

# Continuing Challenge 2024

Region 9



## Tour of Apps

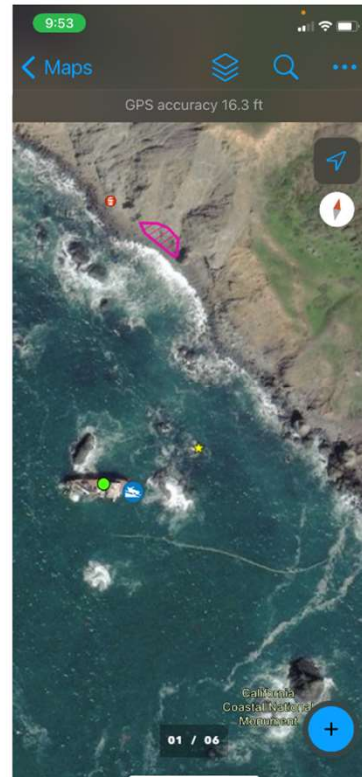
### Mobile Data Collection Tools

#### Field Maps, Survey123, QuickCapture

##### Field Maps

#### Field Maps - American Challenger

Map-centric interface



## For Simpler Data Collection

Less fields collected

Defaults, Drop downs.

Smart Forms allows us to mimic some of the Survey123 functionality (show/hide fields, auto-calculate IDs)

9:54

Cancel Collect Submit

AmericanChallenger Mobil...  
37.971836°N 122.019892°W

Site Name  
R09 American Challenger

Location ID  
DEB\_PT\_

Name  
No value

Collected By  
START

Date  
No Value

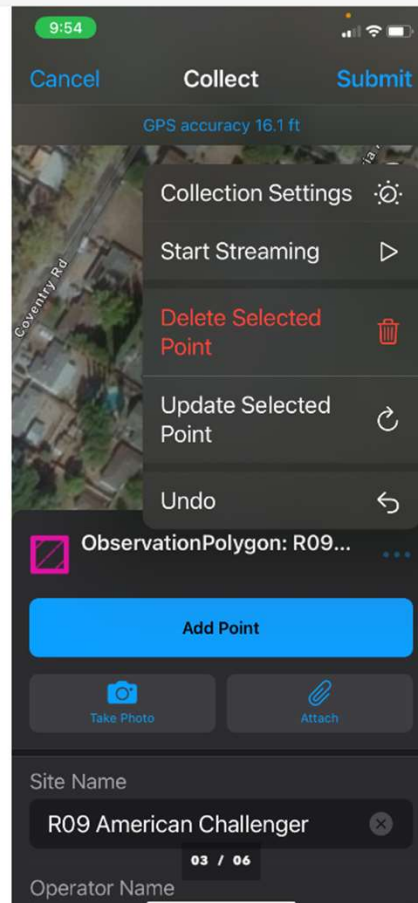
Feature Type \*  
Debris

Location Comment 02 / 06

## Streaming Interface

For drawing lines and polygons

Also Photo and attachment interface





## Results

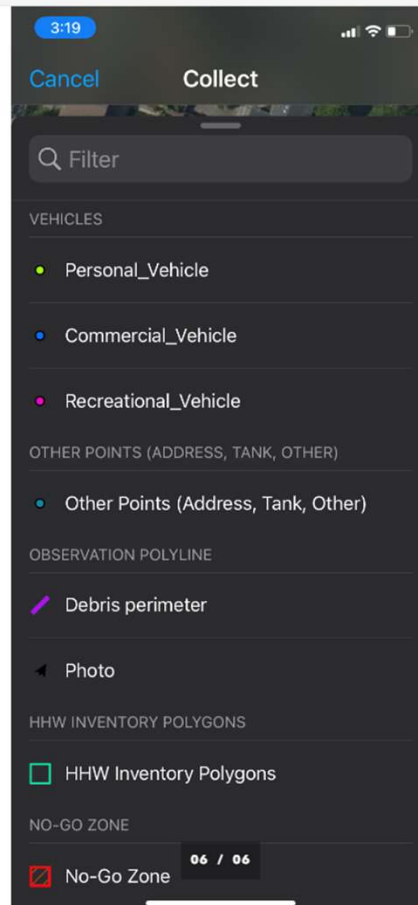
Location and photo identification of trash  
on beaches



## Field Maps - La Tuna



## Point Categories



### **Mt Diablo Field Maps**

Drop-downs, Survey123 Integration

<https://epa.maps.arcgis.com>

### **Tern Island Field Maps**

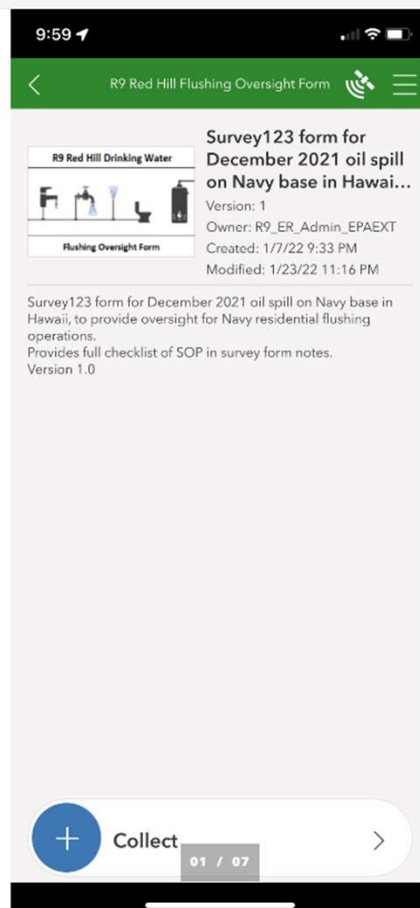
One-one, no Survey123

<https://epa.maps.arcgis.com>

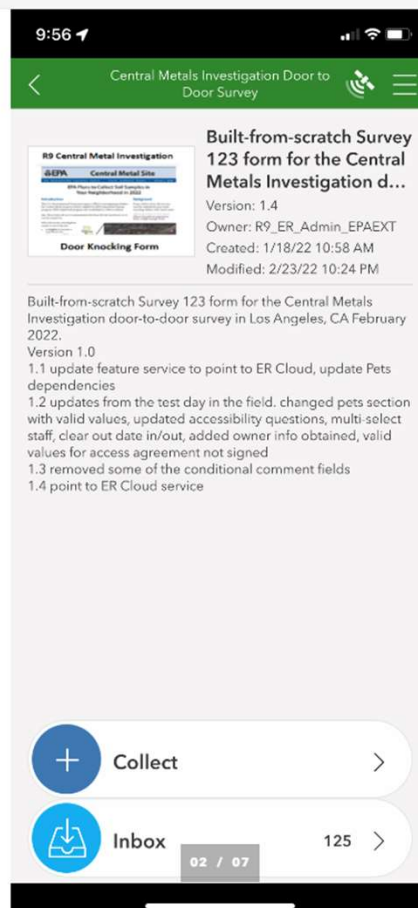
## Survey123

Form-centric interface

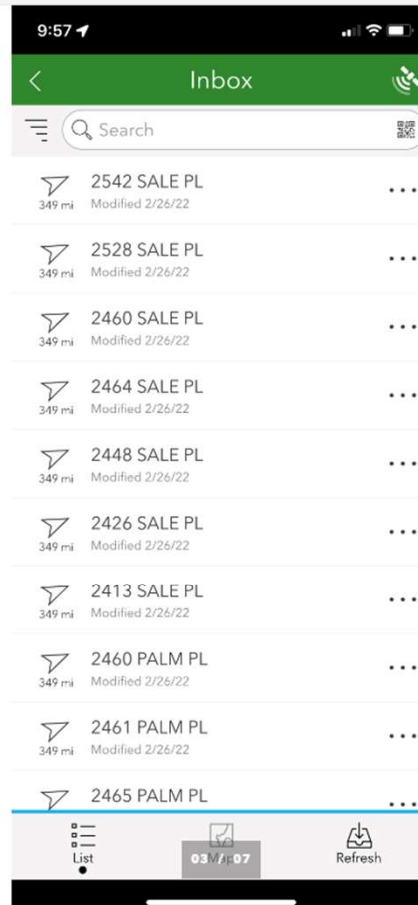
See version comments (manually updated)



## Inbox Feature



## Inbox Editing



## Example

### Central Metals Door Knocking Survey

Health and Safety, Site Suitability/Recon,  
Access Agreement Tracking

9:57

Door to Door Survey

▼ Health and Safety

▼ Pets

Were any pet health and safety issues observed on the property \*

Ex: cats, dogs, etc.

☒ Yes ☐ No ☐ Unknown

Check all that apply. \*

☐ Potentially aggressive dog observed

☒ "Beware of Dog" sign observed

☐ Other

▼ Other Health & Safety

Are there any other health and safety concerns? \*

Ex: homeless encampment, dangerous traffic, etc.

☐ Yes ☒ No

▼ Visit Information

▼ Contact Tracing

Staff present \*

☐ Lawrence, Anne

04 / 07 ✓



## Example

### Refrigerant Exchange

Container Inventory

9:58
Region 9 START - RefEx Container Survey Form

Container Description

Container Type \*

☒ Bucket
☐ Drum
☐ Compressed Gas Cylinder
☐ Tank
☐ Large scale container
☐ Paint Can
☐ Small scale container
☐ Tote
☐ Other Container Type

Container Sequence Number
For Sampling by EPA, 3 digit number (e.g. 001, 002, 036)

123

Container ID \*
Subcontractor Inventory ID, Example: INV0123

INV

Container Size \*

50

Container Size Units \*

Gallon

Percent Full
(Estimated whole numbers)

05 / 07

## Example

Refrigerant Exchange

Health & Safety Warnings

9:58

Region 9 START - RefEx Container Survey Form

☐ Fry top ☐ Screw top

☐ Valve ☐ Other

▶ Container Location Photos (not for Container Label or Samples)

▼ Container Label

Does the container have a legible label? \*

☐ Yes ☒ No

Does the container have a legible CAS number?

☐ Yes ☒ No

▶ Container Label Photo (take one photo for every container)

▼ Samples

Sample needed for this Container?

☒ Yes ☐ No

Crystallization Observed? \*

☒ Yes ☐ No

**STOP! DO NOT HANDLE! NOTIFY PTL OR SAFETY!**

06 / 07

## Example

### Refrigerant Exchange

Grid format, Sample ID calculation

The screenshot shows a mobile application interface for a 'Region 9 START - RefEx Container Survey Form'. The form is displayed on a smartphone screen with a status bar at the top showing the time as 9:59 and various icons. The form has a green header bar with a close button (X), the title 'Region 9 START - RefEx Container Survey Form', and a menu icon (three horizontal lines). Below the header, the form is divided into several sections:

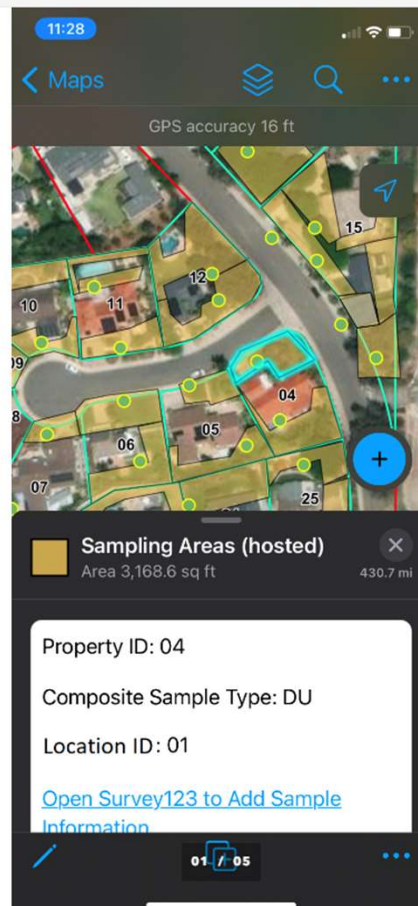
- Location:** A dropdown menu showing 'Lara, Alex' with a refresh icon.
- Sample Type:** Two columns of radio button options:
  - Left column: ☒ Grab, ☐ Composite
  - Right column: ☒ Investigative Sample, ☐ Duplicate Sample, ☐ Resample, ☐ Resample Duplicate, ☐ Other
- Matrix:** A column of radio button options: ☐ Aqueous, ☒ Solid, ☐ Soil, ☐ Other.
- Sample Sequence Number:** A text input field containing '123'. Above the field is a red asterisk and the text 'Sample Sequence Number \*'. Below the field is a note: 'Required. Please scroll to the top of the form and fill out Sequence Number for the container if it is not populated. This is the EPA sequence number.'
- Phase Number Sampled:** A text input field. Above the field is the text 'Phase Number Sampled' and a note: 'If multiple phases, start at 1 on the bottom and count up.'
- Sample Number:** A text input field containing 'REF-123-220330-2-3'. Above the field is a red asterisk and the text 'Sample Number \*'. Below the field is a note: 'Field Sample ID. Must be Unique. Include yyyyymmdd if possible.'
- Sample Comment:** A text input field.

At the bottom of the form, there is a green bar with a grey box containing '07 / 07' and a checkmark icon.

## Example

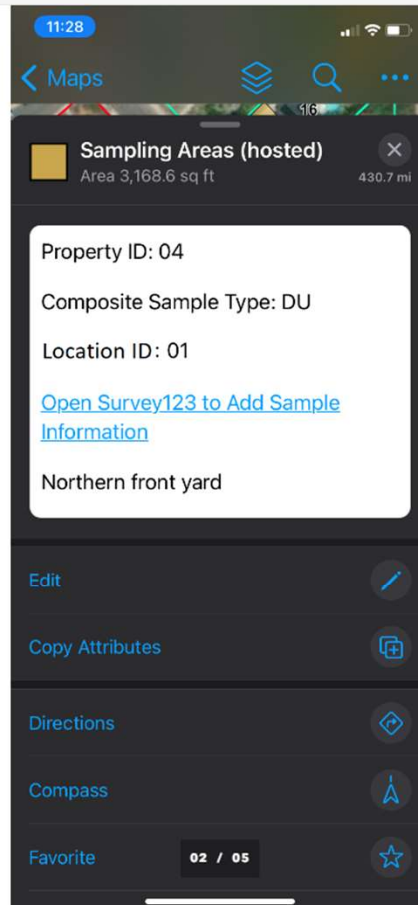
Sidonia

Start in Field Maps, Draw Decision Unit  
Polygon



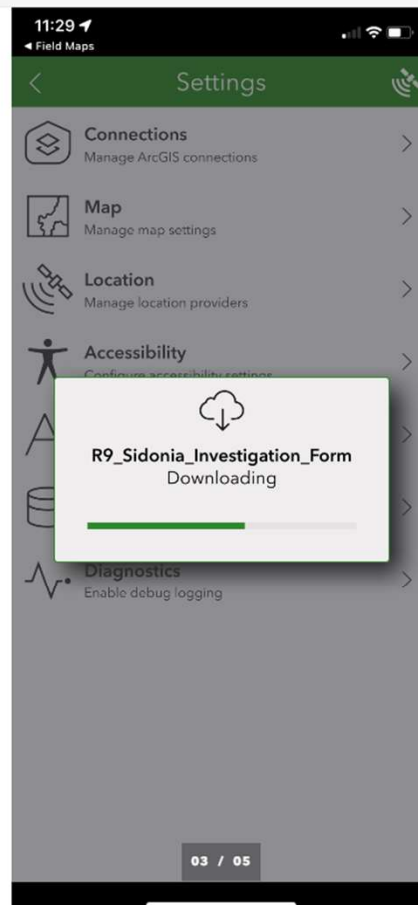
## Example

Jump Link



## Example

Opens Survey123 and downloads appropriate Survey



## Example

Auto-populates Location ID

11:29  
Field Maps

R9 START - Sidonia Investigation  
Survey123 Form

Site Name  
Sidonia Investigation

Date/Time \*  
Wednesday, March 30, 2022  
11:29 AM

Location ID \*  
Auto-populated from Field Maps. Ex: SID-02-DU01  
SID-04-DU01

Location Comment  
Only necessary for background samples or if new properties are added in the field. Used to provide descriptive information about the location. Do not include Personal Identifying Information.

Operator Name \*  
Select the name of the person completing the Survey Form.  
Yadacus, Emily

Feature Type \*  
Identify what type of feature you are collecting at this location. Select all that apply.  
☒ Sampling

04 / 05

## Example

Populates Sample ID (using Location ID)

11:29  
Field Maps

R9 START - Sidonia Investigation  
Survey123 Form

Wednesday, March 30, 2022  
11:29 AM

**Sampler Name \***  
Tobias, Rod

**Collection \***  
☒ Composite

**Sample Type \***  
☒ Field Sample  
☐ Duplicate Sample  
☐ MS/MSD

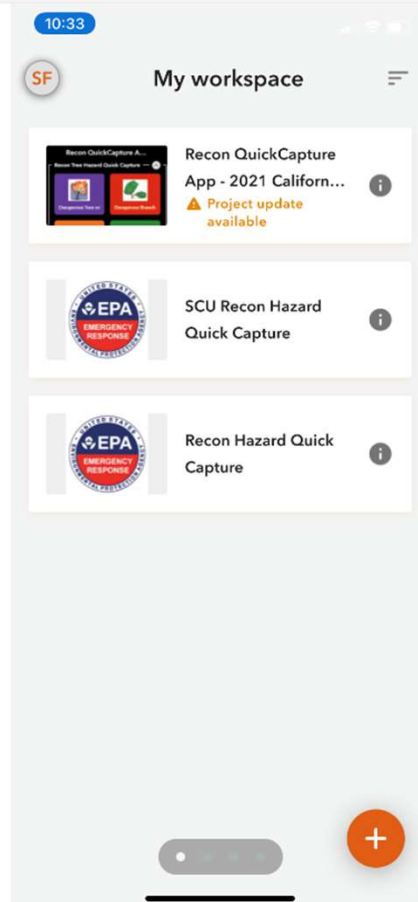
**Number of Aliquots**  
Total number of aliquots collected for the composite sample.  
5

**Auto-Generated Sample ID**  
Please double-check that this auto-generated sample ID is consistent with what the Sampling and Analysis Plan states. Ensuring that this is correct and unique makes importing into SCRIBE and subsequent data analysis much easier. If the sample ID is not correct, make changes to the fields above.  
SID-04-DU01-1

05 / 05



## QuickCapture



## Example

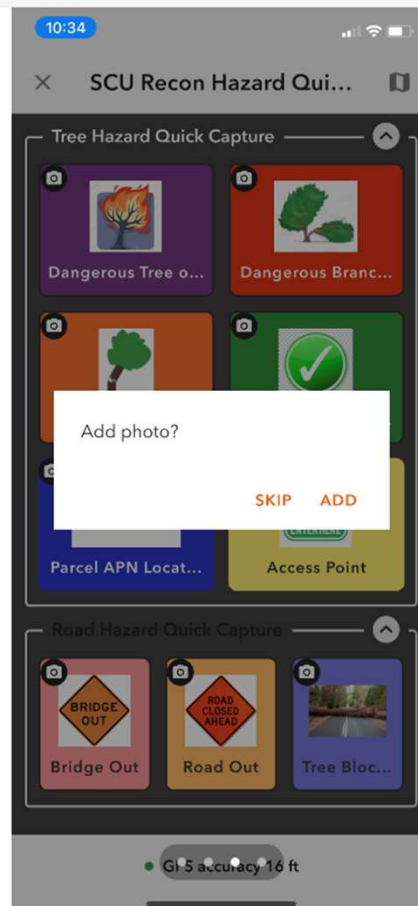
### Recon Quick Capture (CA Fires)

Big button Interface



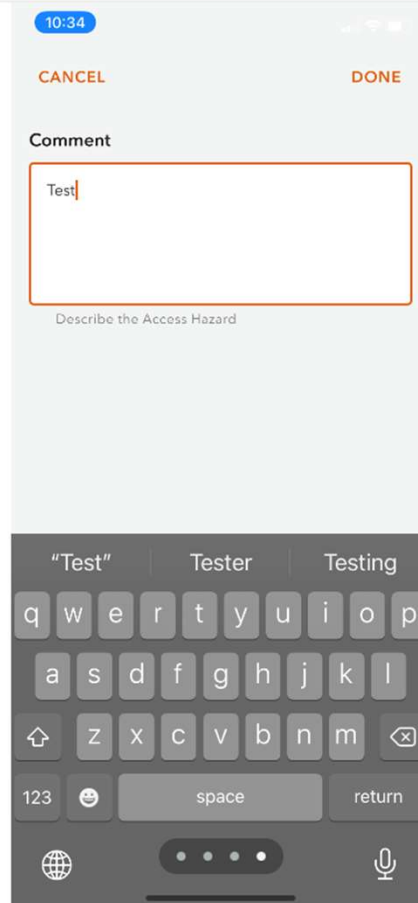
## Example

Photo option



## Example

Add a Comment



A mobile application interface for adding a comment. At the top, there is a status bar showing the time 10:34 and signal icons. Below this, there are two buttons: "CANCEL" on the left and "DONE" on the right, both in orange text. The main section is titled "Comment" in bold black text. Below the title is a large text input field with a thin orange border. Inside the field, the word "Test" is entered, followed by a cursor. Below the input field, there is a placeholder text "Describe the Access Hazard" in a smaller, lighter font. At the bottom of the screen, a virtual keyboard is visible, showing keys for letters, space, and return. The keyboard has a dark gray background with white text on the keys.

## Geospatial Viewers

How do you want to visualize your data for analysis? How will you share your findings with Management, Clients, and External Stakeholders?

### Custom JS Web App - Analytical Widget

*GeoPlatform credentials and response.gov site and credentials required. Quick set-up time (Long), many START widgets available, can be integrated with R9TC widgets*

#### Tustin Blimp Hangar ER

Viewer for air monitoring, sampling, and debris mapping.

<https://fs.response.epa.gov>



#### UPRR

Union Pacific Railroad Analytical Widget to explore Sample results over time.

<https://fs.response.epa.gov>



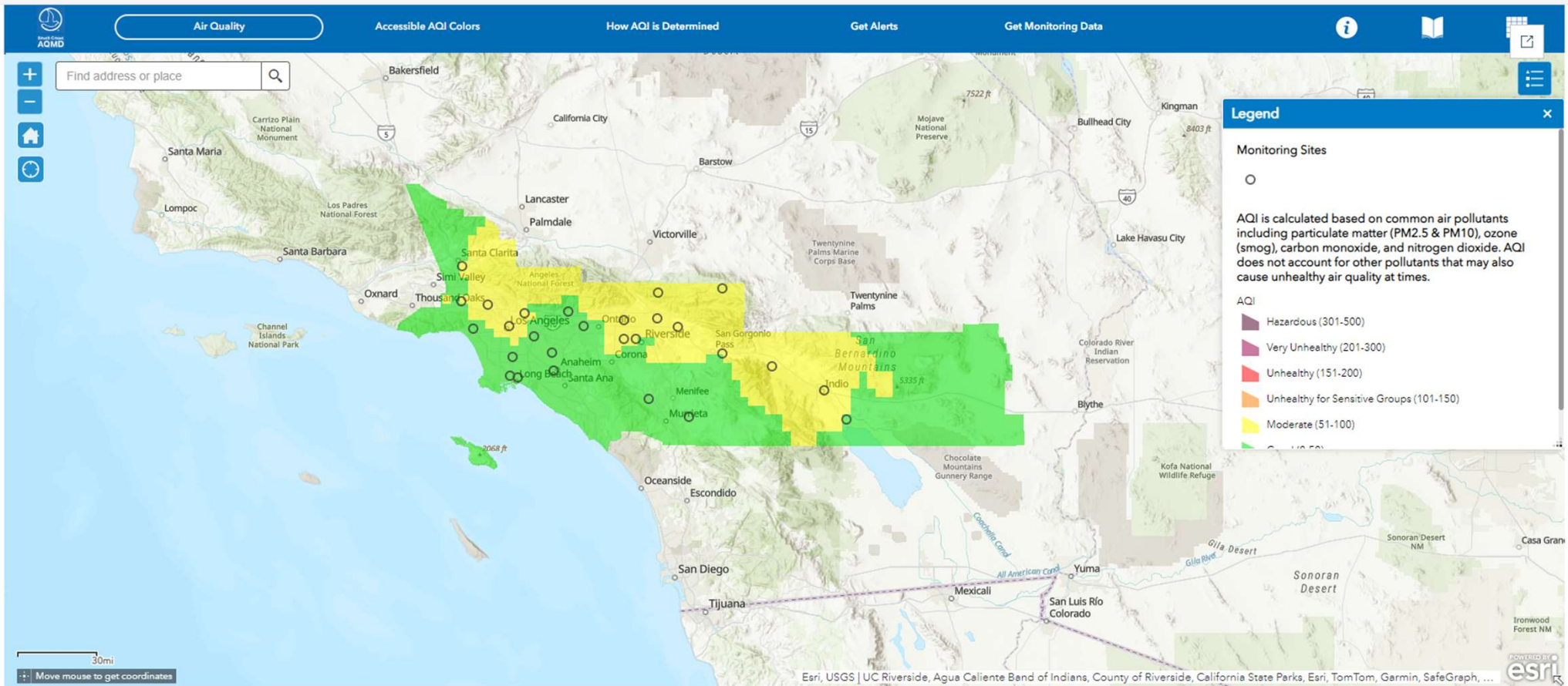
[No Title]

#### Hazen Railroad Tie Fire ER

September 7, 2022 - large fire of creosote-treated railroad ties in Hazen, NV. VIPER monitoring deployed in 24-hr cycles.

<https://fs.response.epa.gov>



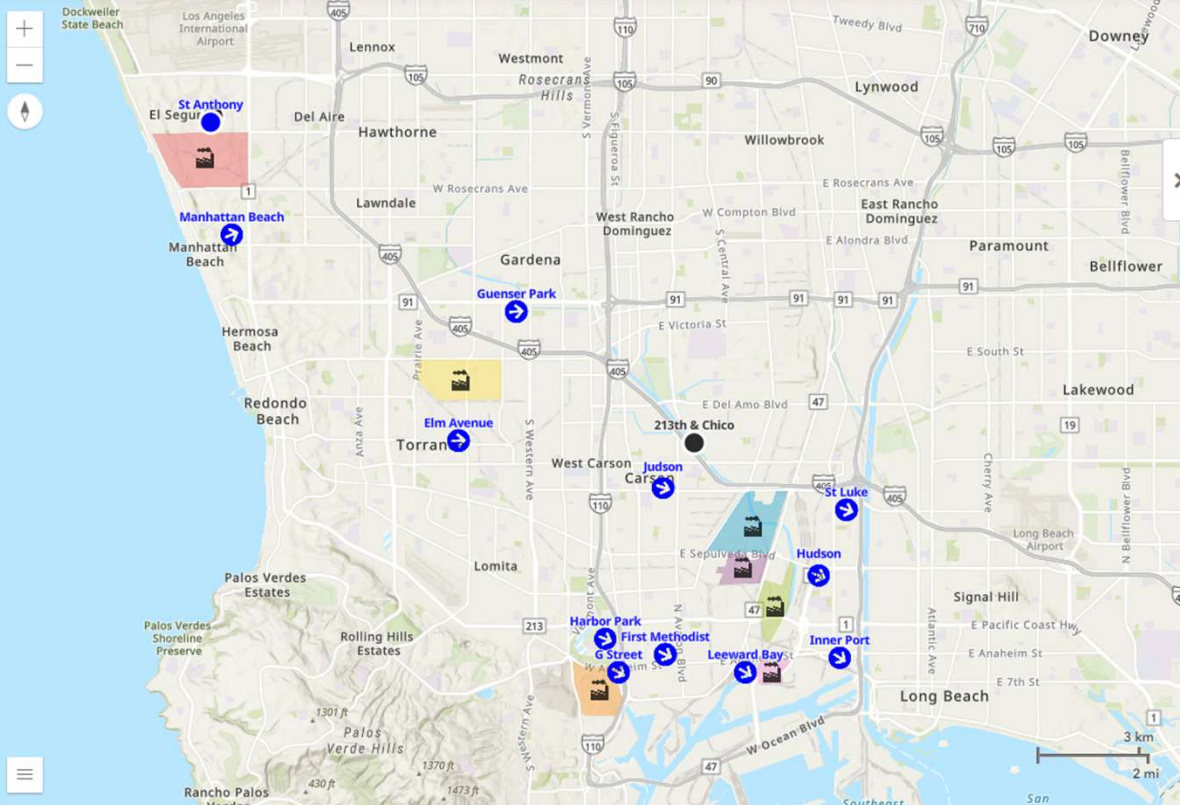






## South Coast AQMD - Rule 118o Community Air Monitoring

SUBSCRIBE



### CURRENT HIGHEST

Color range of current highest value (in percentage) of the threshold



### Community of Long Beach/Carson/Wilmington/San Pedro

#### Hudson Air Monitoring Station

Community of Carson and Long Beach

Pollutant: Hydrogen Sulfide ( $H_2S$ )

Current Highest: 0.6 ppb (2.0% of threshold)



#### Harbor Park Air Monitoring Station

Community of Wilmington

Pollutant: N/A

Current Highest: N/A



#### Leeward Bay Air Monitoring Station

Community of Carson and Wilmington

Pollutant: N/A

Current Highest: N/A



#### Inner Port Air Monitoring Station

Community of Long Beach

Pollutant: Hydrogen Sulfide ( $H_2S$ )

Current Highest: 0.4 ppb (1.4% of threshold)



#### St Luke Air Monitoring Station

Community of Long Beach

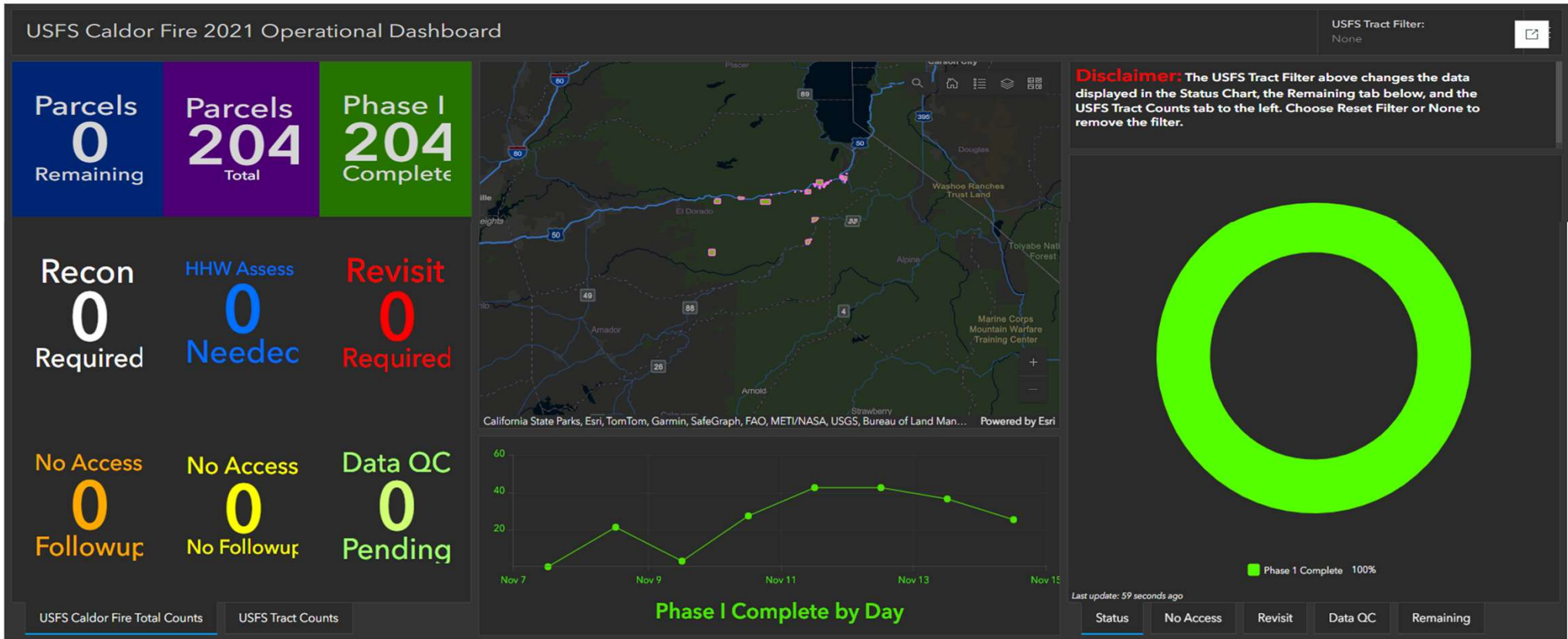
Pollutant: Formaldehyde ( $CH_2O$ )

Current Highest: 13.1 ppb (28.8% of threshold)



## Dashboards

### Fires Dashboards





## Maui Fires 2023 Operations Dashboard

### Total Parcels in Universe

Parcels  
**1621**  
Total

Recon

**0**  
Needed

Recon Revisit

**0**  
Required

HM Assessment

**0**  
Needed

HM Revisit

**0**  
Required

Phase 2

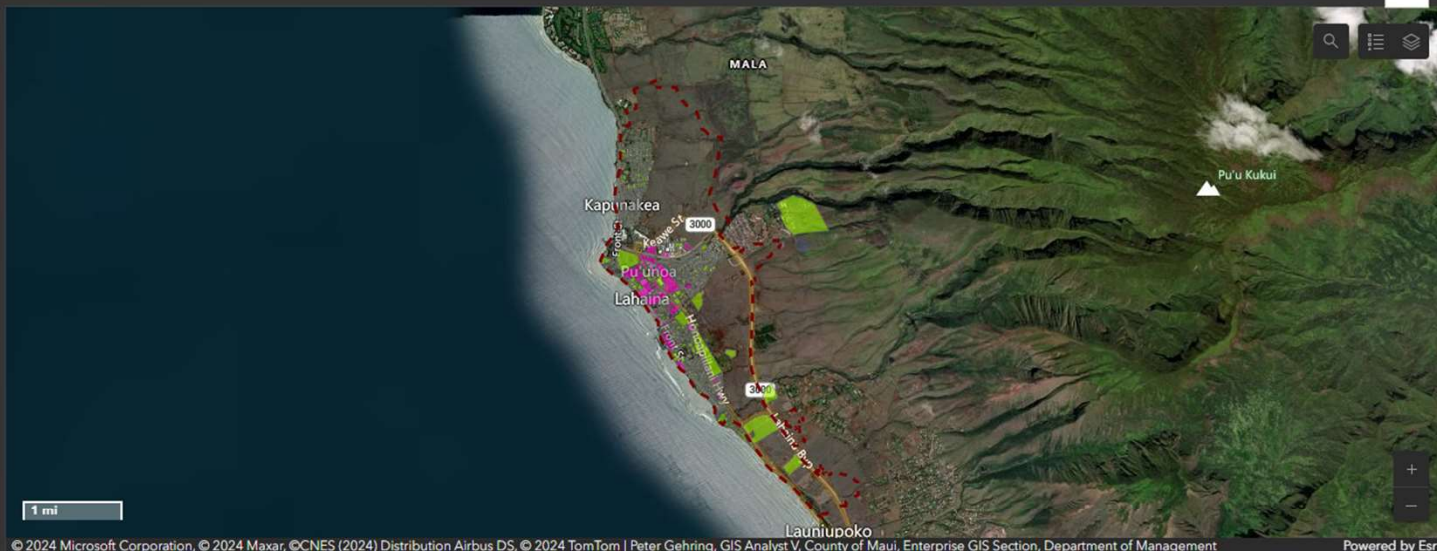
**173**  
Deferred

Q/C

**0**  
Needed

Phase 1

**1448**  
Complete



© 2024 Microsoft Corporation, © 2024 Maxar, ©CNES (2024) Distribution Airbus DS, © 2024 TomTom | Peter Gehring, GIS Analyst V, County of Maui, Enterprise GIS Section, Department of Management

Powered by Esri

### Total Parcels Complete by Day



Phase I Complete by Day

### Commercial Parcels

Commercial  
**174**  
Properties

Commercial Recon

**0**  
Needed

Commercial HM

**0**  
Assessment Needed

Commercial Recon

**0**  
Revisit Required

Commercial HM

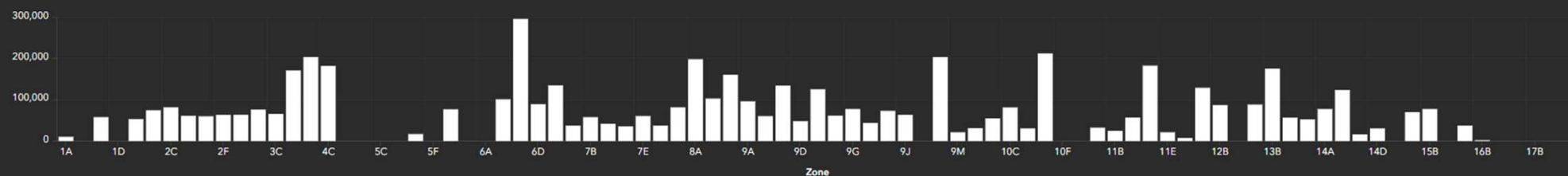
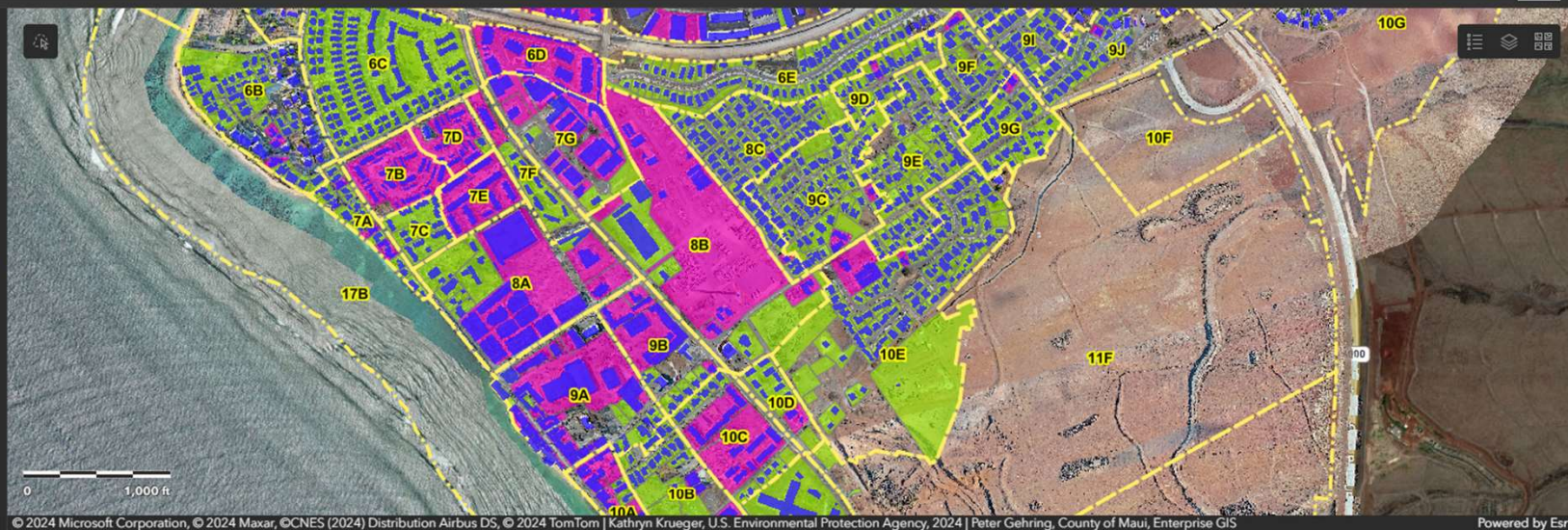
**0**  
Revisit Required

Commercial Properties

**100**  
Phase 2 Deferred

Commercial Properties

**74**  
Complete





## Dededo Dig & Haul Dashboard

Total Haul Days

41

Total Trucks

992

Cumulative Tons

14,637

Cumulative Cubic Yards

16,543



Legend

Decision Units - HAULING Status (2024)

- DU Hauling Not Started
- DU Hauling In Progress
- DU Hauling Complete

Easements

Parcel Boundary 2022

Avg Truck

24

Per Day

Avg CuYd

403

Per Day

Daily Material Hauled (Cubic Yards)



Cumulative Material Hauled (Cubic Yards)



Charts by VOLUME (Cubic Yards)

Charts by WEIGHT (Tons)

R9 General Mercury App Dashboard

Select a Site:

None

Chicken Ranch Casino

MMS

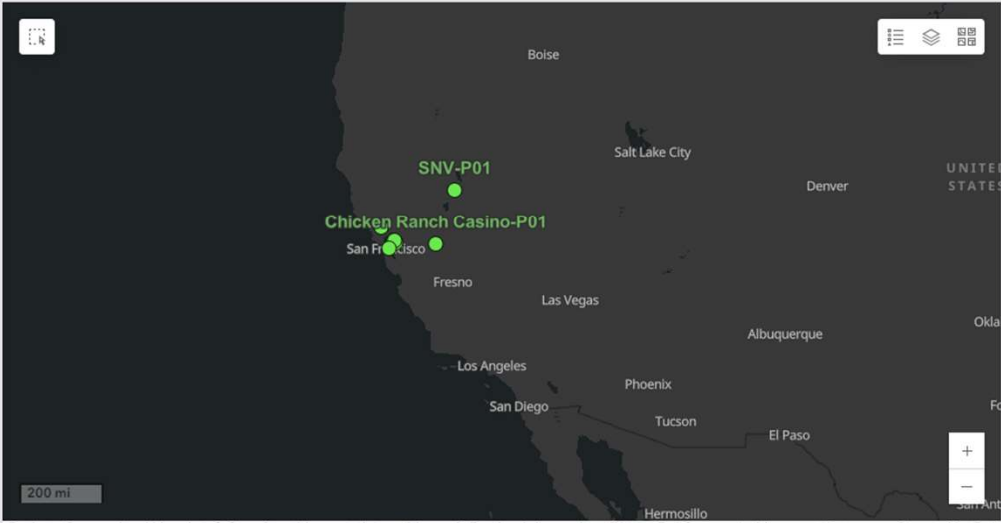
R9 training

SNV

SRMM

Property List

Select a Site above to see related Properties



Scanned Paper Forms

- 7/13/2023, 2:45 PM Post-removal Hg measurements
- 7/13/2023, 11:00 AM Pre-removal Hg measurements
- 7/12/2023, 2:30 PM Initial and post venting Hg Measurements
- 7/12/2023, 11:00 AM House Layout
- 7/7/2023, 3:53 PM Library Parking Lot and Interior Monitoring forms

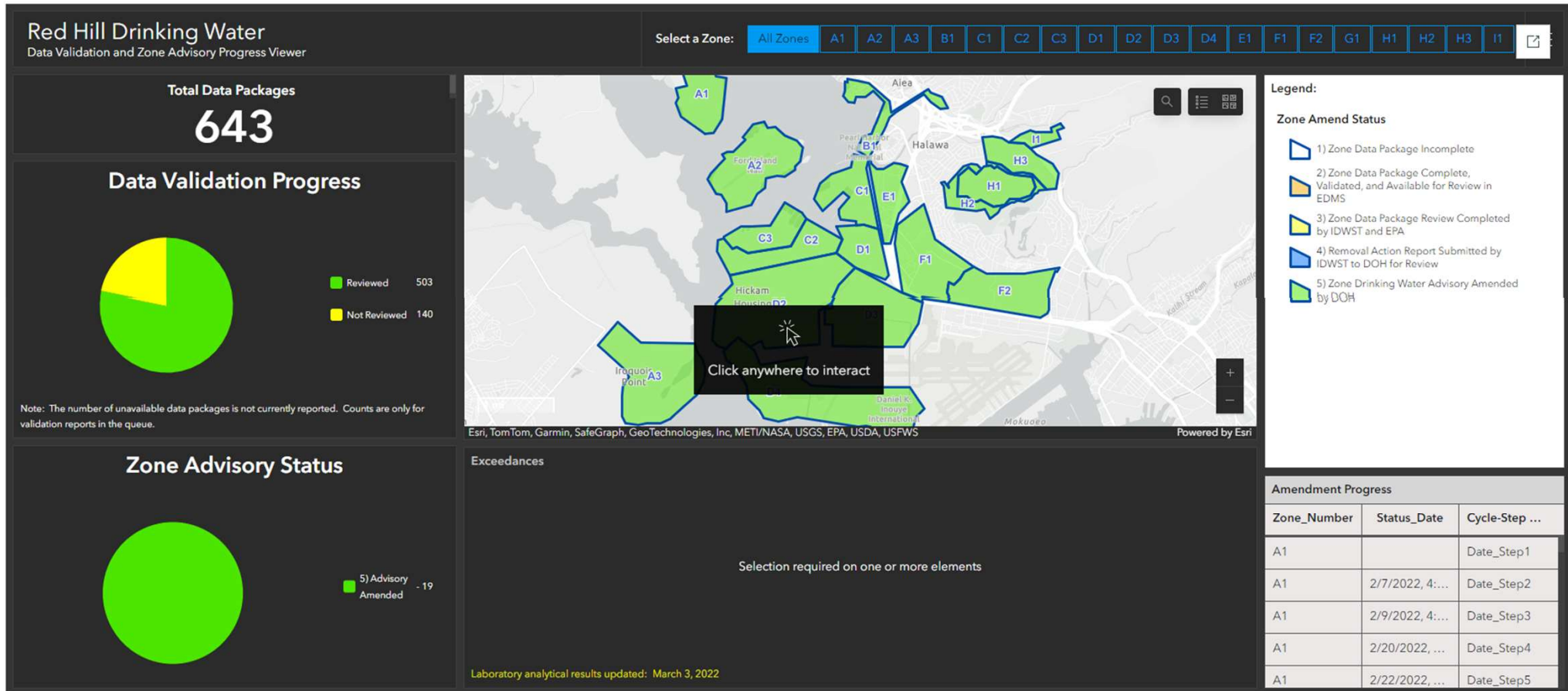
Select a Location above to see all related site layout and monitoring sketches.

Sample Locations

- R9 training-2300-12 (Residential - Kitchen)
- R9 training-2300-04 (Residential - Main)
- R9 training-2300-003 (Residential - Living)
- R9 training-2300-09 (Residential - Basement)

Select a Sample Location to the left to see related Detail data and Photos.

## Red Hill Drinking Water Dashboards



## Red Hill Drinking Water

U.S. EPA Region 9 - Internal Oversight Progress Viewer

Select a Flushing Zone:

All Zones

1 of 19

### START Sampling Oversight Progress:

Buildings

262/1.2k

22%

Distribution

142/141

101%

NAVY

HDOH

### Navy Sampling Progress:

Residential

1,027/1,027

100%

Non-Residential

112/112

100%

CDC/Schools/Medical

41/41

100%

NFE

11/11

100%

### All Building Types:

Overall Complete

1,191/1,191

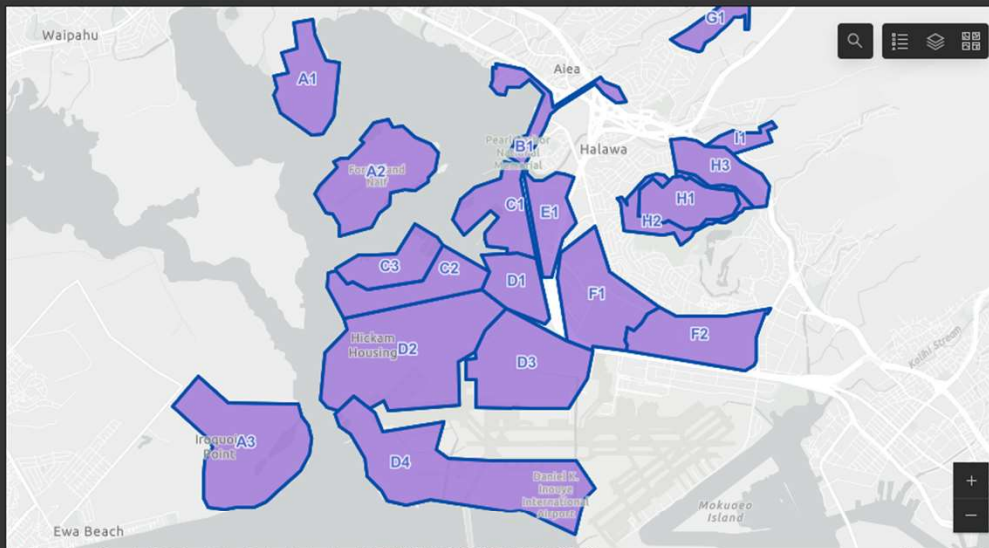
100%

Remaining

0

\*Disclaimer: Navy Total and Remaining numbers may change as resamples are needed.

Navy Data Current As Of: 1400 9 February 2022



Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, USDA, USFWS

Powered by Esri

Map

Navy Data

START Survey123


### START Oversight per Day (# of Survey123 forms submitted)






# Experience Builder/Hub Sites

## Experience Builder


**Tern Island 2024**

Experience Builder Viewer

Location Point





Sediment Soil Samples 2018


 Sediment

 Soil


Porewater Wells 2018

 Groundwater


 Porewater

 Porewater/Surface Water


Observation Points




Observation Polyline





Observation Polygon




Excavation 2001


 Was not Excavated




 Exceedance of Clean-Up Goal

 2001 Excavation Area



Find address or place





Selected features: 0

Powered by For...



Location Point

Observation Points

Observation Polyline

Obs >

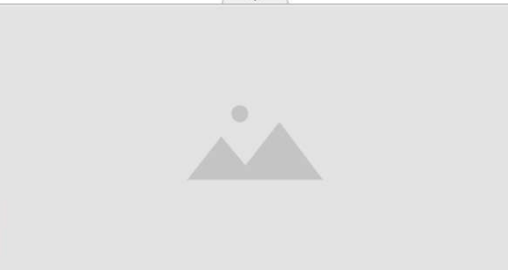
< 1 of 71 >



TI-OTHX-240507-D00

Sample Date	5/7/2024, 8:37 AM
Location Comment	NE Corner of U Shape Building (platform)
Sample Depth From	0.00
SampleComment	
SampleQC	
Horizontal Accuracy (m)	
Username	Solana.Foo_EXT

Last edited by proxyconfig on 5/7/2024, 6:41 PM.





## CNMI Childhood Pb Assessment 2023 Experience Builder



### Legend

#### Location Points



#### Observation Polylines



#### Observation Polygons



#### Subject Parcels Visited



No

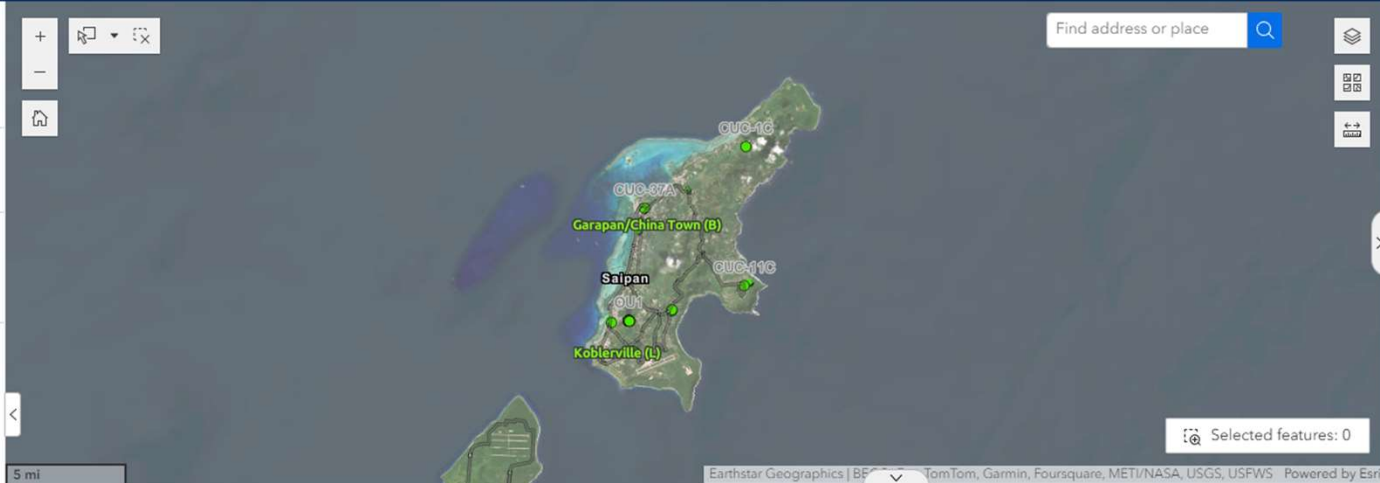


Yes



Other

#### Decision Units



### Subject Parcels

### Decision Units

### Location

< 1 of 13 >



#### Koblerville (L) Property

Multi-unit residential property.

Visited? Yes

First Date Visited: 3/9/2023, 8:00 AM



Location_ID	Address	Comments
Koblerville (L)	Koblerville (L)	Multi-unit residential
Finasisu (H)	Finasisu (H)	Saipan Muslim Com
Chalan Kanoa (A)	Chalan Kanoa (A)	Federally funded ho
San Vicente (D)	San Vicente (D)	Single-family two-stc

Location ID	Sample Date	Sample Number	Matrix_Collated	Sample Comment
Chalan Kanoa	2/20/2023, 11:30 AM	507-S-B-0-6"	S	Backyard child's play area
As Matuis	2/22/2023, 2:40 PM	C1-W-BA	Tap Water	Unit C1 bathroom tap wa
As Matuis	2/22/2023, 2:42 PM	C2-W-BA	Tap water	Unit C2 tap water in bath
As Matuis	2/22/2023, 2:00 PM	C1-D-BR-F1	Indoor dust	Unit C1 bedroom floor





## Navajo Forest Product Industries



Daily Air Monitoring Results

Removal Status

### Overview Map



#### To Filter Chart by Map:

In the Map, click the arrow button in the top left corner



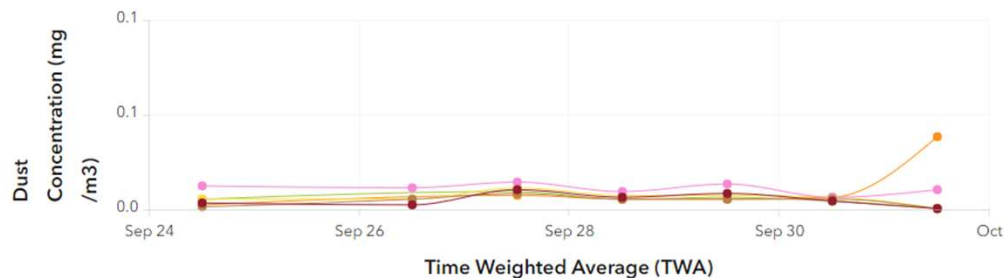
Click on a grey Air Monitoring Location on the map

#### To Clear Chart Filter from Map:

Click the X button next to the Selection Count to clear your selection and unfilter the Chart above



### Daily DustTrak Readings



#### Air Monitoring Locations

- NFPI-P01B
- NFPI-P02C
- NFPI-P03A
- NFPI-P04B
- NFPI-P05
- NFPI-P06
- NFPI-P07
- NFPI-P08
- NFPI-P09
- NFPI-P10A

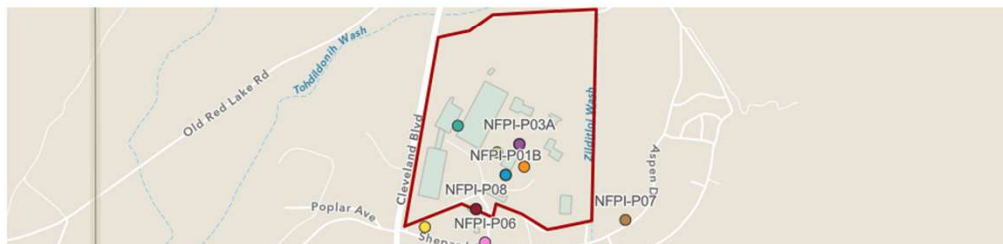
#### NFPI Site Boundary (hosted)



#### NFPI Building Footprint (hosted)



Last Updated: 7/29/21 6:00 AM PST



Esri Community Maps Contributors, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EP... Powered by Esri



## R9 Waymire SVE

Experience Builder App



### Map View

### 3D Scene View

### Cross-Section

### Charts

#### Extraction Wells

- SVE-01 (10 ft)
- SVE-02 (26 ft)
- SVE-03 (50 ft)
- SVE-04 (75 ft)

#### Treatment System



#### Mitigation



Legend

Attributes



Inset Map

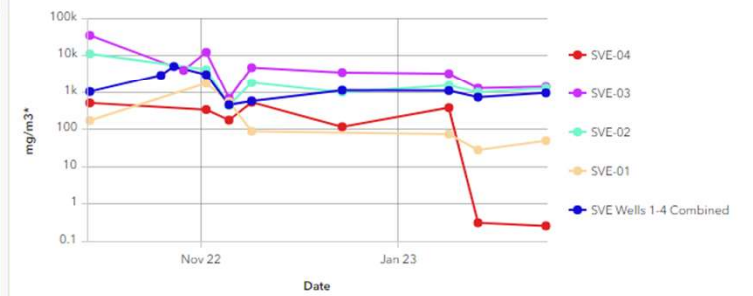
Photos



#### Cumulative Mass Removed (lbs)

Data source error

#### Total VOCs per Extraction Well



\* Log Scale

Total VOCs per Extraction Well



## Supply Creek Asbestos Removal (Experience Builder)

### Sample Locations

- Bulk
- Soil (grab)
- Air\_Perimeter
- Other Matrix

### Total Excavation Boundary



### Decision Units (Confirmation Sampling)



### Decision Units (Assessment)



### ObservationPolyline



### ObservationPolygon



### Live VIPER Data:

SCA-AS-06
SCA-AS-07
SCA-AS-08
SCA-AS-09

### Site Bookmark



### Timeline

● 7/25/2022 7:24:00 AM - 8/4/2022 2:36:00 AM



Sampling   Monitoring







## Dedede Scene View Experience Builder

DededeWastePiles\_2023Viewer

LocationPoint



Waste Pile 01062023

- Waste Pile
- Crushed Auto Debris
- Tires
- White Goods

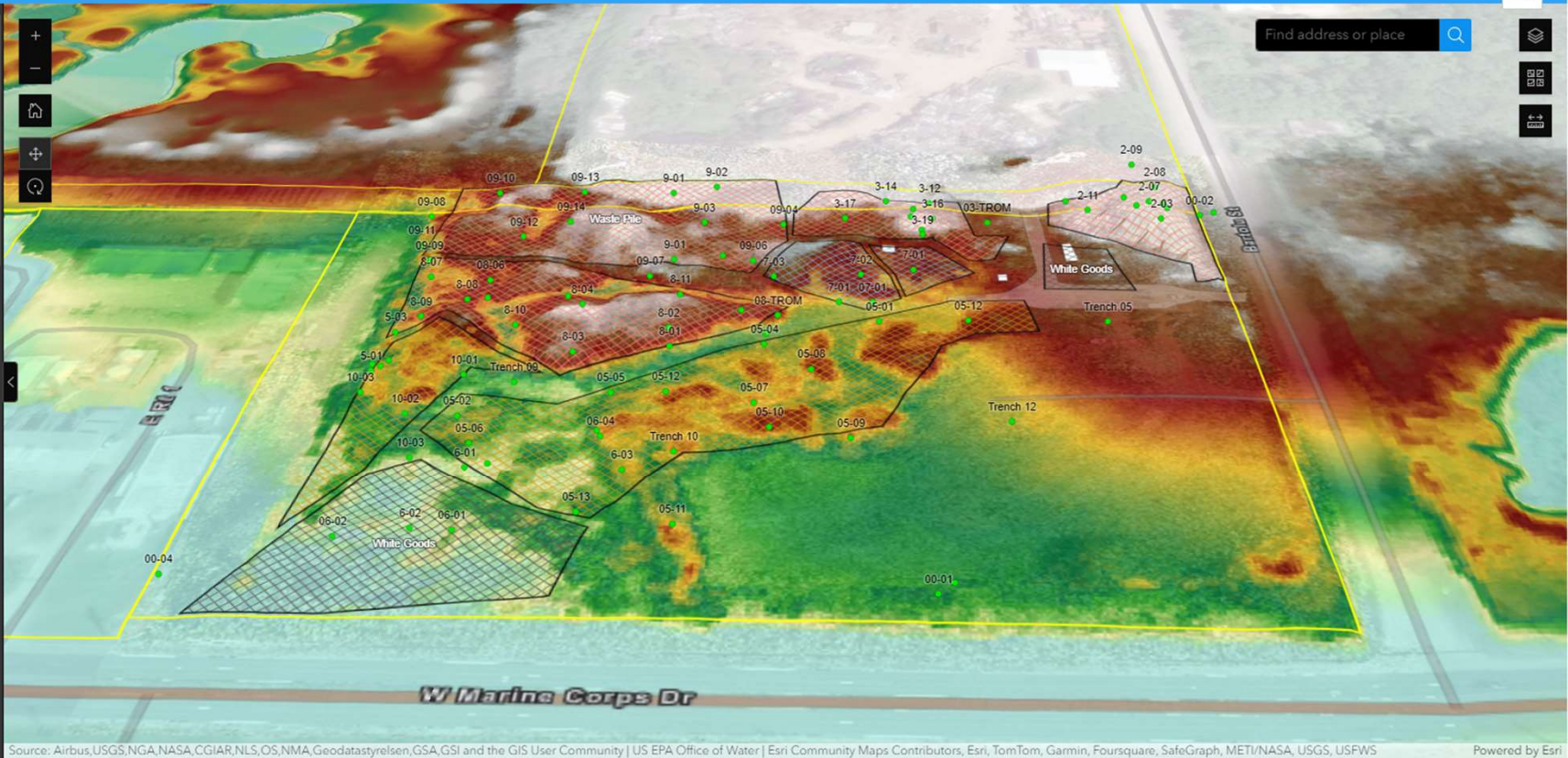
Dedede Layers

Trench

Structure

Road

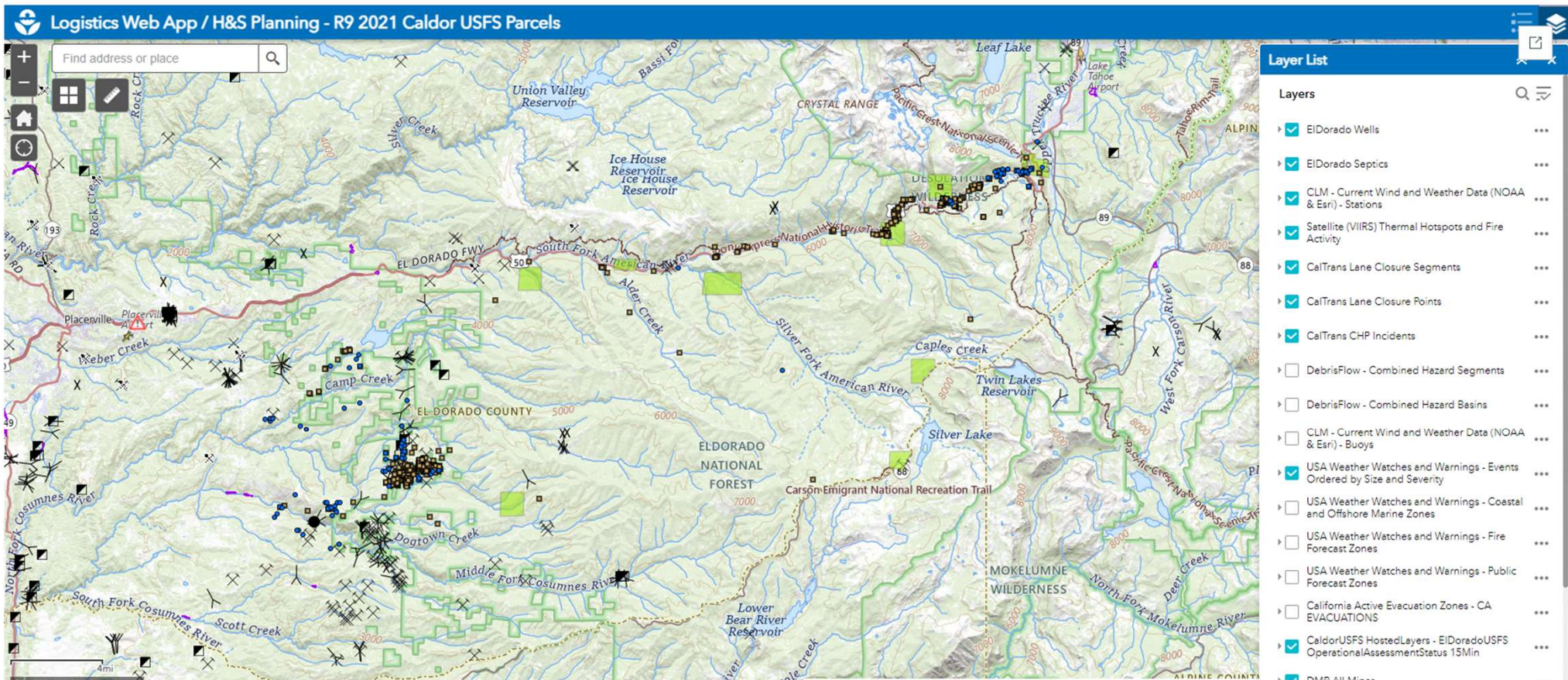
Parcel Boundary2022



Source: Airbus,USGS,NGA,NASA,CGIAR,NLS,OS,NMA,Geodastylelsen,GSA,GSI and the GIS User Community | US EPA Office of Water | Esri Community Maps Contributors, Esri, TomTom, Garmin, Foursquare, SafeGraph, METI/NASA, USGS, USFWS

Powered by Esri









9+



Thomas



# Mission Results

## CARES Act and American Rescue Plan Act of 2021

The [CARES Act](#) is a \$2.2 trillion economic stimulus bill passed by the 116th U.S. Congress and signed into law by President Donald Trump in March 2020 in response to the economic fallout of the COVID-19 pandemic in the United States.

The [American Rescue Plan Act of 2021](#) is a US\$1.9 trillion [economic stimulus](#) bill passed by the [117th United States Congress](#) and signed into law by [President Joe Biden](#) on March 11, 2021, to speed up the country's recovery from the [economic](#) and health effects of the [COVID-19 pandemic](#) and the ongoing [recession](#). The American Rescue Plan continues many of the programs started by the CARES Act (2020) by adding new phases, new allocations, and new guidance to address issues related to the continuation of the COVID-19

Water Access Mission Results



Maui Fires 2023 Hub



Thomas ▾

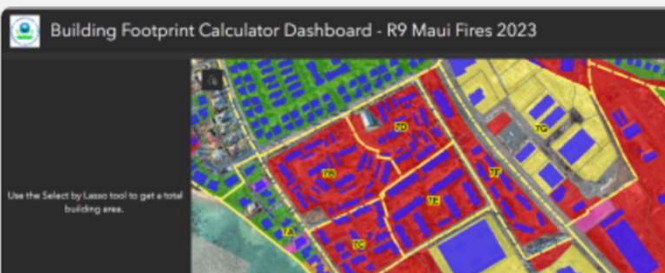


# Maui Wildfires 2023 Hub

This hub site is used for exploring the data team products used for the EPA Maui Fires 2023 response.

## Operations Apps

*See also Field Maps below*



### Building Footprint Area Calculator Dashboard - R9 Maui Fires 2023

Dashboard used for calculating building footprint area to aid in Soil Stabilizer volume estimates.





USFS 2021 California Fire Response



# 2021 California Fire Response: US Forest Service Parcels

Search, Visualize, Download, Create



This is the internal Hub Site for 2021 California Fires Response specific to US Forest Service (USFS) parcels for exploring and downloading GIS data, discovering and building apps, and engaging others to solve important issues. You can analyze and combine datasets using maps, as well as develop new web and mobile applications. Let's work together to accomplish the task.

## Communication

Apps provide simple access to information and tools for you to collect data and help your users understand your data.

ArcGIS Hub



## StoryMaps

### Tempe Lake UP Spill

Train derailment in Tempe, Arizona

<https://www.arcgis.com>



### Viper Deployment for Francis Street

Guidelines and lessons learned with Viper Deployment for Francis Street Fireworks

<https://www.arcgis.com>



### Guam Harbor of Refuge Abandoned Vessels

History and planned removal of derelict vessels in Apra Harbor, Guam

<https://www.arcgis.com>



### USFS Caldor

The Caldor Fire started on August 14, 2021 and has burned nearly 220,000 acres in El Dorado National Forest, Lake Tahoe Basin, and in El Dorado,...

<https://storymaps.arcgis.com>



### Klau Buena Vista

2021 Time Critical Removal Action

<https://www.arcgis.com>



### Klau Buena Vista

2020 Mine Repository Restoration

<https://www.arcgis.com>



### NFPI

Navajo Forest Product Industries Kiln Building Removal 2021

<https://www.arcgis.com>



### Rota Tunnels

Underground sampling in tunnels on Rota.

<https://www.arcgis.com>



### UAS Examples

Different applications of UAS in START

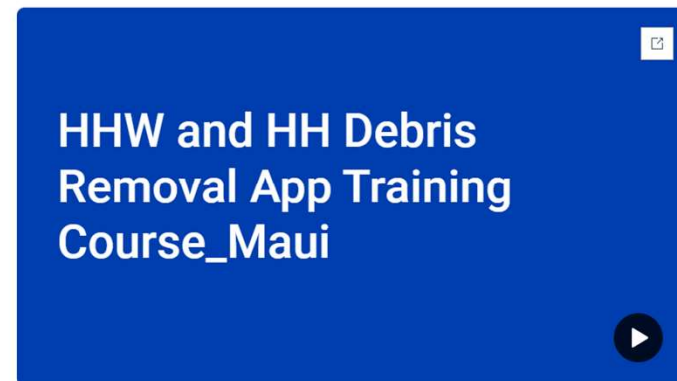
<https://www.arcgis.com>

## Other

Augmented Reality (see video)



iSpring plug-in for PowerPoint



Demo PII Training



### **EPA\_R9\_PII\_Training**

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# Project Planning and Considerations

## Site Specific Data Management Plans (SSDMPs)

US EPA Region 9 - Site-Specific Data Management Plan			
 	Site Name	Francis Street Fireworks	Response Website URL <a href="https://response.epa.gov/site/site_profile.aspx?site_id=15119">https://response.epa.gov/site/site_profile.aspx?site_id=15119</a>
	On-Scene Coordinator	Robert Wise	Public Information Officer N/A
	Response Authority	CERCLA	Response Type Emergency Response
	Create Date	March 17, 2021	Revised Date
	<p>This Site-Specific Data Management plan (SSDMP) is intended to provide guidance for data collection and subsequent data management activities associated with the activity detailed below. The data collection and management practices identified in this plan are designed to ensure data integrity and consistency throughout the response activity. The SSDMP should be used in conjunction with the Region 9 Regional Data Management Plan. The SSDMP is not intended to be all encompassing regarding data management. Additionally, this document is intended to be updated as data management practices change. If there is a substantial change in activity or phase of the response, i.e. necessitates a new sampling plan, a new SSDMP should be written.</p>		

Who has time for this?

### 1. SSDMP OVERVIEW

This section is expected to provide a high-level overview of what data is being collected and why (e.g. objectives), how the data will be used, and who will be involved in the data management related activities. Additional details of how the data will be managed can be found in Section 2 - SSDMP DETAILS.

#### 1.1 Project Scope

Describe what work is being conducted on the site during the time period covered by this SSDMP. This is not a site background or history of the site, but what is the specific action the EPA is taking onsite.

EPA will conduct co-located air monitoring and air sampling for volatile organic compounds (VOCs) and particulates upwind and downwind of a planned controlled burn operation. After the controlled burn, soil samples will be collected and analyzed for metals, VOCs, and semi-volatile organic compounds (SVOCs).

What is the activity that will be performed that requires a DMP?

EPA will deploy air monitoring equipment (DustTrak, AreaRAEs, MultiRAE) in upwind and downwind locations during the planned controlled burn operation. Air samples will be co-located with the air monitoring locations, and the collected air samples will be analyzed for VOCs and particulates. Soil samples will be collected after the controlled burn and will be analyzed for metals, VOCs, and SVOCs.

*Always include bullet for communication strategy. What data elements will we use to communicate with internal and external stakeholders (Story Map, Fact Sheet, Collector App we show at public meetings, etc.). If we don't have any needs, note it in the bullet.*

- Real-time air monitoring data will be used internally by the EPA and local agency partners (Ontario FD/Bomb Squad, Ontario Police Department, SCAQMD) to support operational needs.

## 1.2 Roles and Responsibilities

	Organization	Name/Contact	Role
1	EPA	Robert Wise (562) 889-2572 Wise.Robert@epa.gov	OSC
2	EPA	Christopher Myers (562) 305-1225 Myers.Christopher@epa.gov	OSC
3	EPA	Olivia Trombadore (415) 243-7750 Trombadore.Olivia@epa.gov	OSC
4	EPA	Harry Allen (562) 733-0316 Allen.Harry@epa.gov	OSC
5	Weston-START	Celeste McCoy (562) 472-3916 Celeste.McCoy@westonsolutions.com	Field Team Lead
6	Weston-START	Anne Lawrence (619) 990-7294 alawrence@scst.com	Project Manager
7	Weston-START	Emily Yadacus (256) 483-0214 Emily.Yadacus@westonsolutions.com	Field Team Member-Viper

**Document Internal or External  
Communication Strategy**

**Document Contacts and Roles**

### 1.3 Objectives and Critical Decisions

To be completed by OSC. The Objectives listed in the table below consists of Data Quality Objectives (DQOs) as well as other objectives that require the collection, storage, or management of data. Examples of these objectives include community involvement, which may require the development of a Story Map, and internal communication, which may involve the development of a custom Geoviewer to convey information to internal parties during an emergency response or removal action. All objectives that require collection, storage, or management of data should be listed in the table below. Critical Decisions that will be made utilizing the data collected, stored, and/or managed to meet each objective should be noted in the table

No.	Site Specific Objectives	Critical Decisions	Responsibility	Detailed Activity
1	To determine <u>whether or not</u> airborne dust and VOC concentrations are present or migrating from work zones	If real-time monitoring results indicate particulates greater than the action level, work activities will be reassessed.	START	Co-located air monitoring and air sampling for VOCs and particulate upwind and downwind of work zone.
2	To determine <u>whether or not</u> metals, VOC, or SVOC contamination exists at the Site after the controlled burn.	Do sample concentrations exceed screening levels?	START	Soil sampling in work zone and surrounding properties.

## Document Data Objectives

Why are we collecting this data?

## Which Tools and Apps are needed?

### 1.4 Data Tools and Applications Needed

To be completed by OSC.

WebEOC	Response.epa.gov site:	Scribe	Viper	Collector	Survey123	Dashboard	Story Map	Geospatial Viewer	UAS	Waste Management Tool	Fact Sheets	Notices	Other
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



Comments: Hub Site for internal sharing

## 2. SSDMP DETAILS

This section is expected to contain the details of data acquisition (what data you will acquire and how you will acquire it), data management (how you will manage the data), and data reporting (how will the data be reported and associated frequency).

### 2.1 Data Streams

#### 2.1.1 Detailed Activities

Obj No.	Data Stream	Detailed Activity	Collection Location	Data Recording Tools	Frequency	Deliverable
1	Monitoring Data	Air Monitoring	Multiple locations upwind and downwind of controlled burn	Log Book, and ProRAE Guardian, VIPER	Other: every 60 seconds	Online ProRAE Guardian Viewer, VIPER and ER Letter Report
1	Spatial/Location Data	Air Monitoring; Soil Sampling	Multiple locations upwind and downwind of controlled burn; Multiple locations on subject parcel and surrounding properties	Mid-range GPS with iPad and mobile devices	As-Needed	Final Letter Report/Figures
1	Site Photographs	Site Conditions	On-Site	iPad, and Camera	As-Needed	Final Letter Report
1	Maps, Figures	Site Conditions	On-Site	Log Book	One time	Final Letter Report
1	Map Viewers, Dashboards, Story Maps	JS API Viewer with Viper widget (Internal)	N/A	N/A	<u>As-Needed</u>	Geospatial Viewer

## Document Data Streams



Obj No.	Data Stream	Detailed Activity	Collection Location	Data Recording Tools	Frequency	Deliverable
1	Map Viewers, Dashboards, Story Maps	ArcGIS Hub site with Viper Live High Charts and static High Charts (Internal)	N/A	N/A	<a href="#">As-Needed</a>	ArcGIS Hub site
1, 2	Sample Collection Information	Air Sampling; Soil Sampling	Multiple locations upwind and downwind of controlled burn; Multiple locations on subject parcel and surrounding properties	Collector, Survey123, Log Book	As-Needed	Final Letter Report/Figures
1, 2	Analytical Data	Air Sampling; Soil Sampling	Multiple locations upwind and downwind of controlled burn; Multiple locations at Site	EDD file	As-Needed	EDD File

#### 2.1.2 Detailed Activities (Public)

Obj No.	Data Stream	Detailed Activity	Frequency	Deliverable
N/A				

## 2.2 Data Management

#### 2.2.1 Data Quality Control

Activity	Objective	Data Source(s)	Task	Frequency	Responsibility
Duplicate Sampling	Ensure consistency of sample results	Lab	Collect field duplicate soil samples	10%	START
Data Validation	To confirm that field samples were collected	Data Validator	Compare sample collection information with lab report	As Needed	START

## Document Public Data Streams

#### Survey123 Worksheet Attachment #2

You should use Survey 123 if field teams are collecting multiple data in multiple fields. If limited data fields are used during data collection, Collector alone can be used.

#### General Survey123 Form Information

Product Name	URL	Owner	Audience
R9_General_App	<a href="https://epa.maps.arcgis.com/home/item.html?id=c51efc746d824e88a18a4d8fa04cfac1">https://epa.maps.arcgis.com/home/item.html?id=c51efc746d824e88a18a4d8fa04cfac1</a>	<a href="#">Solana_Foo_EXT</a>	START

#### Workflow for Field Operations

Field Operations
Set out AreaRAEs for VOCs link to Viper, use <a href="#">Dustrak</a> to monitor for particulates/metals
Collect composite soil samples
Collect air samples

#### Method of Geolocation

Methods to Be Used	Basemap Used (if digitizing)	Basemap Source	Date Used
GPS (built-in iPad/iPhone)	Aerial	ESRI	3/17/21

Offline Basemap Needed? No

Temperatures over 100°F expected? No

Base Template Form to Use

Template Form
R9_General_App

#### Custom Attribute Fields

Field Name	Hidden	Valid Values	Default Value	Data Type	Field Length	Field Order
N/A						

Other Customizations (renaming fields, changing order, etc)

	Change required
1	Site Name = R09 20210317 Francis Street Fireworks
2	Sampling nomenclature (auto-calculate): FSF-01-S-20210317 for soil, FSF-01-A-20210317 for air
3	Default Air equipment Multigas: <a href="#">AreaRAE</a> , Particles: <a href="#">Dustrak</a>
4	Soil sample default: Composite, Field

## Data Collection Tool Considerations

- Add slider for monitoring locations
- Layers for Geospatial Viewer

Layer Name	Service URL	Data Repository	Filter/Queries	Default On	Label Field	Labels On	Layer Order	Customizations
Parcels	<a href="#">Link</a>	ER Cloud	Ontario, CA	Y	Number	Y		
Viper Locations	<a href="#">Link</a>	ER Cloud		Y				Has time enabled

ArcGIS Hub Attachment #4

General Information

Product Name	URL	Admin	Audience
Francis Street Fireworks Hub	<a href="https://francis-street-fireworks-epa.hub.arcgis.com/">https://francis-street-fireworks-epa.hub.arcgis.com/</a>	Solana.Foo_EXT	EPA/START

Detail how the Hub will be used and the functionality required by the user:

	Use
1	Links to charts for live Viper readings
2	Links to response.epa.gov site and js viewer
3	Link to Deployment manager
4	Interactive charts of Day 1 data not in Viper
5	Links to data collection apps used

Document Reporting Tool Requirements



HOW DOES THIS HELP?

# THANK YOU!

## Questions?