



# DINGELL ACT

ESSENTIAL TECH FOR  
ESSENTIAL WORK

COLLABORATE, INTEGRATE, **LOCATE**, MITIGATE...

- ❖ What is the Dingell Act?
- ❖ How the Dingell Act currently impacts the fire service?
- ❖ How the Dingell Act may impact the fire service in the future?
- ❖ How does the fire service need to adapt to ensure the requirements of the Dingell Act are met?

As we talk two key items to keep in mind – **Integration and Interoperability**

# **Dingell Act Resource Tracking (DART) for Wildfire Response**

Dingell Act Resource Tracking (DART), signed into law in March 2019 (Public Law No. 116-9, Section 1114). It has significant implications for wildfire response. The law requires remote tracking with GPS location of active assets to manage firefighting resources on federal lands with locations to be displayed on real-time maps.

## Key Provisions of the Dingell Act

Under the Dingell Act, federal agencies must ensure that they use GPS tracking technology to manage firefighting resources, such as helicopters, ground vehicles, and firefighters. The law requires that GPS tracking data be made available in real-time, and that it is integrated with existing wildfire response tools. In addition, federal agencies are required to provide training and support to their firefighting personnel to ensure the effective use of this technology.

The Dingell Act also includes provisions for the use of unmanned aerial vehicles (UAVs), also known as drones, in wildfire response. UAVs equipped with cameras and other sensors can provide real-time data on fire conditions, which can be used to inform firefighting strategies and tactics. The use of UAVs can also improve the safety of firefighters by providing them with up-to-date information on fire behavior and conditions.

## The Role of the Dingell Act in Wildfire Management

The Dingell Act is a critical tool in wildfire management. It ensures that firefighting resources are deployed in a timely and effective manner. Real-time GPS tracking data allows for the efficient coordination of resources, enabling firefighters and first responders to respond quickly and effectively to wildfire threats. This technology also improves the safety of firefighters and first responders by providing them with real-time data on fire conditions and the location of other resources.

In addition to the use of GPS tracking technology and UAVs, the Dingell Act also emphasizes the importance of community engagement in wildfire response. The law requires federal agencies to work with local communities to develop wildfire response plans that take into account local conditions and resources. This collaborative approach to wildfire response can help to ensure that resources are deployed in the most effective manner possible.

Overall, the Dingell Act represents a significant step forward in the management of wildfires on federal lands. By requiring the use of GPS tracking technology, UAVs, and community engagement, the law helps to ensure that firefighting resources are deployed in the most effective manner possible, and that firefighters and first responders are equipped with the tools and information they need to respond quickly and safely to wildfire threats.

# Implementing GPS Resource Tracking Systems

## Choosing the Right GPS Tracking Solution

[Choosing the right GPS tracking solution](#) is critical to the success of a wildfire response program. Agencies should look for solutions that offer real-time tracking, easy integration with existing tools, and user-friendly interfaces. Additionally, the chosen solution must comply with the requirements of the Dingell Act, including the provision of real-time data.

## Integrating GPS Tracking with Existing Wildfire Response Tools

Integrating GPS tracking systems with existing wildfire response tools is essential to maximize the benefits of this technology. This integration enables better coordination of resources and provides firefighters with real-time data that is easily accessible from a single platform. This integration also reduces the training required for firefighters to effectively use GPS tracking tools.

# *The Benefits of GPS Resource Tracking in Wildfire Response*

## **Improved Resource Allocation and Coordination**

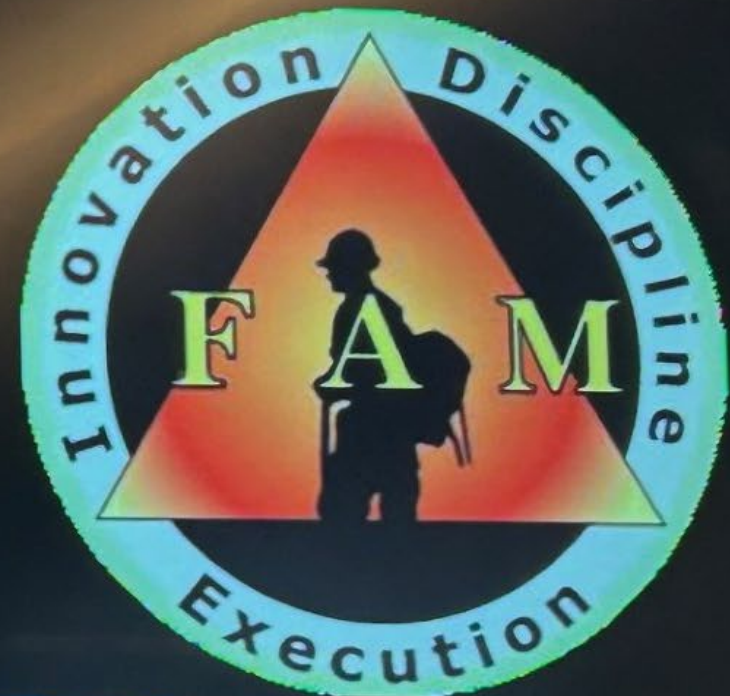
GPS resource tracking is a game-changer when it comes to wildfire response. The ability to [track resources in real-time](#) allows firefighters to respond quickly and deploy resources where they are needed most. This technology also makes it easier to coordinate the efforts of multiple agencies working together to fight a wildfire.

For example, if a wildfire is spreading rapidly in a particular area, GPS technology can help firefighters quickly identify the nearest water sources and deploy resources to that area. This can help prevent the fire from spreading further and causing more damage.

## **Enhanced Safety for Firefighters and First Responders**

[GPS tracking systems](#) are not only useful in improving resource allocation and coordination, but they also enhance firefighter and first responder safety. These systems provide real-time data on fire conditions and the location of other resources, allowing firefighters to make informed decisions about where to deploy resources and when to evacuate an area.

Moreover, GPS technology allows firefighters to track the movement of the fire in real-time, enabling them to avoid dangerous areas and prioritize their efforts based on the data at hand. This can help prevent injuries and fatalities among firefighters and first responders.



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# **Fiscal Year 2024 Projects Update Focus on DART**

## **DYNAMIC AUTOMATED RESOURCE TRACKING (DART)**

- ❖ **Request for Product (RFP)**
- ❖ **Blanket Purchase Agreement (BPA) for products and services**
- ❖ **First Task Order**
- ❖ **Education/ Rollout**

## **WILDLAND FIRE TEAM AWARENESS KIT (WFTAK)**

- ❖ **Architecture Development**
- ❖ **Website Development**
- ❖ **Beta Field Testing**
- ❖ **Education/ Rollout**

## **ADS-B NEAR REAL-TIME HELICOPTER TRACKING**

- ❖ **Phase 2 Testing**

## **STRATOSPHERIC HIGH-ALTITUDE PLATFORM SYSTEM (haps) BALLON**

- ❖ **Proof of Concept testing**

## **TRANSITION FROM ENTERPRISE GEOSPATIAL PORTAL (EGP) LEGACY TO ENTERPRISE GEOSPATIAL PORTAL-NEXT GENERATION (EGP-NG)**

- ❖ **Phase 2 analysis of environment ongoing**
- ❖ **Beginning Phase 3 of redesign of capabilities – Summer 24**

# Dynamic Automated Resource Tracking (DART)

## DART BPA

- ❖ RFQ-Spring 2024
- ❖ RFP-Spring/ Summer 2024

## Current efforts

- ❖ Device and Service request template development
- ❖ NWCG data standards have been proposed
- ❖ Asset management system architecture development
- ❖ First Task Order-Undetermined number of individual tracking units
  - ❖ TBA-2024

## Device and System Architecture Testing, Validation, and Rollout

- ❖ TBA-2024/ 2025



GSA eBuy! Under RFQ ID: RFQ1641416 RFQ Title: DART Draft RFQ  
Notice ID RFI5929 [Follow](#)

**RFI - Interagency Wildland Fire  
Personnel and Asset Tracking for  
Increased Situational Awareness**



**Deploying TAK on wildland fires; results from 2020 and looking forward**

**COLORADO**  
**Center of Excellence for Advanced Technology Aerial Firefighting**  
Department of Public Safety



## WHITE PAPER

April 4, 2024

TO: FIRESCOPE Board of Directors  
23300 Castle Street  
Riverside, CA 92518-2200

FROM: FIRESCOPE Ops Team, Task Force, Emerging Information Technologies Subcommittee

SUBJECT: WILDLAND DISMOUNTED RESOURCE TRACKING

**APPROVAL:** This White Paper was approved by the Board of Directors on April 4, 2024

**Summary:** The ability to remotely view the location of dismantled firefighters would enhance the safety of all who operate in the wildland environment. Rapidly advancing technology and connectivity improve the outlook for tracking dismantled resources in all terrains. The ideal solution will be quickly deployed, easily connected, able to be viewed on a Common Operating Picture (COP), and able to be shared with other agencies.

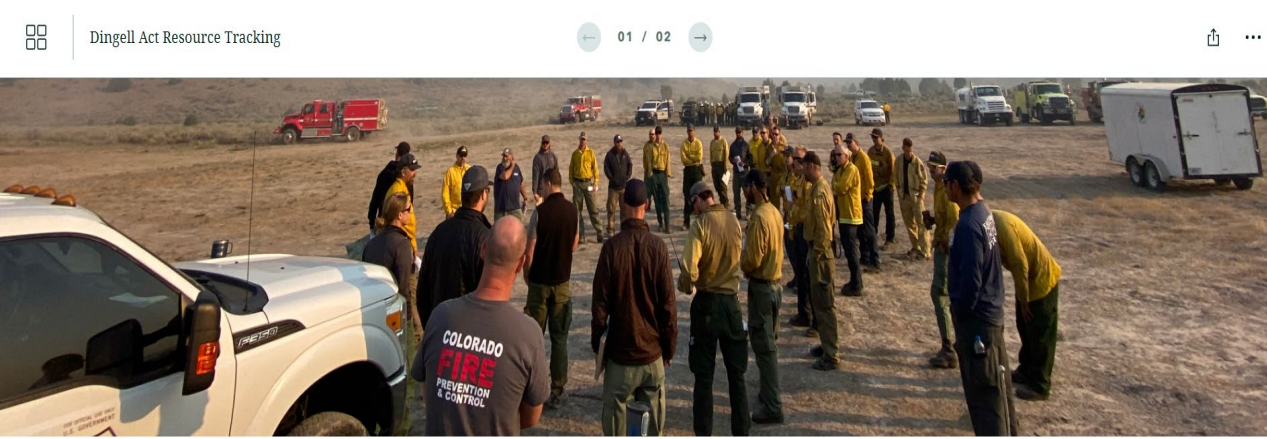
Knowing where resources are located is an age-old fire service problem. For the wildland fire service, describing and sharing location becomes even more problematic when working away from roads and known landmarks. Advances in location-based technology over the last 20 years have brought the fire service to a point where automatically sharing the exact location of resources in real-time can be achieved in all but a few circumstances.

During routine fire operations, knowing the locations of resources lends to increased efficiency and effectiveness. A certain level of safety can be achieved by understanding where resources are located when completing hazardous activities like firing operations and in the event of an incident within an incident.

The purpose of this paper is to provide a list of considerations for evaluating "resource tracking" solutions, information on current commercially available solutions, and the intrinsic limitations associated with the various communication pathways used to share resource locations.

[https://fsapps.nwcg.gov/nirops/docs/upload/5\\_5\\_TFRSAC\\_Presentation\\_Schmidt.pdf](https://fsapps.nwcg.gov/nirops/docs/upload/5_5_TFRSAC_Presentation_Schmidt.pdf)

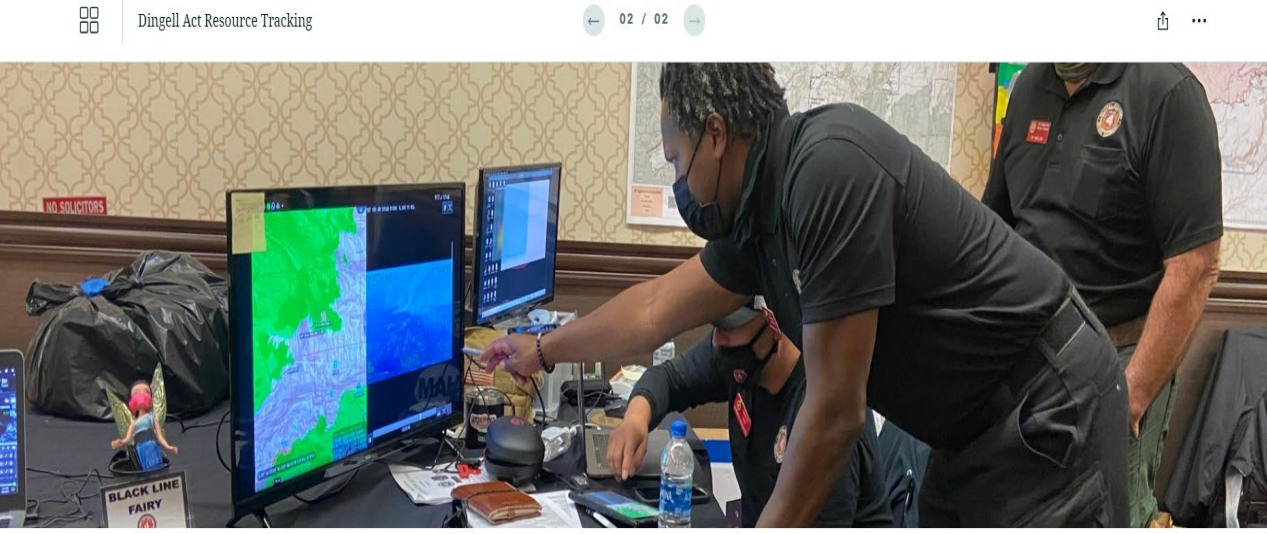
<https://firescope.caloes.ca.gov/ICS%20Document%20s/FIRESCOPE%20White%20Paper%20Wildland%20OFF%20Tracking%20White%20Paper.pdf>



<https://storymaps.arcgis.com/collections/c193360ddf124e5e9ad70b344d40eb14?item=1>

# DART on the Tamarack Fire

Humboldt-Toiyabe National Forest: July 23–30, 2021



<https://storymaps.arcgis.com/collections/c193360ddf124e5e9ad70b344d40eb14?item=2>

# DART on the Caldor Fire

Lake Tahoe Basin: Sept 1–14, 2021

# FIREFIGHTER TRACKING SUMMIT



April 10-11, 2024



# PRODUCT

iOS



ALL CELL CARRIERS



# INTEGRATIVE PLATFORM

THE BEST TOOLS FOR THE JOB

GPS RADIO

GPS WATCH

GPS TRACKER

AVL

TABLET

GARMIN



L3HARRIS

Globalstar

SOMEWEAR



Ground  
Control

zoleo



FLORIAN

Personnel

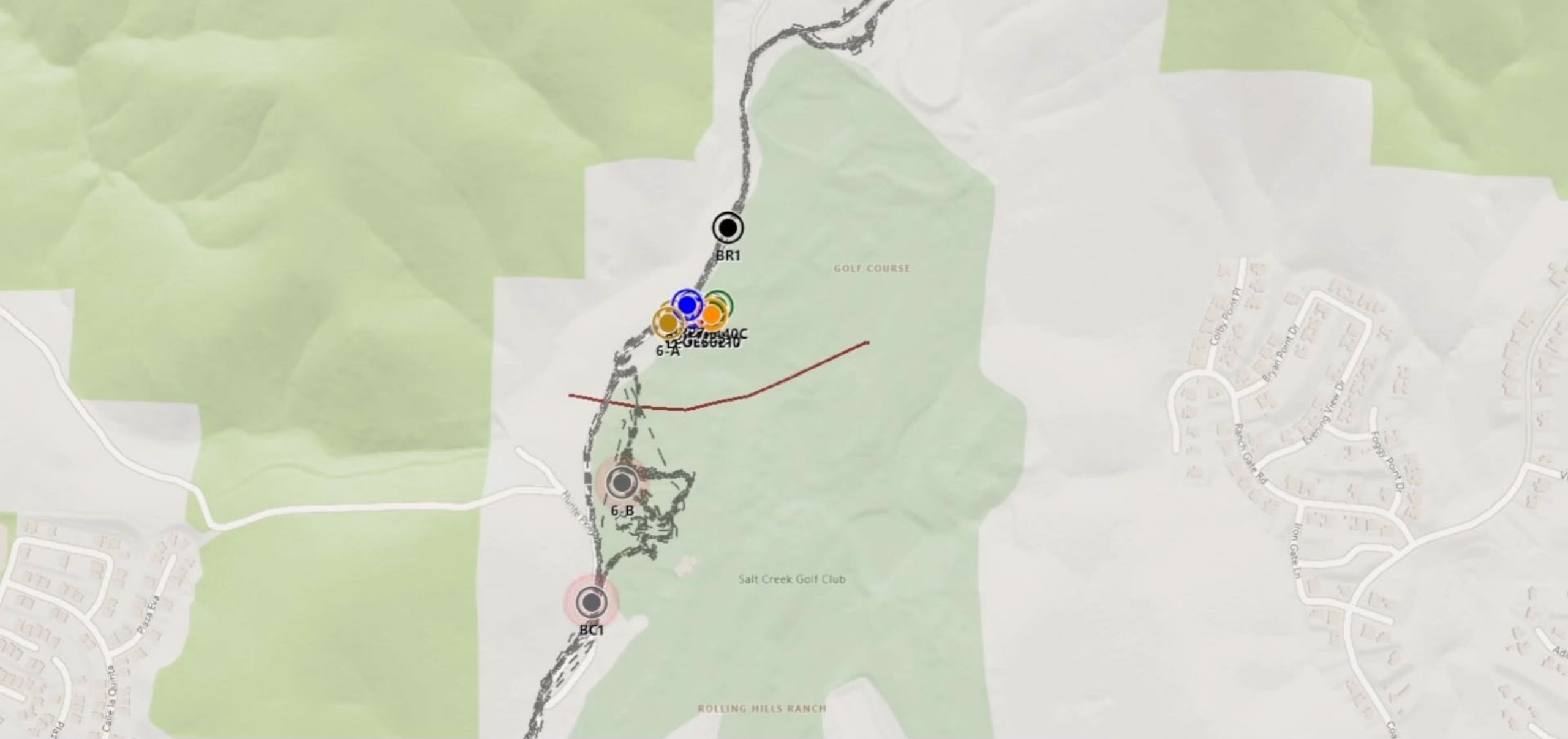
- Staged (6)
  - Niedzielski 00:00 ETA
- Progressive (2)
  - Brandon 00:00 ETA
- L-1 (0)
  - Polvino 00:00 ETA
- Mobile Attack (8)
  - Orlowski 00:00 ETA
- Holding (0)
  - Halm 00:00 ETA
- Firing (2)
  - [Personnel] 00:00 ETA

Incident: 0002841 Time: 03:49:24 Type: Mode: Status:

03:49:24 of 14:24:12







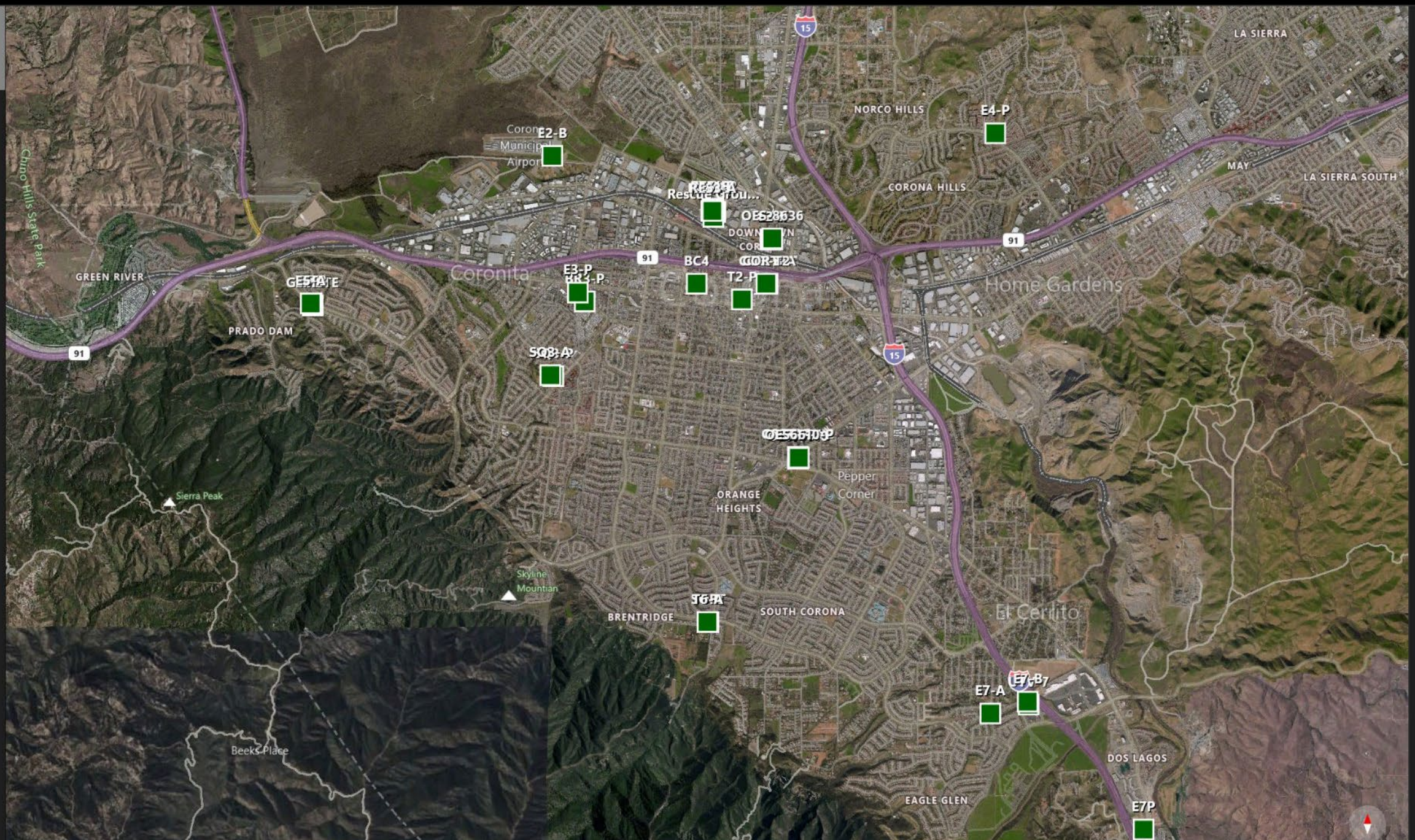
# Scribbles on Shared 3D Terrain and 3D Satellite Maps

DAY 1





[www.3AMInnovations.com](http://www.3AMInnovations.com)



Map labels and markers include:

- Green River, Prado Dam, Sierra Peak, Skyline Mountain, Beeks Place
- Corona Hills, Corona, Home Gardens, Orange Heights, South Corona, Brentridge, Eagle Glen, Dos Lagos
- LA Sierra, La Sierra South, Norco Hills, Corona Hills, May
- Sierra Peak, Skyline Mountain
- Green River, Prado Dam
- Sierra Peak, Skyline Mountain
- Beeks Place
- Corona Hills, Corona, Home Gardens, Orange Heights, South Corona, Brentridge, Eagle Glen, Dos Lagos
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- Beeks Place



Jurupa Valley

Rialto

San Bernardino

Riverside

Moreno Valley

Woodcrest

El Sobrante

Bloomington

Colton

Highland

Redlands

IRRESPA Grou...

OES B636

E4-P

COR T2A



An aerial photograph of a city, likely New Orleans, showing extensive flooding of residential areas. The sun is low on the horizon, creating a golden glow over the water. A network diagram with blue nodes and lines is overlaid on the right side of the image. A white rectangular box with a black border contains the main text.

# 3AM

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