](#);
- Access [Esri's online help](#) for making maps; and
- Contact [EPA Geospatial support staff](#).



My Groups

 [CREATE A GROUP](#)

Show

All My Groups

[Owned by Me](#)
[Owned by Others](#)
[With New Membership Requests](#)

You are a member of 9 group



ER Geoviewer Gallery
Emergency Response Flex Geoviewers
created by Region9_EPA on May 27, 2014

[Details](#)

GUAM
Geospatial data and maps supporting Region 9 Emergency Response Activities.
created by Region9_EPA on September 25, 2012

[Details](#)

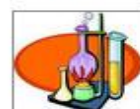
R9 Internal
Maps and data from Region 9 in the GeoPlatform that are for internal EPA use only.
created by Region9_EPA on June 5, 2012

[Details](#)

R9 Mobile
Applications developed primarily for mobile access.
created by Region9_EPA on September 24, 2012

[Details](#)

R9 Public
Maps and data from Region 9 in the GeoPlatform that are share-able with the public.
created by Region9_EPA on April 16, 2012

[Details](#)

Region 9 Testing
EPA Region 9 GIS Center Group within the GeoPlatform used for testing.
created by Region9_EPA on May 30, 2012

[Details](#)

Tern Island
Contains maps and files related to EPA work on Tern Island
created by Region9_EPA on September 3, 2014

[Details](#)

Find...

[The organization's groups](#)[The organization's groups that are public](#)

Featured Groups

[Land & Cleanup](#)[Pesticides, Chemicals and Toxics](#)[Waste](#)

[LEAVE THIS GROUP](#)

Geospatial data and maps supporting Region 9 Emergency Response Activities.

Group Content

All Results

Maps

[Open](#)[Details](#)

Common Operating Picture V5-E

HQ EOC COP

Web Map by Region9_EPA

Last Modified: February 20, 2014

★★★★★ (0 ratings, 0 comments, 16 views)

[Open](#)[Details](#)

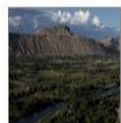
Lake Tahoe Geographic Response Plan

Lake Tahoe Geographic Response Plan for EPA Region 9

Web Map by Region9_EPA

Last Modified: May 27, 2014

★★★★★ (0 ratings, 0 comments, 19 views)

[Open](#)[Details](#)

Lower Colorado River Geographic Response Plan V5-E

Lower Colorado River Geographic Response Plan map

Web Map by Region9_EPA

Last Modified: February 25, 2014

★★★★★ (0 ratings, 0 comments, 79 views)

[Open](#)[Details](#)

Oakland Estuary V2-E

Version 2

Web Map by Region9_EPA

Last Modified: February 24, 2014

★★★★★ (0 ratings, 0 comments, 9 views)

PREVIOUS

1 2

NEXT

[LEAVE THIS GROUP](#)

Applications developed primarily for mobile access.

Group Content

All Results

Maps



HOODSurveyBoundary

★★★★★ (0 ratings, 0 comments, 23 views)



Removals View-Copy

Removals for EPA Region 9

Web Map by Region9_EPA

Last Modified: July 16, 2013

★★★★★ (0 ratings, 0 comments, 2 views)



West Oakland Removal View V2

West Oakland Removal View for EPA Region 9 V2

Web Map by Region9_EPA

Last Modified: December 20, 2012

★★★★★ (0 ratings, 0 comments, 12 views)



West Oakland Removal View-Copy

West Oakland Removal View for EPA Region 9

Web Map by Region9_EPA

Last Modified: July 11, 2013

★★★★★ (0 ratings, 0 comments, 16 views)

PREVIOUS

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Region 9 Testing

[LEAVE THIS GROUP](#)

EPA Region 9 GIS Center Group within the GeoPlatform used for testing. ▼

Group Content

All Results

Maps



Guam Common Operating Picture 2015 V2 Edit

test0128

Web Map by swift.andrew_EPA7

Last Modified: January 28, 2015

★★★★★ (0 ratings, 0 comments, 5 views)



Guam Common Operating Picture 2015

This map presents data relevant to emergency response in Guam. It includes data on potential pollutant and spill sources, infrastructure, and economically sensitive resources.

Web Map by tangestani.mo_EPA

Last Modified: January 27, 2015

★★★★★ (0 ratings, 0 comments, 51 views)



GRP Sensitive Sites v2

Testing Guam field tool

Web Map by walrath.alexandra_EPA

Last Modified: January 22, 2015

★★★★★ (0 ratings, 0 comments, 1 view)



HAWAIIAN ISLANDS NATIONAL WILDLIFE REFUGE: TERN ISLAND

Imagery of Tern Island

Web Mapping Application by Yarnell.David_EPA

Last Modified: January 16, 2015

★★★★★ (0 ratings, 0 comments, 575 views)

PREVIOUS

1

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12

NEXT



R9 Public

[LEAVE THIS GROUP](#)

Maps and data from Region 9 in the GeoPlatform that are share-able with the public. ▼

Group Content

All Results

Maps



BayArea PCBs-Copy

Marine Debris Observations

Web Map by tangestani.mo_EPA

Last Modified: July 15, 2014

★★★★★ (0 ratings, 0 comments, 78 views)



RCRA Corrective Action in CIMC

RCRA Corrective Actions: RCRA Corrective Action (CA) Sites are facilities that are on EPA's 2020 Corrective Action Baseline to be cleaned up under the Corrective Action program ...

Map Image Layer by jadams1_EPA

Last Modified: February 8, 2015

★★★★★ (1 rating, 0 comments, 128 views)



Region 9 - US EPA / US Coast Guard Jurisdictional Boundary

Boundary along the California coastline that defines the jurisdiction between the US EPA and the US Coast Guard in the event of an emergency response activity.

Web Mapping Application by Region9_EPA

Last Modified: March 21, 2014

★★★★★ (0 ratings, 0 comments, 57 views)



San Francisco Bay Area Baseline Trash Loading Estimate (Feb 2012)

This map shows the annual estimated amount of trash discharged through each city and county storm sewer system.

Web Mapping Application by Region9_EPA

Last Modified: December 4, 2012

★★★★★ (0 ratings, 0 comments, 116 views)

PREVIOUS

1

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NEXT

Login Screen

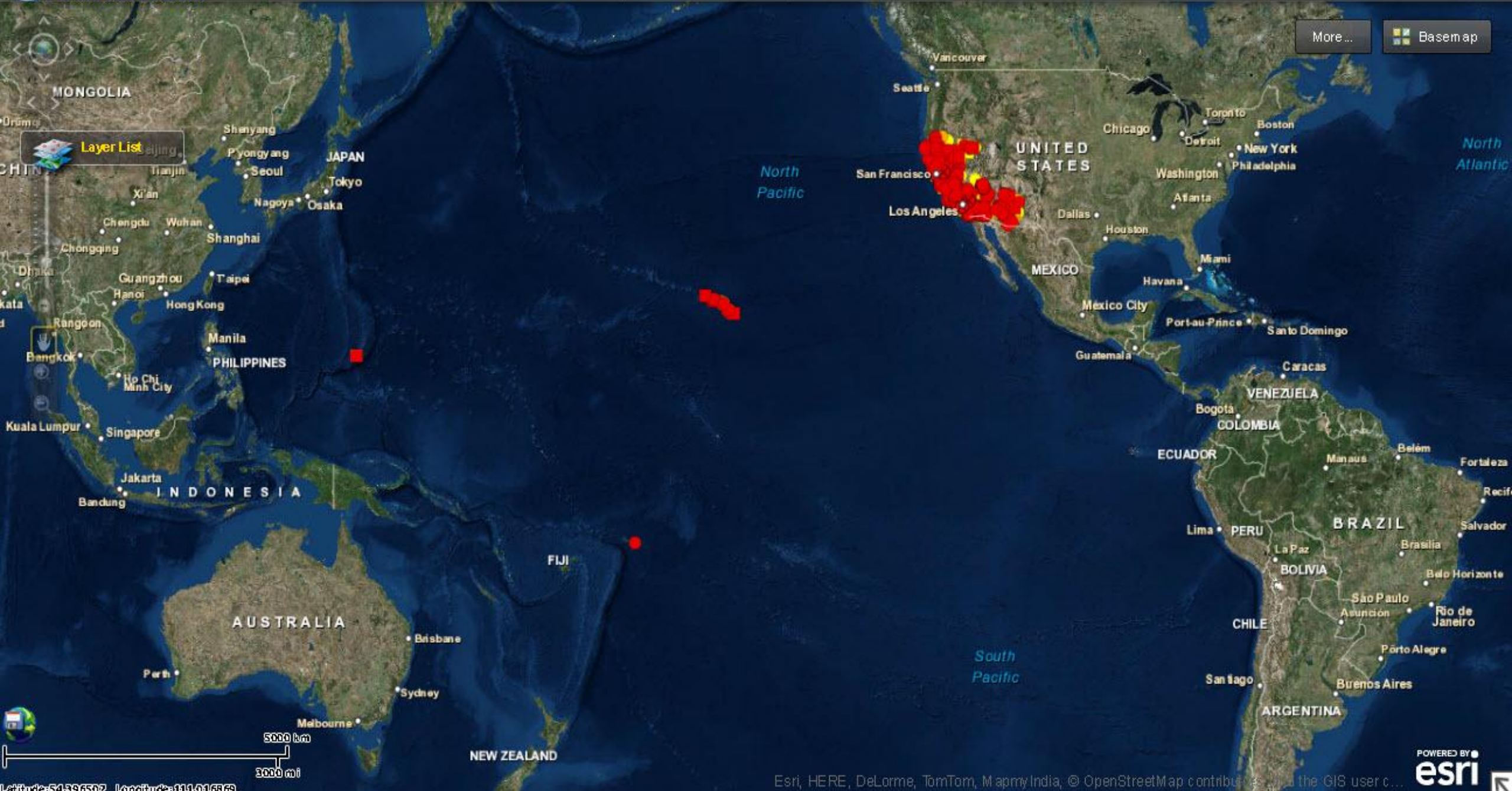


You are accessing a U.S. Government information system, which includes: (1) this computer, (2) this computer network, (3) all computers connected to this network, and (4) all devices and storage media attached to this network or to a computer on this network. This information system is provided for the U.S. Government-authorized use only. Unauthorized or improper use of this system may result in disciplinary action, as well as civil and criminal penalties. By using this information system you understand and consent to the following: You have no reasonable expectation of privacy regarding any communications or data transiting or stored on this information system. At anytime, the government may for any lawful government purpose monitor, intercept, search and seize any communication or data transiting or stored on this information system. Any communications or data transiting or stored on this information system may be disclosed or used for any lawful government purpose. By continuing to access this information system, you acknowledge, you understand and you consent to the above terms.

☒ I agree

Access Code

Login





Layer List

Layer Visibility

- ☒ **ER Recon (Editable)**
 - ☒ ER Recon (Editable)
- ☒ **R9 OSC Hotline Data**
 - ☒ WebEOC Hotline Log Region 9
 - Unknown Material - Unknown
 - Unknown Material - Pending
 - Unknown Material - Closed
 - Haz - Unknown Status
 - Haz - Pending
 - Haz - Closed
 - Oil - Unknown Status
 - Oil - Pending
 - Oil - Closed
 - Rad - Unknown Status
 - Rad - Pending
 - Rad - Closed
 - Other - Unknown Status
 - Other - Pending
 - Other - Closed
- ☒ **R9 EPA OSC.ORG**
 - ☒ OSC Sites

Layer List

Layer Visibility

- ☒ **Hurricane_Active**
 - ☒ Forecast Positions
 - Tropical Low
 - Tropical Depression
 - Tropical Storm
 - Hurricane
 - Major Hurricane
 - ☒ Past Positions
 - Low
 - Remnant Low
 - Disturbance
 - Tropical Depression
 - Tropical Storm
 - Hurricane1
 - Hurricane2
 - Hurricane3
 - Hurricane4
 - Hurricane5
 - ☒ Forecast Track
 - ☒ Observed Track

Layer List

Layer Visibility

- ☒ Forecast Error Cone
 - 3 Day Cone
 - 5 Day Cone
- ☒ Watches and Warnings
 - Hurricane Warning
 - Tropical Storm Warning
 - Hurricane Watch
 - Tropical Storm Watch
- ☒ **Current Natural Hazards Events**
 - ☒ Floods
 - Major
 - Moderate
 - Minor
 - ☒ U.S. Volcanoes
 - Alert: Warning, Code: 1
 - Alert: Watch, Code: 2
 - Alert: Warning, Code: 3
 - Alert: Watch, Code: 4
 - Alert: Advisory, Code: 5
 - Alert: Normal, Code: 6
 - ☒ Other Volcanoes
 - Recent Activity

Layer List

Layer Visibility

- ☒ Earthquakes
 - 2.500000 - 3.000000
 - 3.000001 - 5.000000
 - 5.000001 - 10.000000
- ☒ **Shakemaps**
 - Weak (II - III)
 - Light (IV)
 - Moderate (V)
 - Strong (VI)
 - Very Strong (VII)
 - Severe (VIII)
 - Violent (IX)
 - Extreme (X+)
- ☒ Hurricanes
 - Other
 - Depression
 - Storm
 - Hurricane
- ☒ Hurricane Forecasts
 - Forecastpts
 - Forecast Location
 - Forecastlms

Layer List

Layer Visibility

- ☒ Wildfires
 - Current Wildfire
 - Wildfire Perimeters
 - Burned Area
- ☒ Severe
 - Flash Flood Warning
 - Severe Thunderstorm Warning
 - Special Marine Warning
 - Tornado Warning
- ☒ Warnings
 - Ashfall Warning
 - Avalanche Warning
 - Blizzard Warning
 - Civil Danger Warning
 - Coastal Flood Warning
 - Dust Storm Warning
 - Earthquake Warning
 - Excessive Heat Warning
 - Extreme Cold Warning
 - Extreme Wind Warning
 - Fire Warning
 - Flash Flood Warning



Layer List

Layer Visibility

☒ Watches

- ☐ Avalanche Wat
- ☐ Blizzard Watch
- ☐ Coastal Flood V
- ☐ Excessive Hear
- ☐ Extreme Cold V
- ☐ Fire Weather W
- ☐ Flash Flood We
- ☐ Flood Watch
- ☐ Freeze Watch
- ☐ Gale Watch
- ☐ Hard Freeze W
- ☐ Hazardous Sea
- ☐ Heavy Freezing
- ☐ High Wind Wat
- ☐ Hurricane Forc
- ☐ Hurricane Watc
- ☐ Lake Effect Sn
- ☐ Lakeshore Flo
- ☐ Severe Thunde
- ☐ Storm Watch
- ☐ Tornado Watch

Layer List

Layer Visibility

☒ STORET

☒ Water Monit

☒ Current Wind !

☒ Stations

- ☐ 0 km/h
- ☐ < 12 kn
- ☐ < 39 kn
- ☐ < 62 kn
- ☐ < 89 kn
- ☐ < 118 k
- ☐ >= 118

☒ Buoys

- ☐ 0 km/h
- ☐ < 12 kn
- ☐ < 39 kn
- ☐ < 62 kn
- ☐ < 89 kn
- ☐ < 118 k
- ☐ >= 118

☒ Cleanups in M

☒ Incidents of t

Layer List

Layer Visibility

☒ Tribal Lands

☒ Brownfield Grant

- ☐ Job Trainin
- ☐ Job Trainin
- ☐ Assessme
- ☐ Assessme
- ☐ Cleanup Gr
- ☐ RLF Grants
- ☐ RLF Pilots
- ☐ State and 1
- ☐ Multiple Gr

☒ Annotation

☒ Congressional Di

☒ EPA Regions

☒ OSC Field Activity

☒ EPA OSC Field

☒ R9 Scribe Data

☒ Scribe Data

☒ R9 Sensitive Spec

- ☐ Superfu
- ☐ Brownfields Properties

Layer List

Layer Visibility

☒ R9 Sensitive Species

☒ California Natural Dive

☒ Point Sitings

☒ Plants, Anima.

☒ Plant

☒ Animal

☒ Terrestri

☒ Aquatic

☒ Federal Listin

☒ Endange

☒ Threater

☒ Propose

☒ Candidat

☒ Delisted

☒ None

☒ Habitat and Range

☒ Plants, Anima.

☒ Plant (80

☒ Plant (sp

☒ Plant (no

☒ Plant (cir

☒ Animal (i

Layer List

Layer Visibility

☒ R9 Potential Pollutant And Spill Sources

☒ RMP Facilities (2011)

☒ All RMP Facilities

☒ Level 3 Facilities

☒ Chemicals of Concern/ Population >= 5

☒ Chemicals of Concern/ No Population >

☒ No Chemicals of Concern/ Population >

☒ No Chemicals of Concern/No Populatio

☒ Level 2 Facilities

☒ Chemicals of Concern/Population >= 5

☒ Chemicals of Concern/ No Population >

☒ No Chemicals of Concern/Population >

☒ No Chemicals of Concern/Np Populatio

☒ Level 1 Facilities

☒ Chemicals of Concern/No Population >

☒ No Chemicals of Concern/Np Populatio

☒ FRP 2012

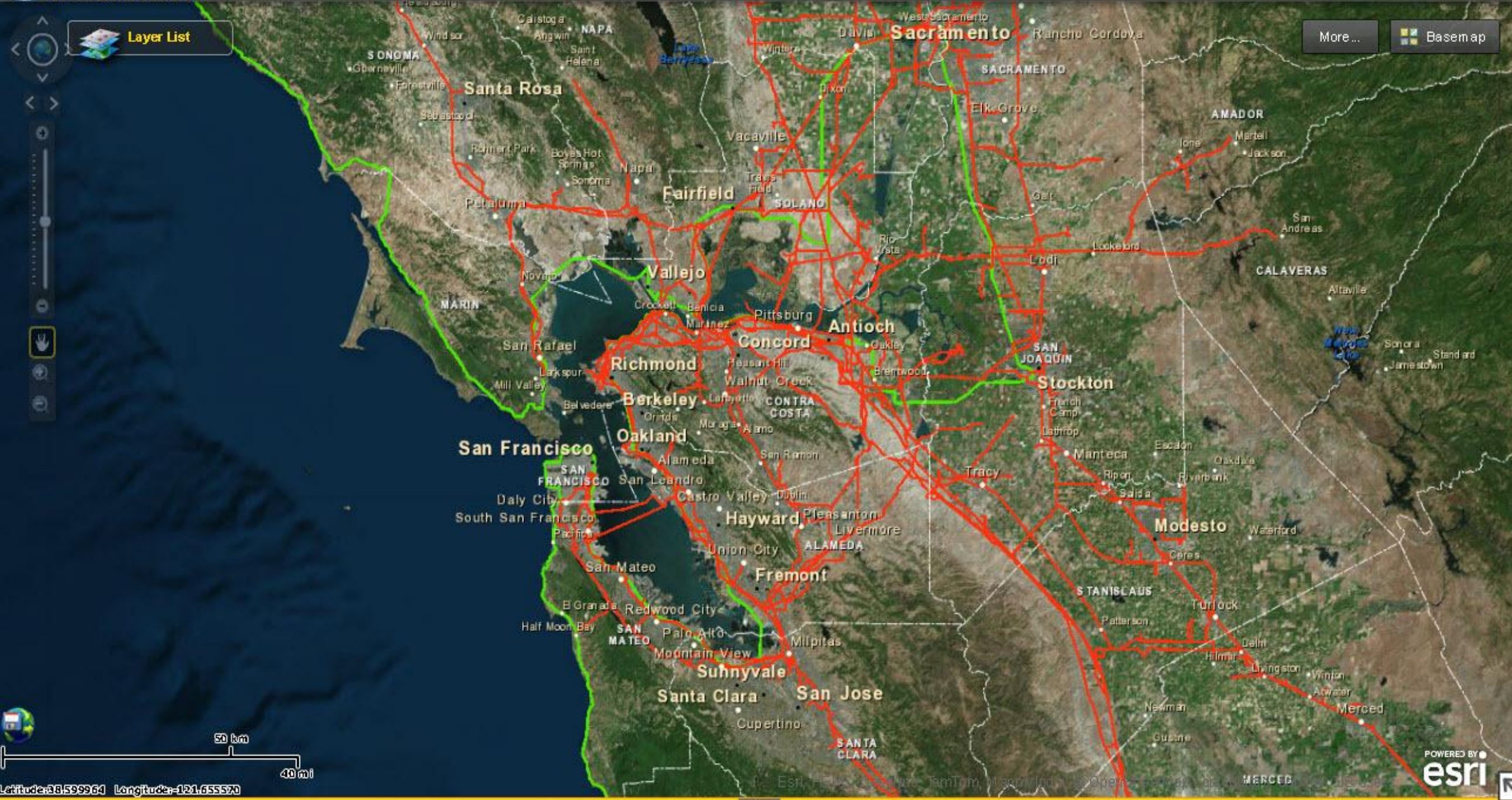
☒ TRI Facilities (2010)

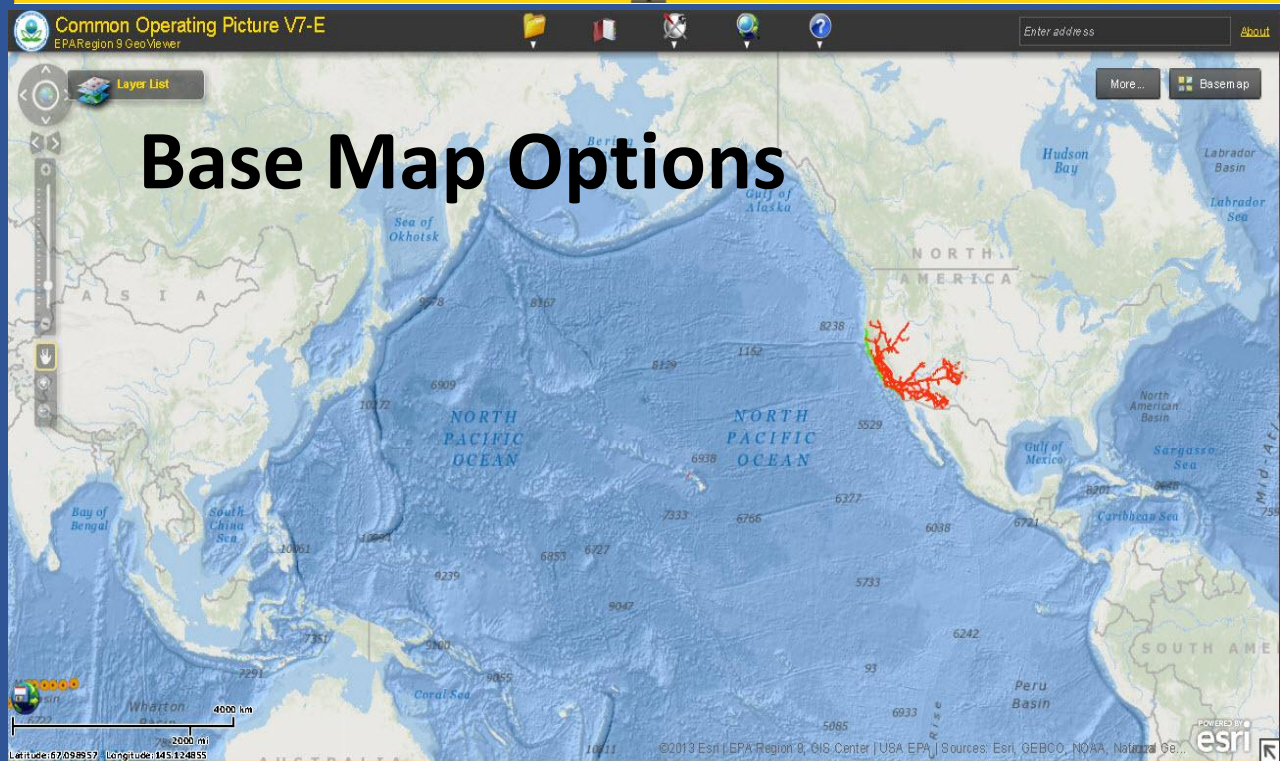
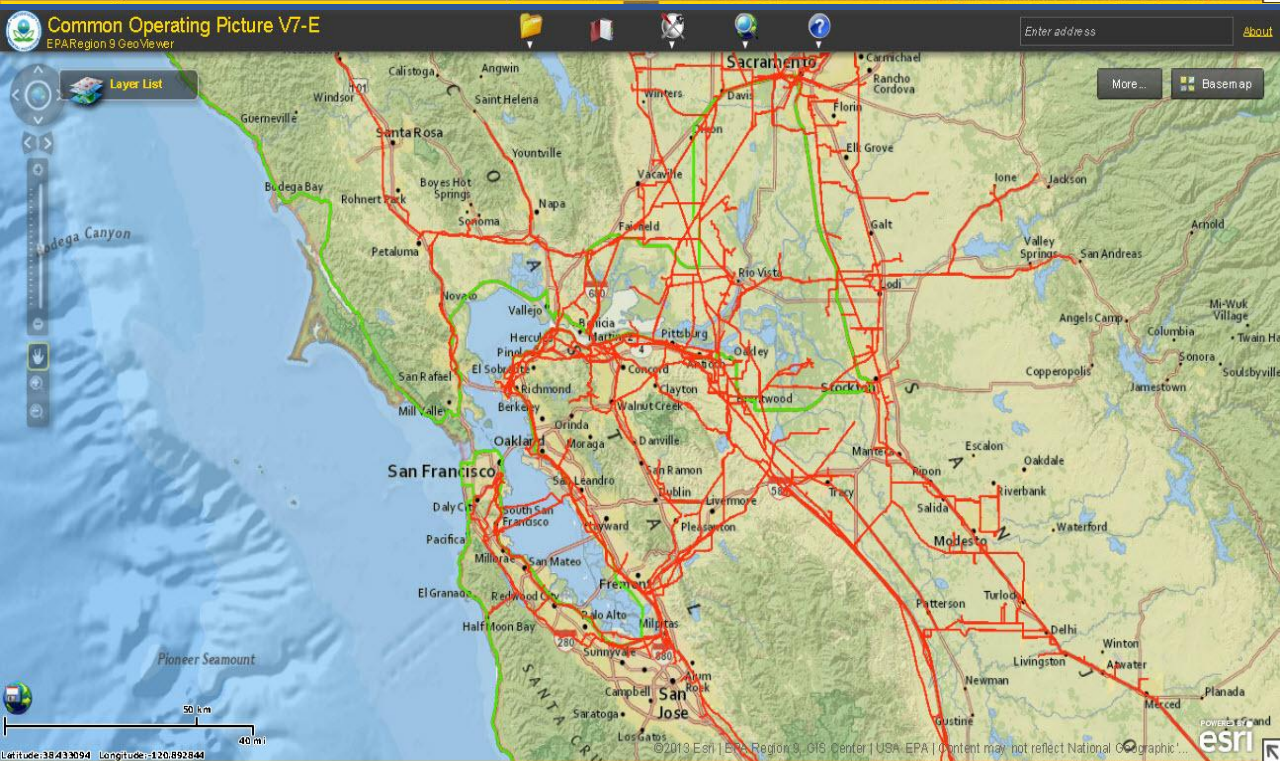
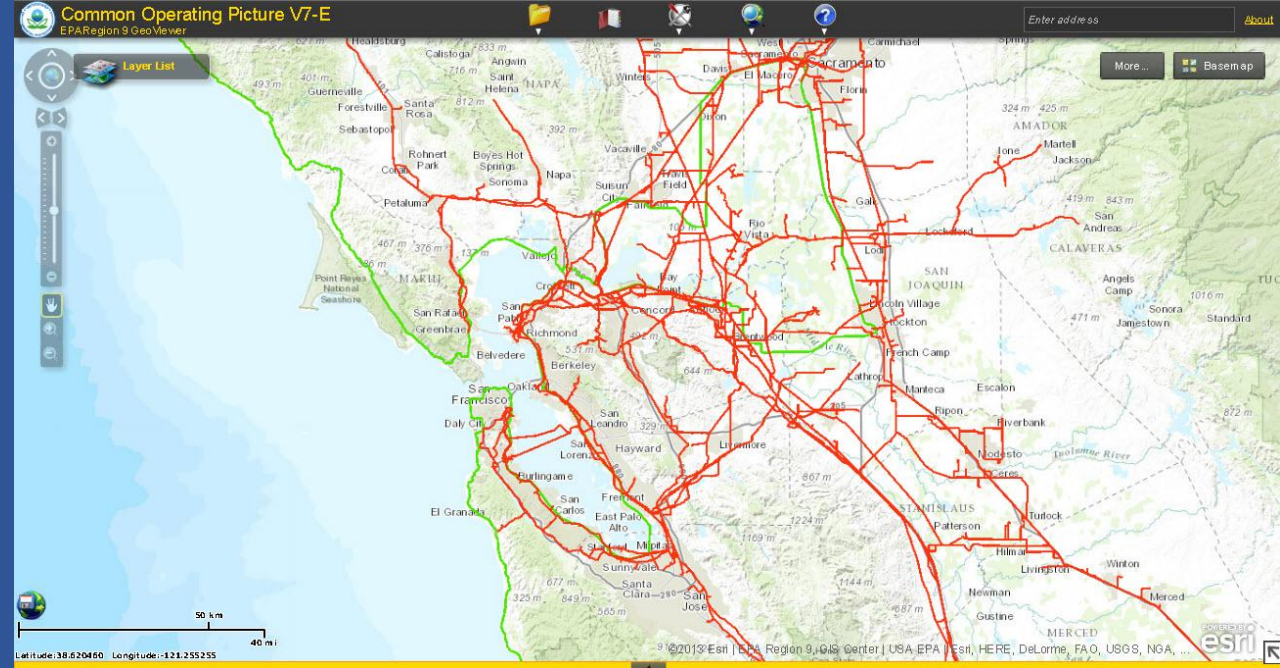
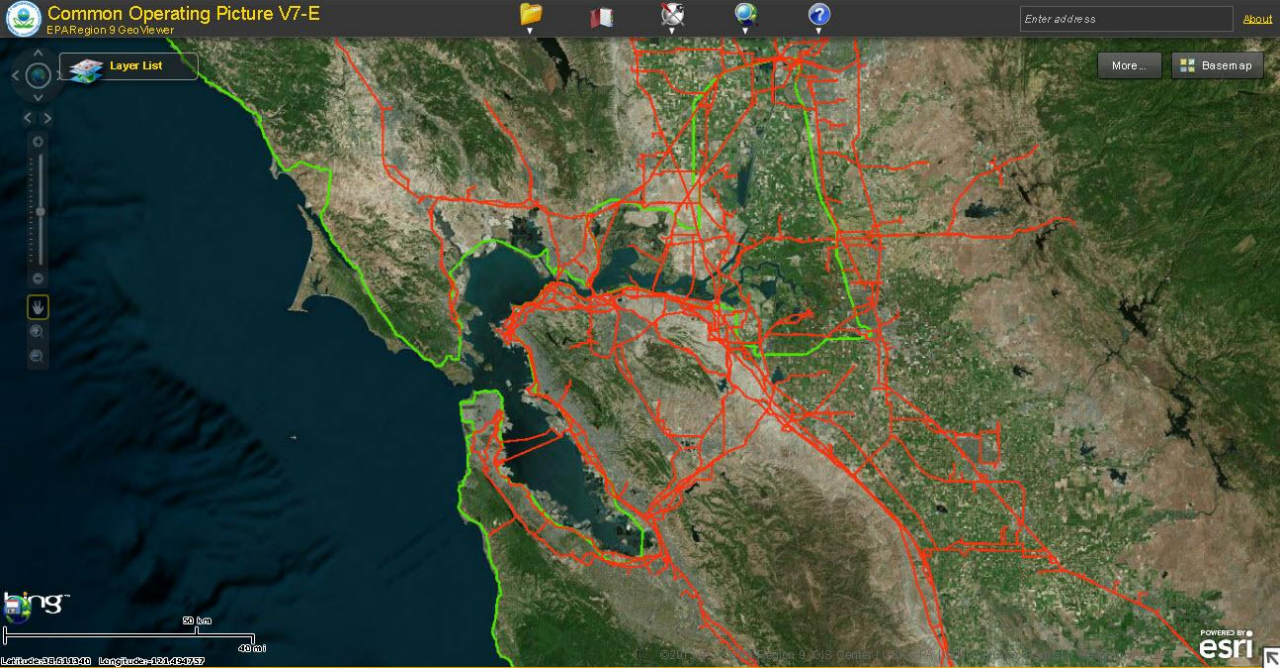
☒ Tier II Sites

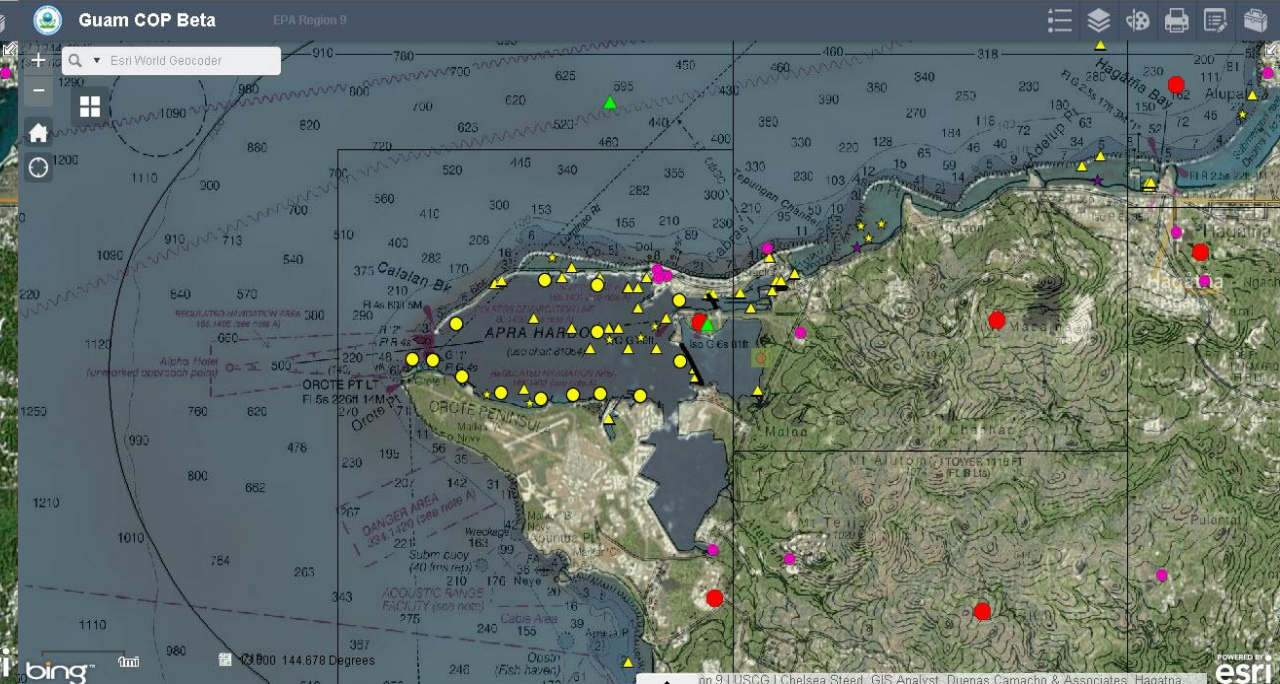
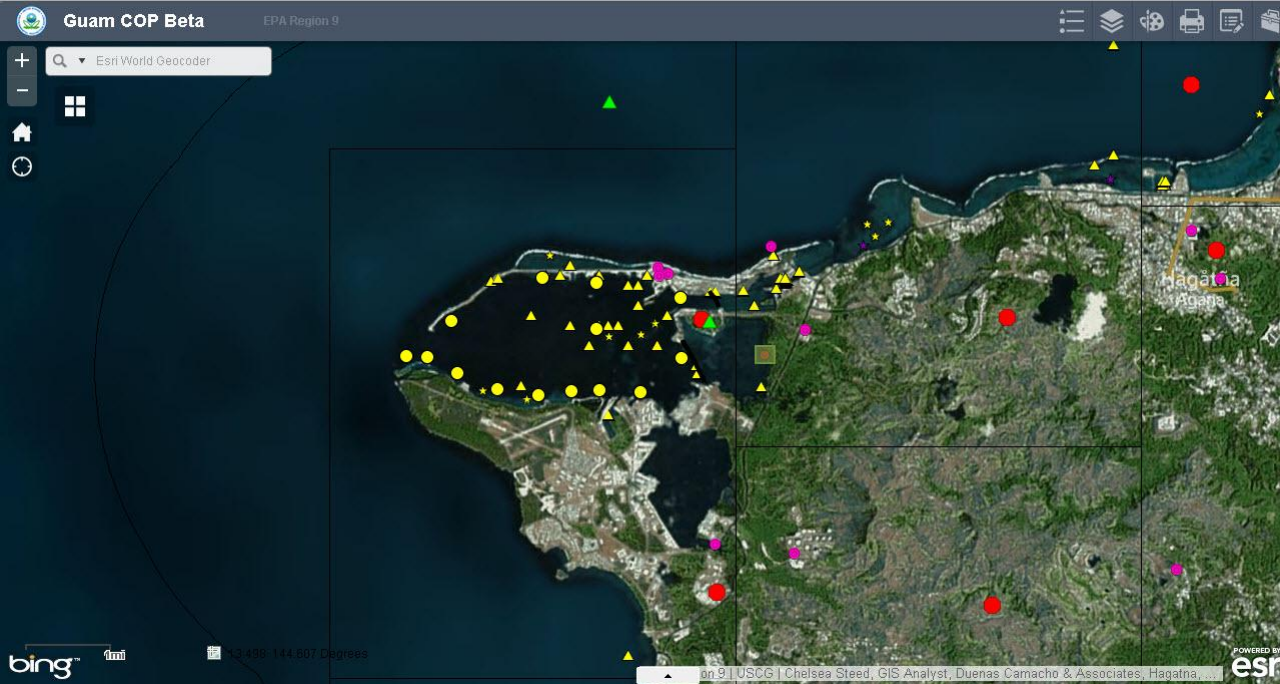


Layer List

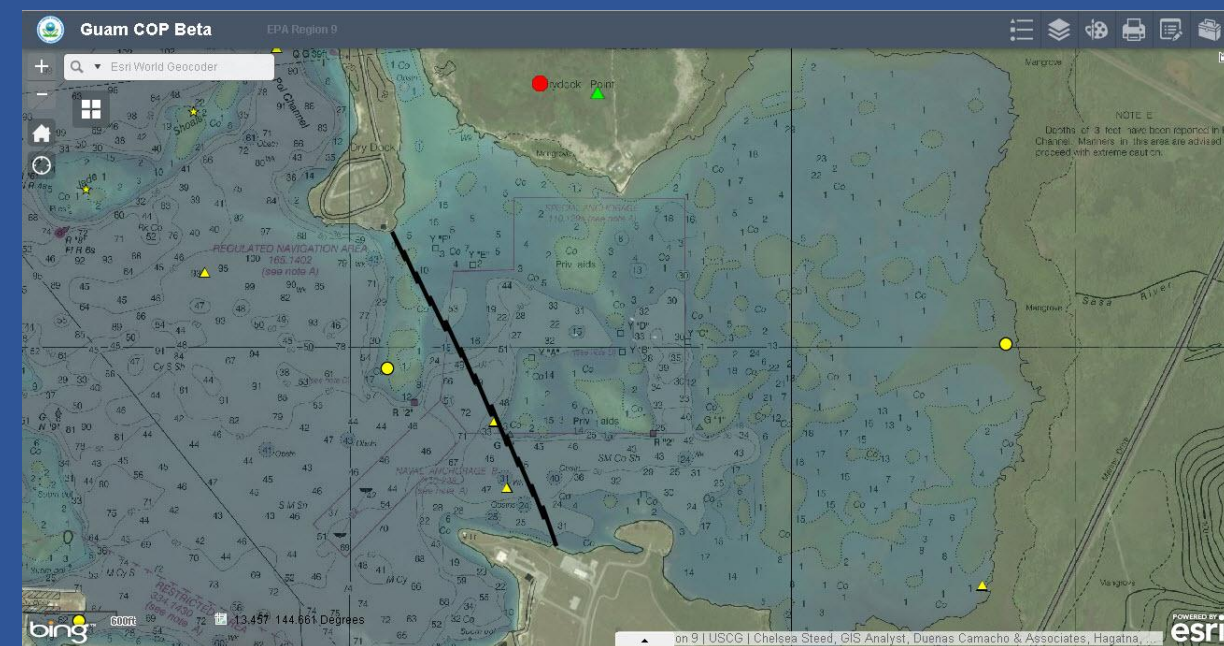
[More...](#) Basemap



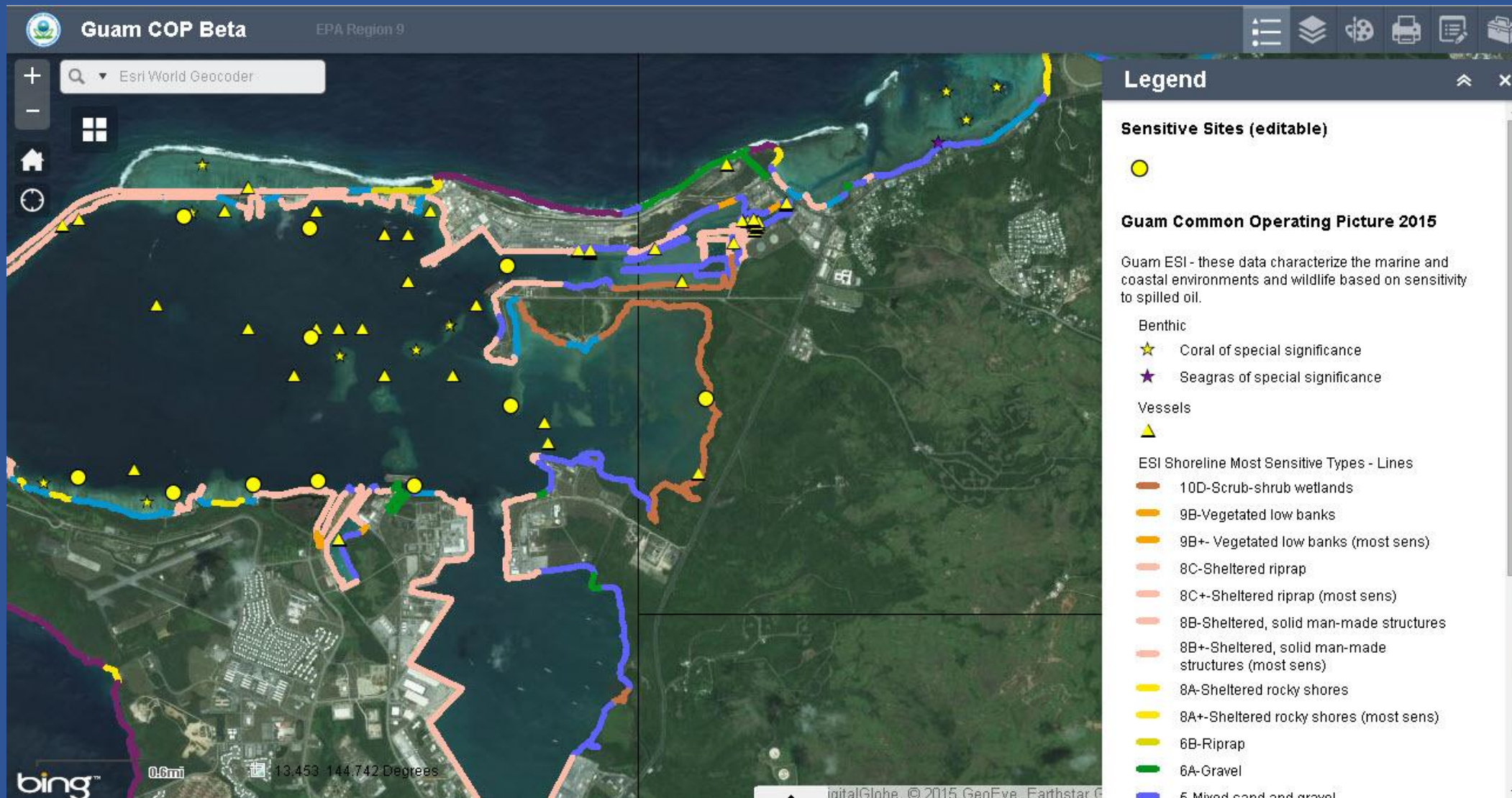




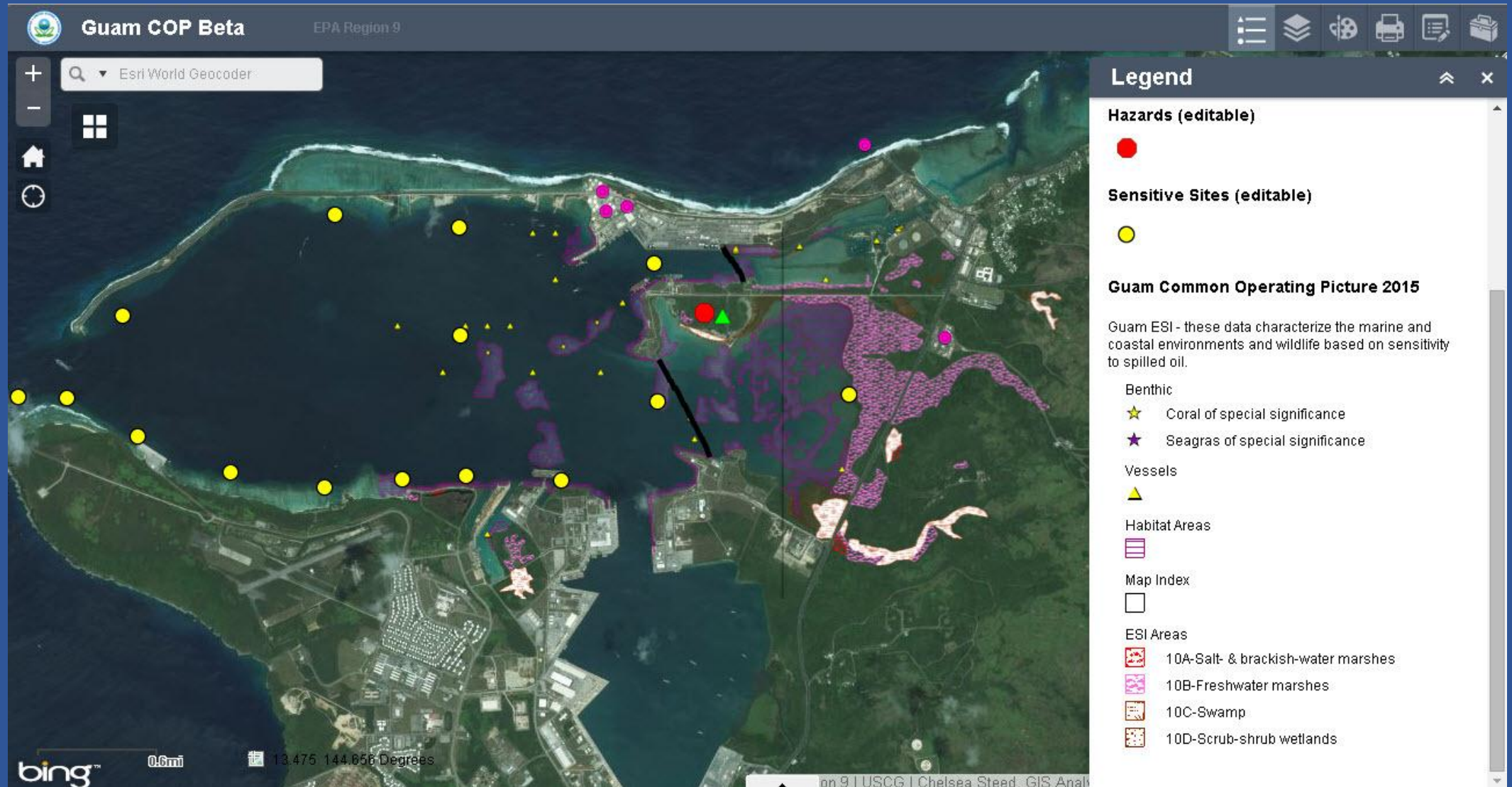
Base Maps
Zoomed-in!



Environmental Sensitivity Data



ESI Data, Hazards and GRP Protection Strategies



Widgets.... APIs.... Geospatial tools!

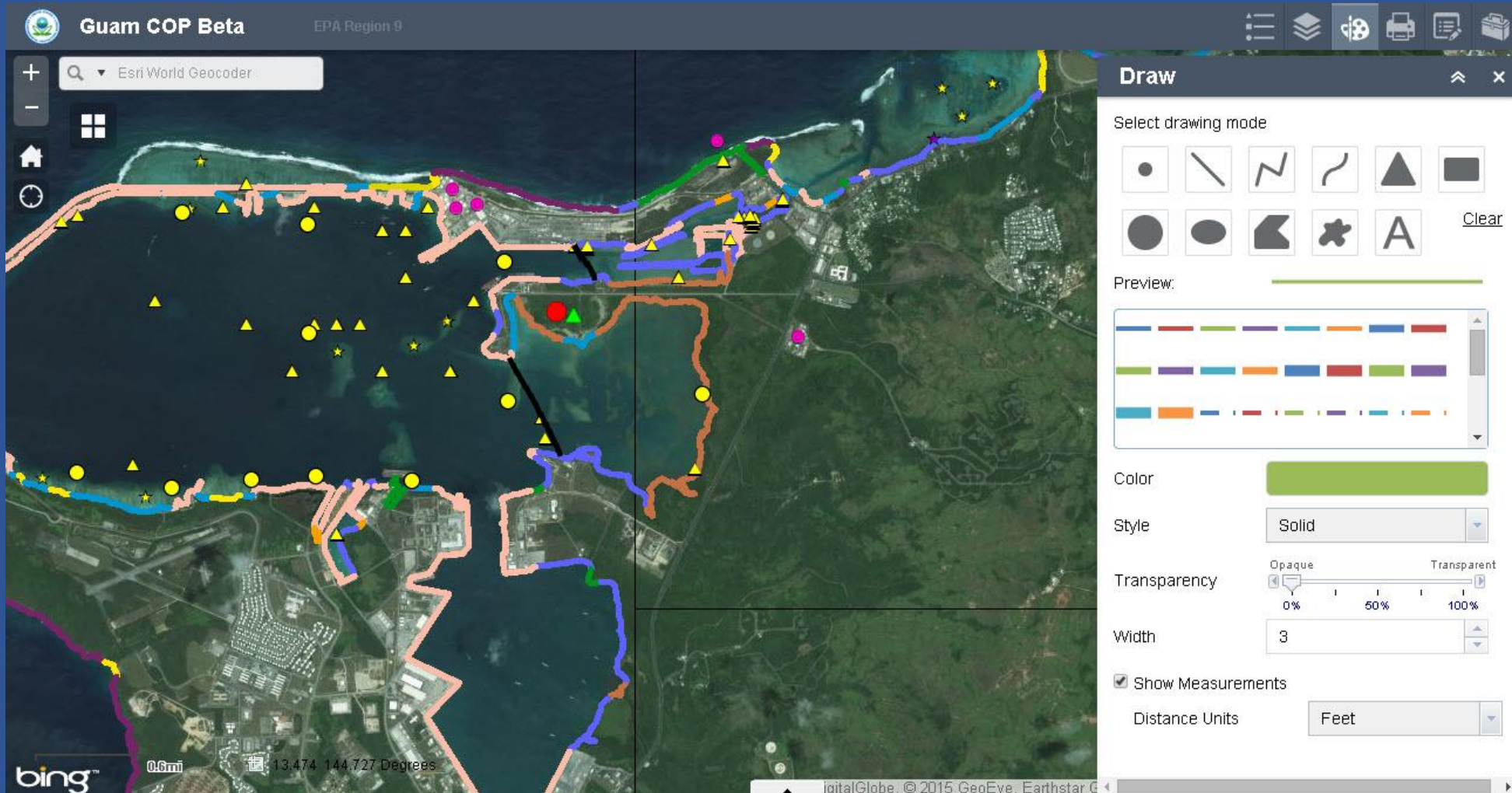
Widgets enable Spill Source Investigation and Tracking

- Easy watershed-based investigation to potential sources and downstream risks
- Pipelines, drinking water infrastructure, wetlands, etc.

Widgets provide useful tools in the field

- Measuring distances and related physical relationships, forecast and existing weather conditions, information sharing, plume display, import of additional GIS layers, etc.

Geographic Response Planning



Geographic Response Planning

Guam COP Beta EPA Region 9

Esri World Geocoder

GRP Sensitive Sites (editable)

OBJECTID	1
Sector	USCG Sector Guam
GRP Map Number	ESI-1
Name	GRA Apra Harbor- Mar
Other Name	Do not Delete
Site ID	AH-Demo
Protection Priority: Spring	A
Protection Priority: Summer	B
Protection Priority: Fall	C
Protection Priority: Winter	D
Latitude (DMS)	13°27'14"
Longitude (DMS)	144°28'47"

Edit

Select template to create feature

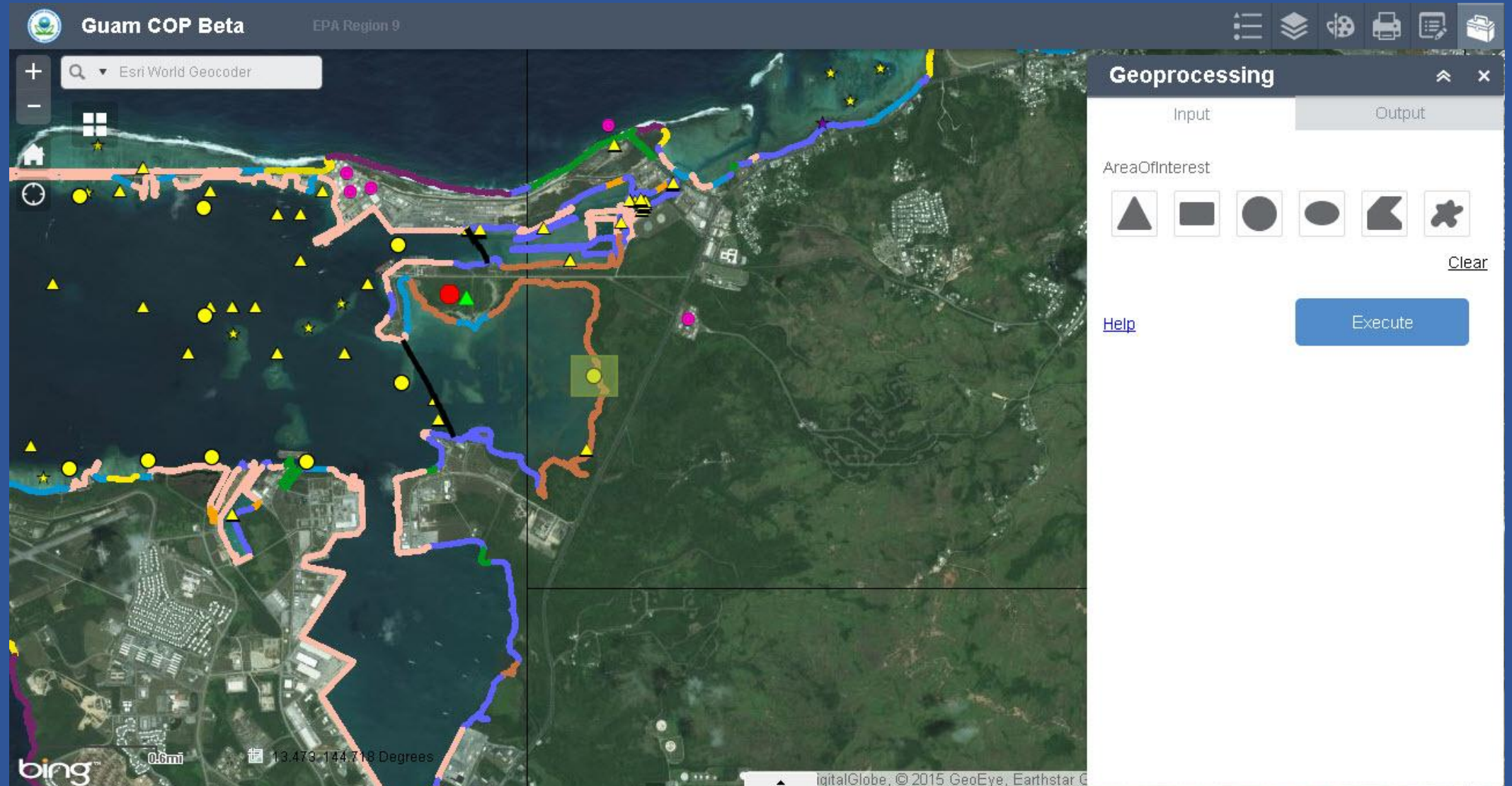
- Boom (editable)**
- Tier II Facilities (editable)**
- Guam Natural Resources (editable)**
- Guam Hazards (editable)**
- GRP Sensitive Sites (editable)**

0.6mi 13.471 144.714 Degrees

bing

igitalGlobe, © 2015 GeoEye, Earthstar G

Geographic Response Planning



Geographic Response Planning

GRA Apra Harbor- Mangroves		GRP Map #ESI-1
<div>Name: GRA Apra Harbor- Mangroves</div> <div>Other Name: Do not Delete</div> <div>Site ID: AH-Demo</div> <div>Protection Priority (Season):<div>Spring: A</div><div>Summer: B</div><div>Fall: C</div><div>Winter: D</div></div> <div></div>		
Geospatial Information		
Latitude (DMS): 13°27'14" Longitude (DMS): 144°38'47" Latitude (DD): 13.454643 Longitude (DD): 144.680255		
ESI Map: ESI Map		ESI Name: ESI Name sample text
NOAA Chart:		CHART Name: CHART Name sample
USGS Quad: USGS Quad sample text		QUAD Name: QUAD name sample te
Managed Area (if applicable): managed area text		
General Location: general location text		
Site and Resources at Risk		
<div>Site Description</div> <div>Shoreline Type: Mangroves and salt marsh with coral heads at each end</div> <div>Tidal Range (ft): +/- 1.5 feet summer months / +/- 2 feet winter months</div> <div>Average Current (kts): Negligible</div> <div>Physical Description: This mangrove shoreline is approximately 900 feet wide northern edge. The influenced by seasonal rainfall. During wet winter periods the creek mouth may For much of the year a natural sand berm fills the creek mouth forming a pon the xxxxx. This mangrove habitat is the sensitive area of concern where a diver marsh plants such as cattail and bulrush thrive. Numerous species of birds, and terrestrial mammals are attracted to this mangrove habitat.</div> <div>Other Comments: other site description comments...The cow jumps over the moon</div> <div>Seasonal and Special Resource Concern</div> <div>Comments: seasonal and special resource concern comments</div>		
Resources of Primary Concern		
<div>Habitat: mangroves</div> <div>Wildlife: Manatees, Wading birds, Juvenil</div> <div>Threatened and Endangered Species: Manatees, Red Sand Verbena - Two listed species of fish are knowr Tidewater goby and Steelhead trout. Consequently any NON-EMERG must be with the concurrence of the Guam EPA wildlife biologist and U During the months of March through September, Guam least tern and W present along the beach face. One listed plant, Red sand verbena, m beach sand dunes.</div> <div>Other Comments: other resources of primary concern comments</div>		
Cultural, Historic, Socio-Economic and Archaeological Sensitivities		
<div>Cultural Priority: cultural priority comments</div> <div>Historic Priority: historic priority comments</div> <div>Socio-Economic Priority: 1 Must keep the port open if at all possible</div> <div>Archaeological Priority: 1 Notfy Walter Leon Guerrero at Guam EPA immediately</div> <div>Other Comments: additional comments</div>		
Additional Site Summary Comments		
<div>Comments: Response efforts at this site will require coordination with the Commanding Office base routinely conducts live fire exercises and other similar military training missio front. Early coordination to avoid conflict between responders and military OPS guided travel within Navy and Guam EPA work sites should be coordinated to r clearing the gate security office, and to speed up response time to the remote is undeveloped coast line.</div>		
Hazards and Restrictions		
<div>Hazards: hazards sample text</div> <div>Restrictions: restrictions sample text</div> <div>Other Comments: Use Lifeguard Station road for access to the Mangrove Beach Path. Heavy this route, but will have to cross over the rail road tracks at the trestle. Obt advance to avoid potential conflicts with rail traffic. A second access can be at (07-002) access about 0.1 mile to the east.</div>		
Contact Information		
names, organizations, and phone numbers go here		
Site Strategies		
<div>Comments: The mangroves are a seasonally evolving ecosystem strongly influenced by rainfall. The amount of recent rainfall will determine if the trees will be open or closed. Most of the year it is closed by a natural sand berm. Only if the mangroves have recently been opened by flowing water will closure be necessary, but overtopping wave wash may not be good.</div>		

AH-Demo GRA Apra Harbor- Mangroves

AH-Demo

Strategy G-101-A1

Objective: Primary: on the flood tide, exclusion booming mouth Walter's Creek, other tidal channels, and protect nearby shoreline

Implementation: a) Exclusion booming Alhambra Creek: 200' of swamp boom in a chevron configuration backed by sorbent boom at the inlet. b) Protection booming: Deploy 1100' of sorbent boom along the marsh to the west of Martinez Marina (both sides of creek but mostly on the west side.) c) Exclude oil from entering the small tidal inlet to the marsh east of the marina with boom and sorbent (50' 4X4+). Tidal inlet mouth is located between Shell and Amoco Terminals/Shore Terminal wharf at bridge.

Strategy G-101-A2

Objective: Primary: on the flood tide, exclusion booming mouth Walter's Creek, other tidal of shoreline

Implementation: Deploy 600' of deflection boom extending west from inside the old ferry slip Martinez Marina. Set deflection angle into the current as may be possible under p

Strategy G-101-A3

Objective: Deflection for the ebb tide, deflect oil away from and past Walter's Creek & mar slip

Implementation: Deflect oil away from shoreline with 2000' 9x9+ Hboom. From the shoreline treatment plant, deploy boom at a diagonal to the 15' depth contour.

Strategy G-101-A4

Objective: Sample objective

Implementation: Sample implementation comments

AH-Demo GRA Apra Harbor- Mangroves

AH-Demo

Table of Response Resources

Strategy Number	Min. Boom (ft.)	Boom Type	Harbor Boom	Swamp Boom	Other Boom Type	Sorb Boom	Boom Boat	Skiffs/Punts	Anchoring No.	Anchoring Type/Gear	Skimmers No.	Skimmers Type	Staff Deploy
Strategy G-101-A1	1300		466709	200		1100			10	anchoring sample text			5
Strategy G-101-A2	600							1	10	anchoring sample text	2	skimmer type	10
Strategy G-101-A3	2000		2000										
Strategy G-101-A4	1000		100	100	700	100		1	3		2		10

Logistics

Directions: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

Comments: Staging area is available at the end of the paved trail near the train trestle.

Land Access

Comments: Exit I-5 at Basflore Road and travel a short distance along the old PCH road to a gated access road maintained by State Parks. Enter the gate and proceed toward the Lifeguard offices on the bluff top, then turn south along the dirt road which leads to the beach. On the beach turn north and proceed to the San Mateo Creek mouth about one-half mile north. This creek mouth is approximately 300 feet wide at the mouth.

Water Logistics

Limitations: depth, obstruction

Launching, Loading, Docking and Services Available: services available sample text

Other Comments: water comments sample text

Facilities, Staging Areas, Possible Field Posts, and Equipment Available

Staging Areas: See Port Authority in the moment

Other Comments: other comments sample text

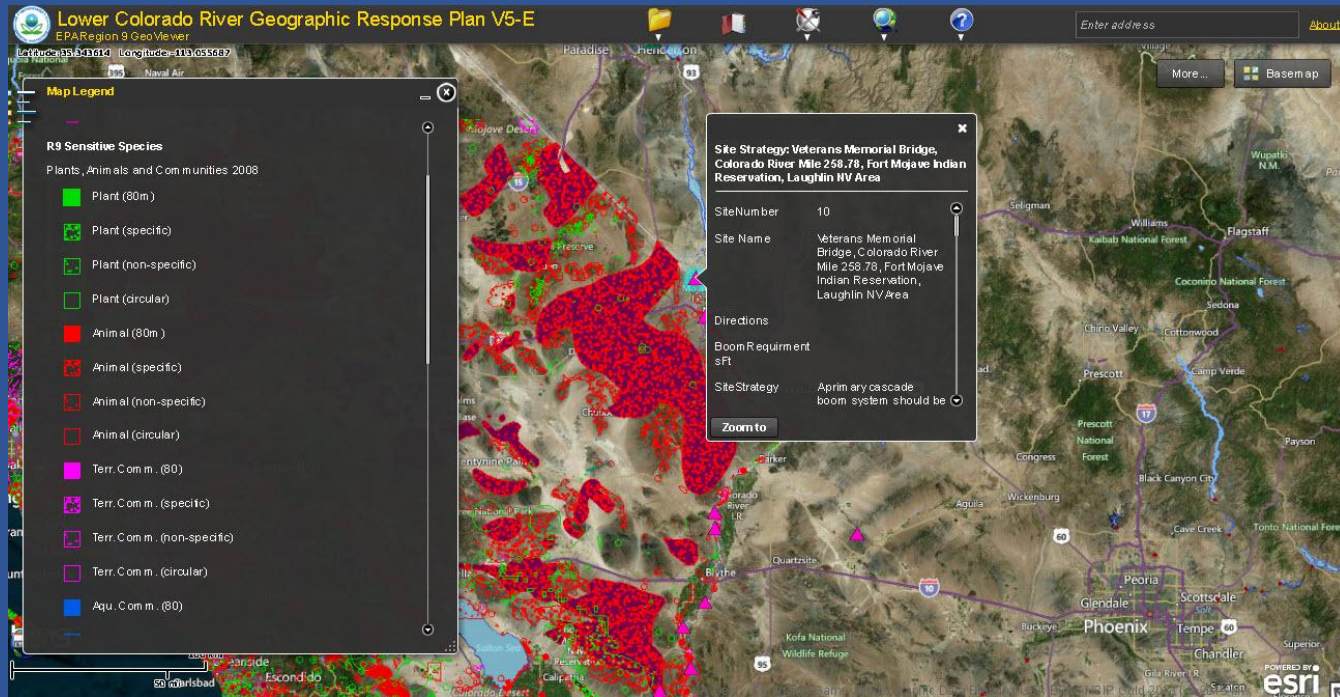
Communications Issues

Comments: test edit on AGO

Additional Operational Comments

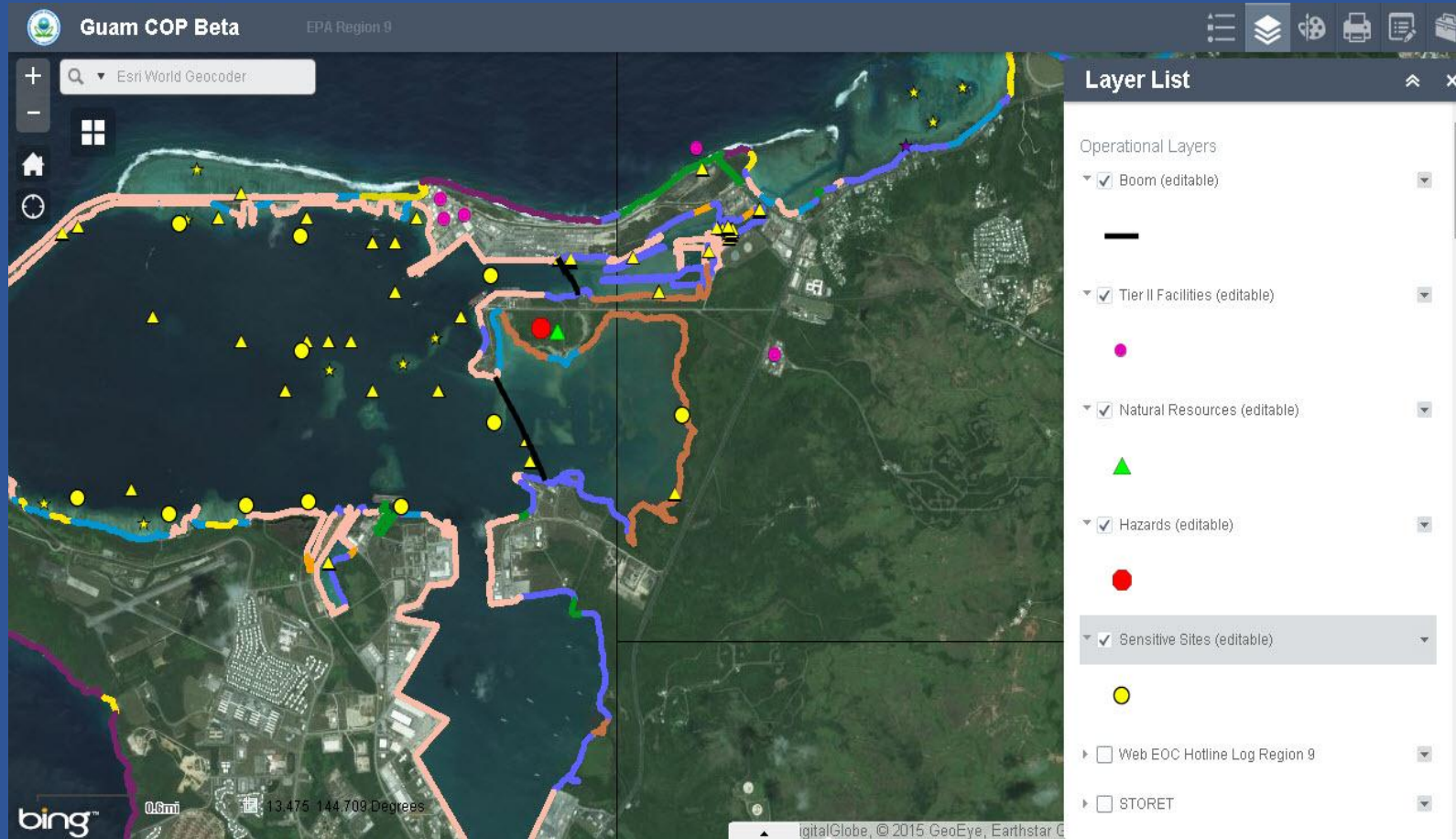
Comments: Contact the Harbor Master before making any encroachments. Site access from the vehicle restricted footpath on the southwest edge of the harbor.

Emergency Response Support Widgets



- Import functions
 - DTRA IMACC Plumes
 - Cameo Data
 - ALOHA Plumes
- Draw and Measure
- Screen Export/Print
 - Pdf/jpg
- Location tools
- Air Monitoring Display
- Spill Documentation
- Field Data Collection

Real-Time Field Data Collection



**Direct from the Field
to the ICP.....**

- **Photos/Video**
- **Monitoring Data**
- **Survey Data**
- **Rapid-Needs
Assessment Data**
- **Field Monitoring
information**



17



Collector



All Maps

26



Common Operating Picture V7-E

Sep 17, 2014 | Cheryl Henley



Guam Common Operating Picture 2015

Jan 27, 2015 | Ma Tangman



Common Operating Picture V7-E

Apr 18, 2014 | Alexandra Wallach



Guam Common Operating Picture V3-E

Nov 13, 2014 | Cheryl Henley

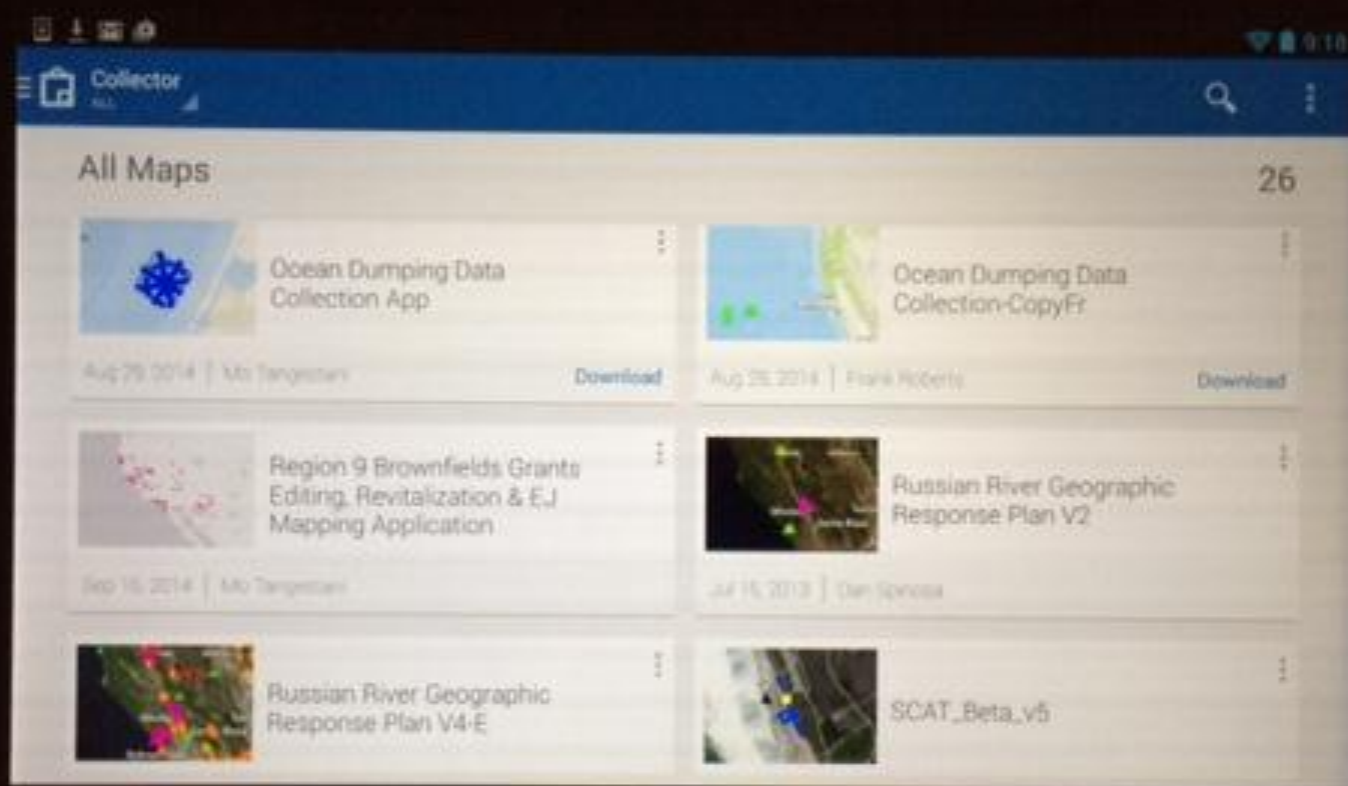


Common Operating Picture V5-E



Common Operating Picture V5-E-Copy for Lance-Copy







+

Collect New

▲ Subsurface Oiling (Point)
Subsurface Oiling (Point)

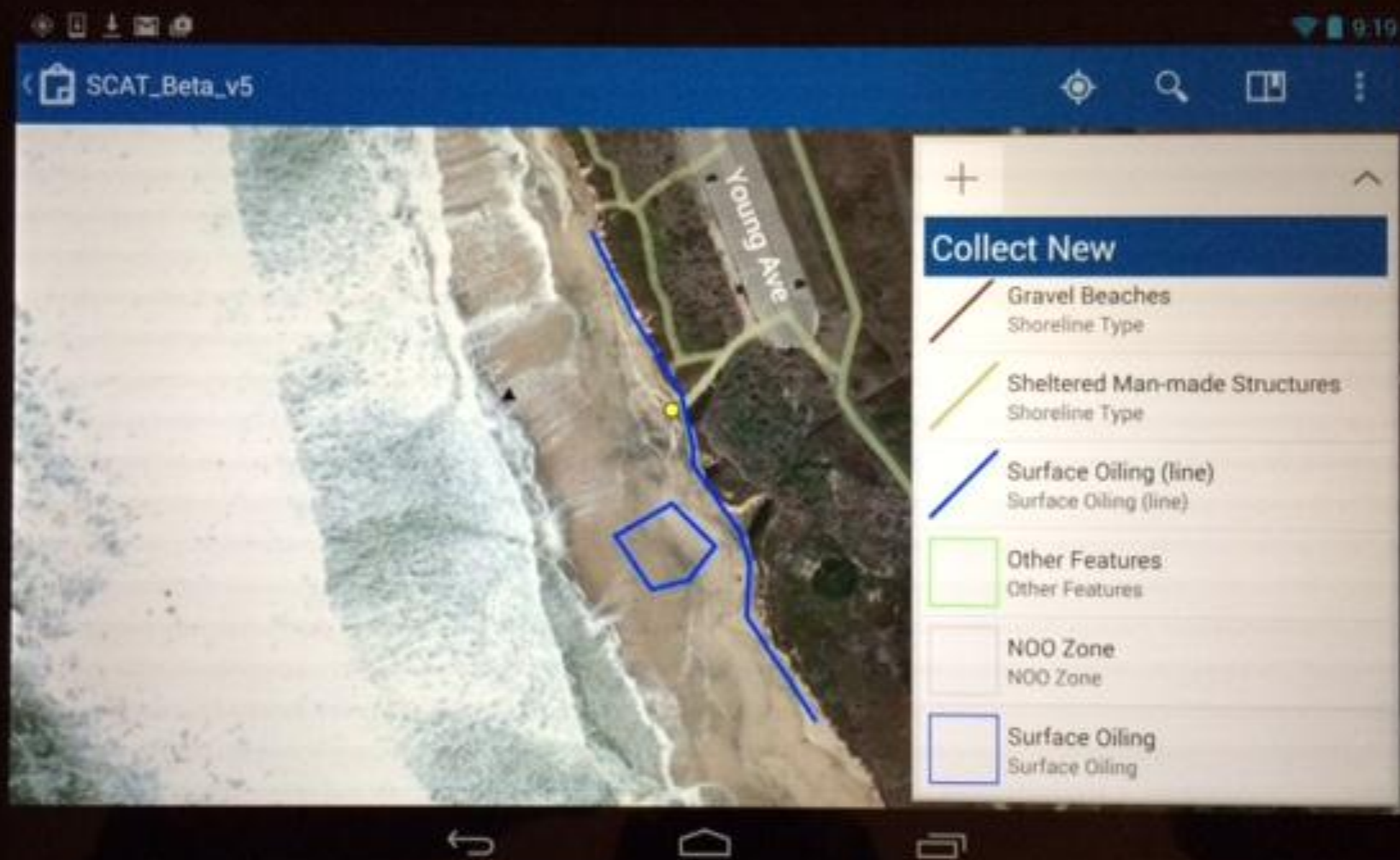
● Survey Event
Survey Event

▲ Debris
Debris

● RCWL: Remove Clean Wrack Line
Operational Features

● Other
Operational Features

● R: Restriction
Operational Features




●●○○ AT&T 9:20 AM 85%

All Maps


26 maps

All On Device




Guam Common Operating Picture 2015 V2 Edit

2/20/15 | Cheryl Henley




Lower Colorado River Geographic Response Plan V5-E

2/25/14 | Cheryl Henley



Common Operating Picture V7-E

9/17/14 | Cheryl Henley




Common Operating Picture V7-E

●●○○ AT&T 9:20 AM 85%

All Maps


26 maps

All On Device




Common Operating Picture V7-E

4/18/14 | Alexandra Walrath




Common Operating Picture V5-E

8/8/14 | Cheryl Henley



Common Operating Picture V5-E-Copy for Lance-Copy

8/5/14 | Cheryl Henley




Common Operating Picture V8-E- Mo copy for editing

●●○○ AT&T 9:20 AM 85%

All Maps


26 maps

All On Device




GRP Sensitive Sites v2

1/22/15 | Alexandra Walrath



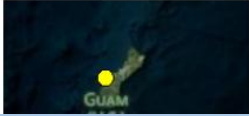
Guam Common Operating Picture 2015

1/27/15 | Mo Tangestani

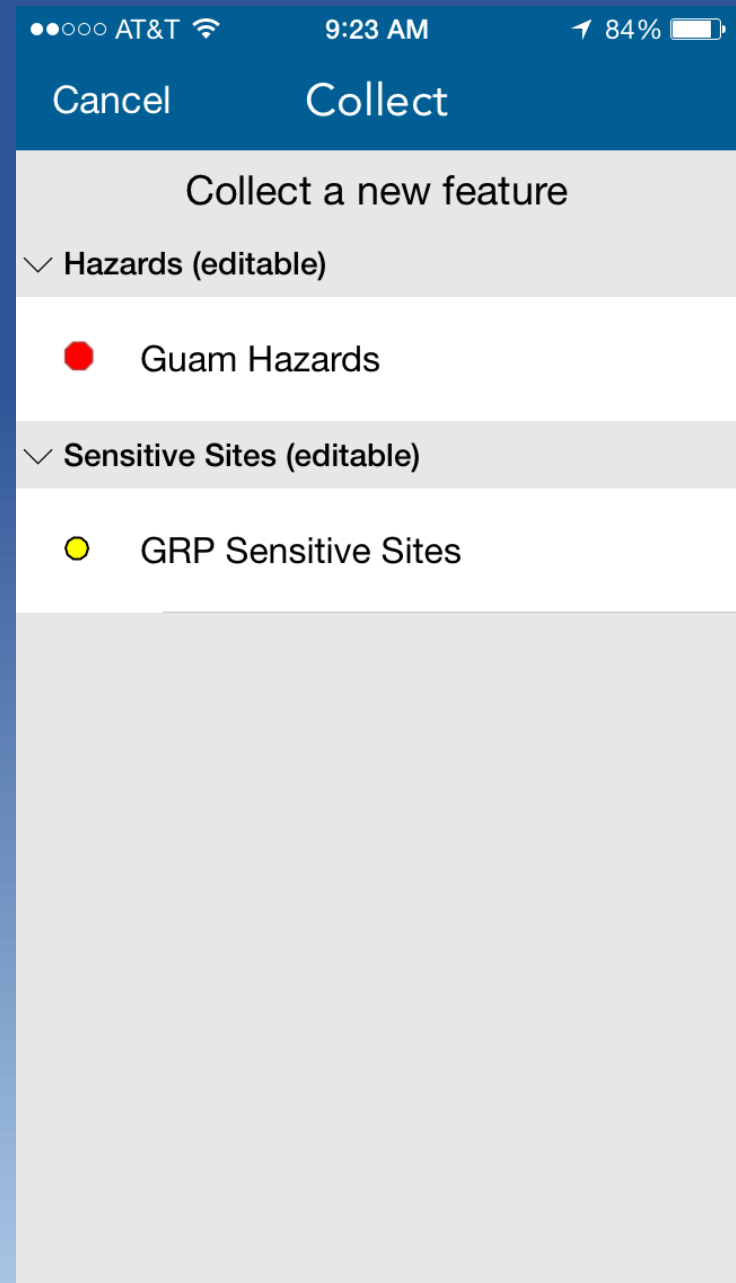
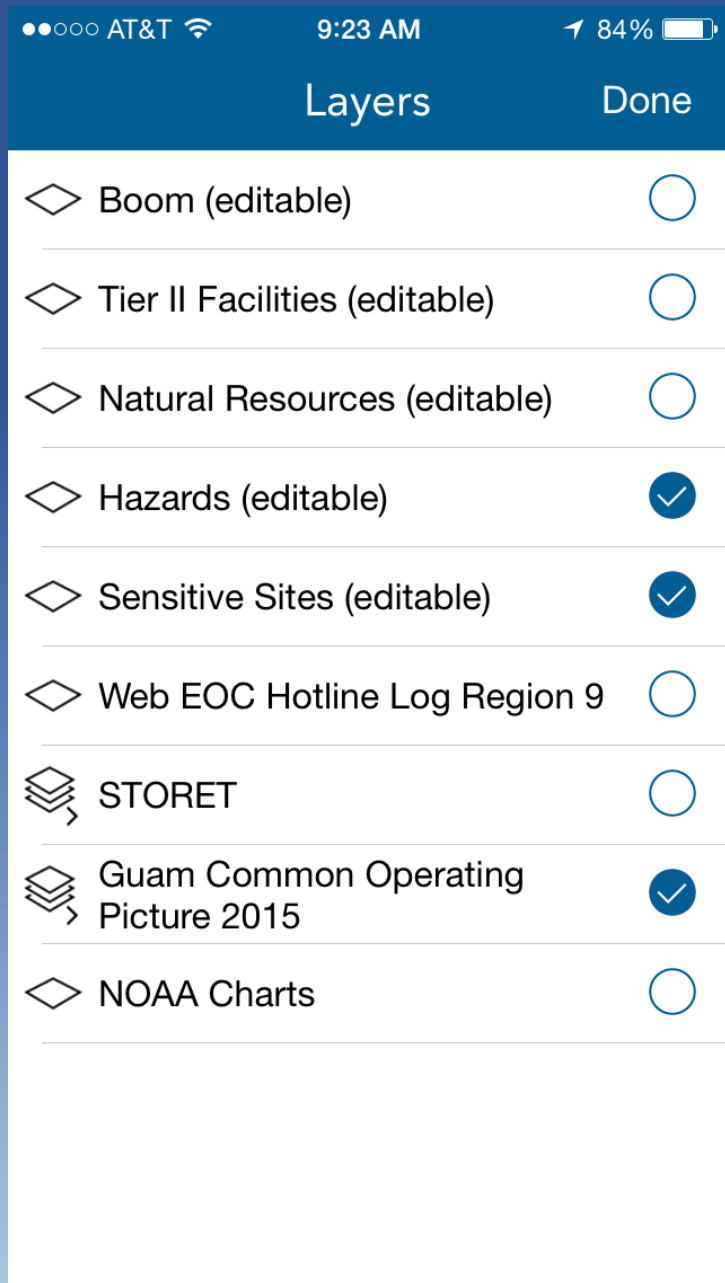



Guam Common Operating Picture 2015 V2 Edit


2/19/15 | Frank Roberts



Guam Common Operating Picture




 Location

Lat: 37.789063° Long: -122.298480° 

Guam Hazards (editable):

Notes >

Date >

 Location

Lat: 37.789063° Long: -122.298480°

Edited by wrobbers seconds ago

Guam Hazards (editable): I've seen the enemy and the enemy is us! We must keep pace with technology!

Notes

I've seen the enemy and the enemy is us! We must keep pace with technology!

Date

February 26, 2015

 Photo1.jpg

1096.8 KB >



Done



Photo1.jpg



Area Contingency Planning

Lower Colorado River Geographic Response Plan V5-E
EPA Region 9 GeoViewer

Latitude: 36.033584 Longitude: -114.647057

Enter address [About](#)

Layer List

Edit-Add Features

Select template to create feature

- ☒ **ER Recon (Editable)**
 - ▲ ER Recon (Editable)
- ☒ **Site Strategy (Editable)**
 - ▲ Site Strategy
- ☐ **Hazards (Editable)**
- ☐ **Natural Resources (Editable)**

Attachments

The feature has 1 attachment

 DOWCARSI.jpg
35.72 KB

Choose a file to attach

[Go back](#)

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Removal Project Planning and Prioritization

The screenshot displays the Oakland Estuary EPA Region 9 GeoViewer interface. The main map shows an aerial view of the estuary area, with various streets and landmarks labeled. A popup window titled "Points of Interest" is open, displaying details for a specific location. The popup includes a "Zoom to" button and a "Basemap" button. The map also shows a scale bar for 500 feet and coordinates: Latitude: 37.76559, Longitude: -122.245630.

Oakland Estuary
EPA Region 9 GeoViewer

Enter address [About](#)

More... Basemap

Points of Interest 2 of 3

Insulation	
Material Type	steel hull
Notes	a navigational challenge, steel tugs need paint samples at low tide, two tugs two barges, steel barges, steel hulls of tug boat, lots of oil and trash visible at low tide
Potential HazMat	Yes
Sediment	

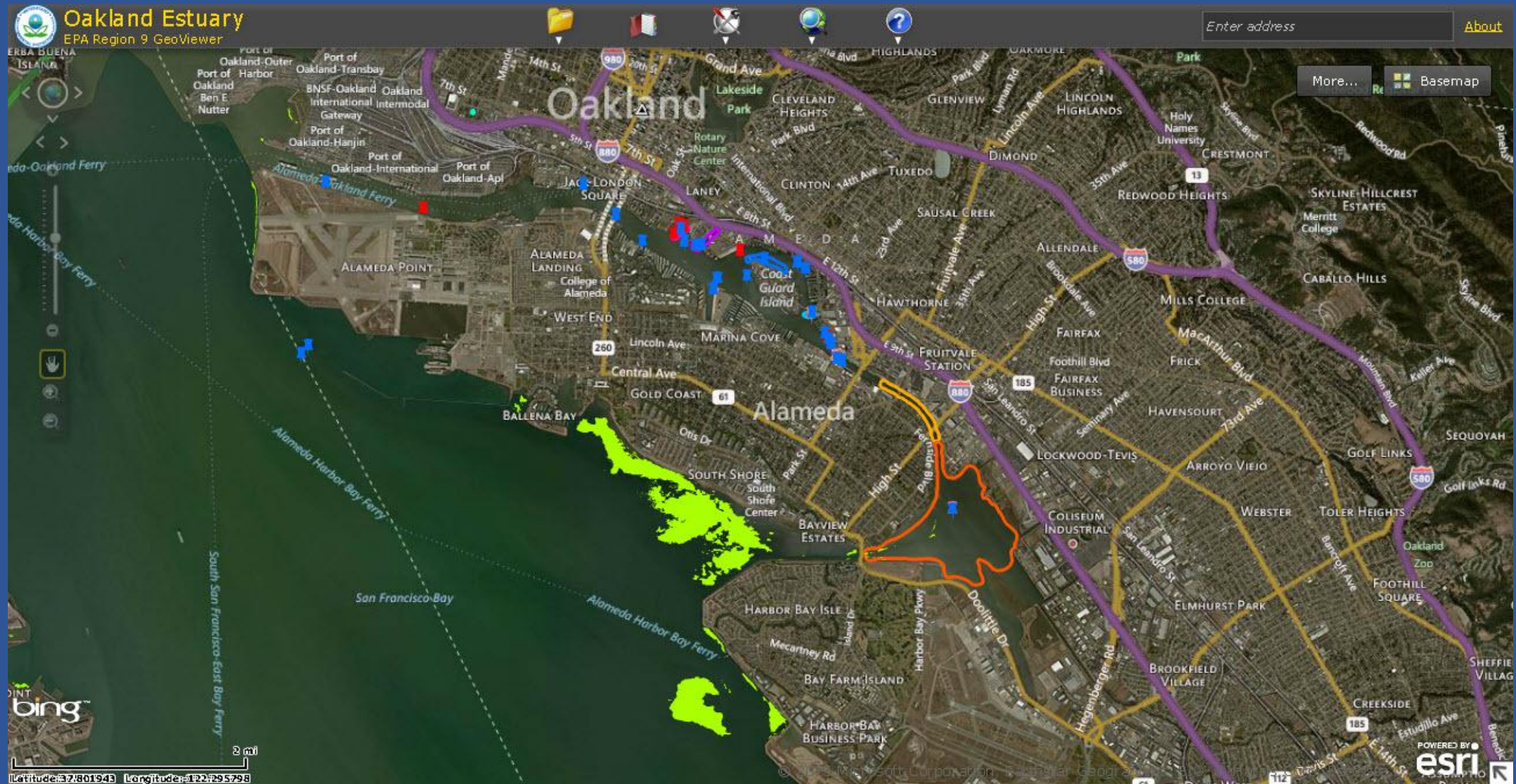
[Zoom to](#)

500 ft

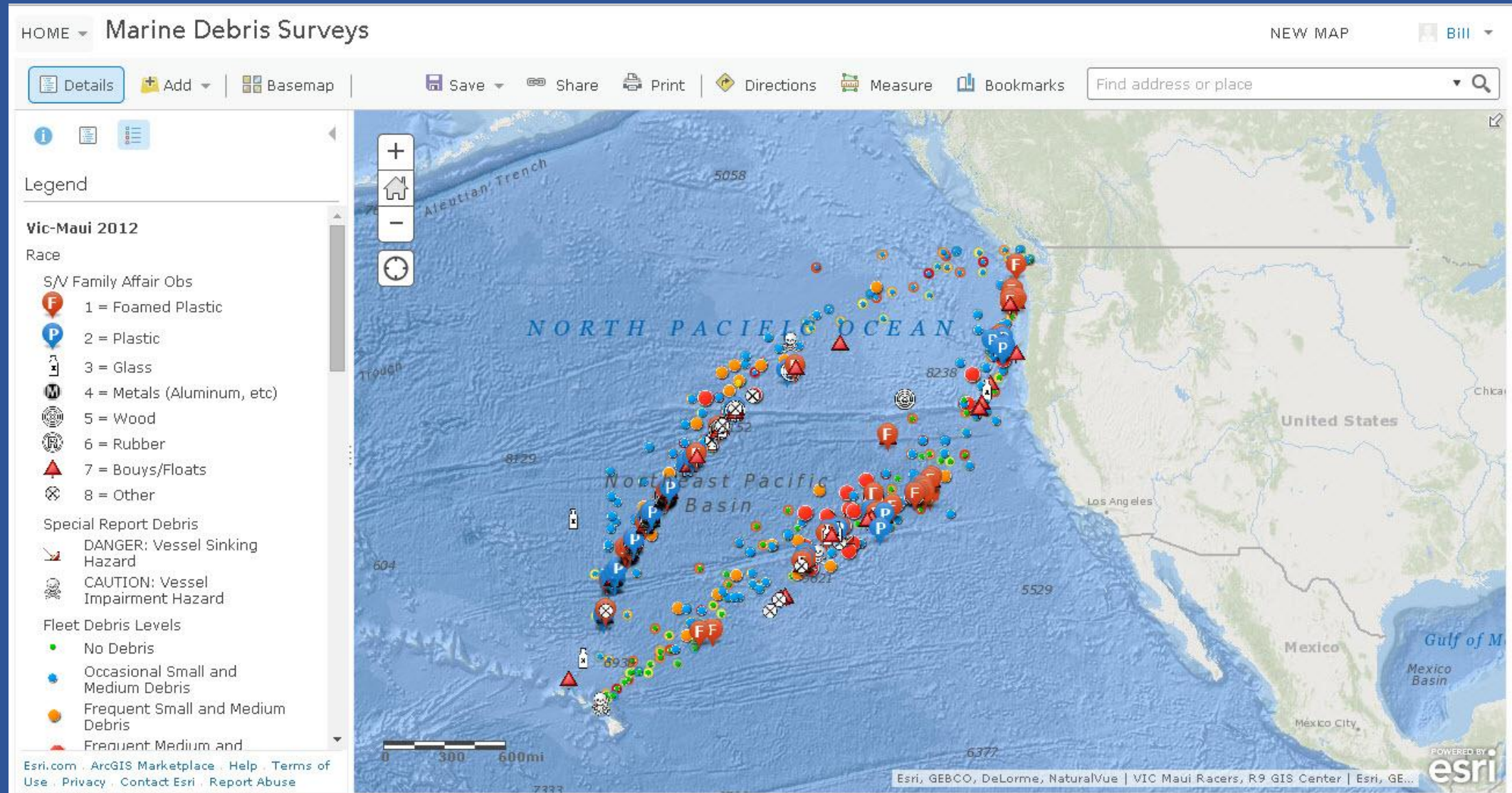
Latitude: 37.76559 Longitude: -122.245630

POWERED BY esri

Removal Project Management and Outreach



Surveys and Tracking



Preliminary Assessments... Anywhere!

United States Environmental Protection Agency

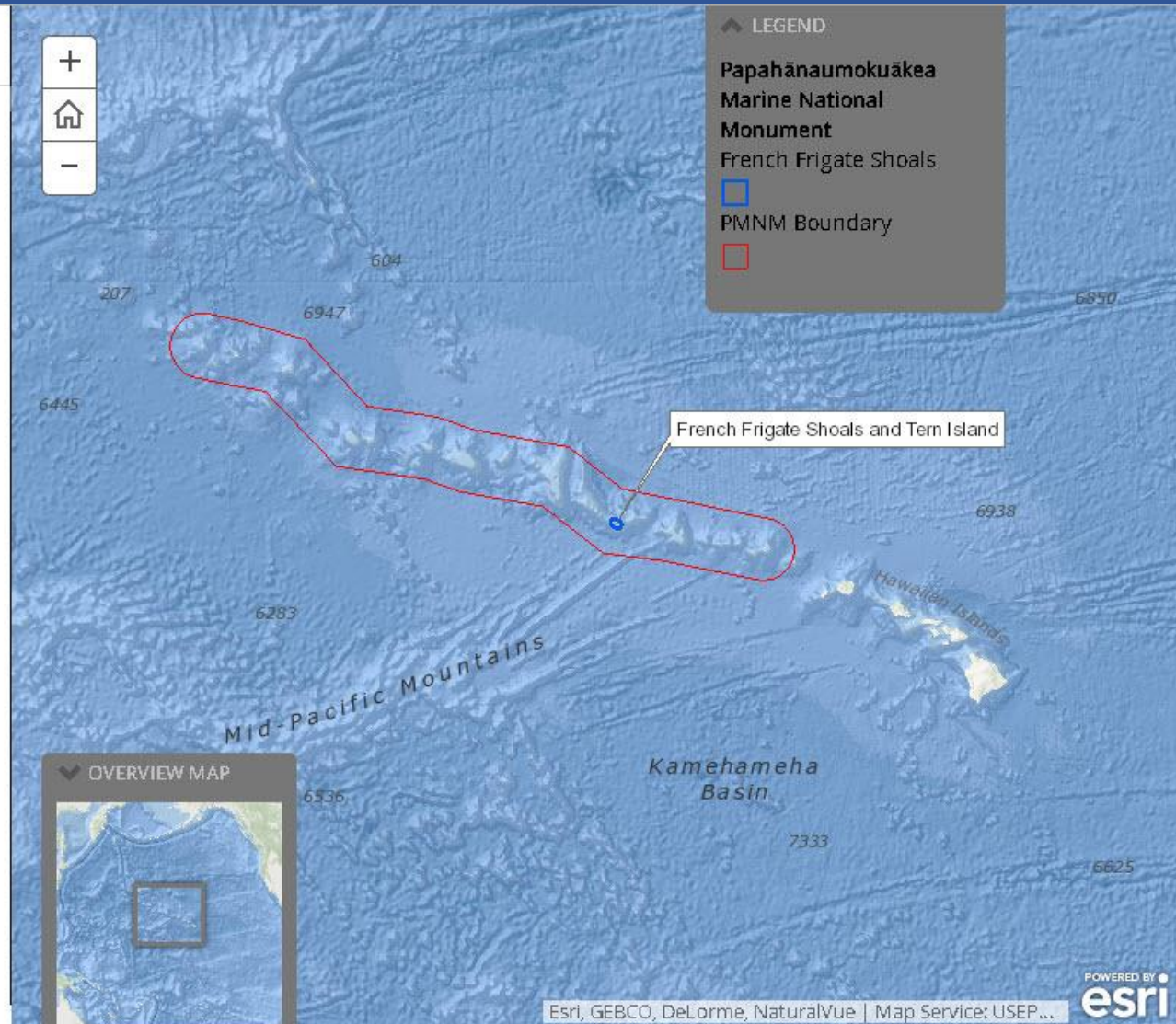
Hawaiian Islands National Wildlife Refuge: Tern Island



Tern Island is part of the atoll known as French Frigate Shoals (FFS) and is located 490 nautical miles northwest of Honolulu, Hawaii.

Islands of French Frigate Shoals

FFS or Kānemilohā as it is known in the Hawaiian language, is



Technical Support



Wildlife Monitoring and Studies



It's all about the data!!!!

Questions.....

CDR Bill Robberson, US EPA Region 9 / robberson.bill@epa.gov

