

Disaster Assistance Summary - Hurricane Michael (As of 10/31/2018)

NAPSG Foundation provided support for Hurricane Michael through a variety of efforts: including GIS incident support, application development, technical assistance, and coordination. The NAPSG team supported the following efforts that were built on top of the approach for Hurricane Florence.

- **Equipped 126 Search and Rescue (SAR) teams** by providing mission critical response with a suite of field information collection and decision-support tools, in collaboration with the International Association of Fire Chiefs (IAFC).
- Developed a prototype solution for **integrating over 20 disparate SAR field data sources** across multiple platforms and formats into a common dashboard for enhanced situational awareness.
- **Compiled more the 500 citizen observations** as on-the-ground images through a crowdsourced photo app that supported situational awareness and helped validate impacts.

Search & Rescue Decision Support

Prior to Hurricane Michael, NAPSG Foundation and IAFC collaborated in developing a suite of SAR decision support and analysis tools. The standardized toolkit includes: a mobile application, command dashboard, and a series of technical guides to support the search and rescue missions during a disaster. The mobile application was based on the work of NAPSG's SAR Field Data Collection Working Group, which developed a standardized and

interoperable schema for collecting mission critical information in the field. A command dashboard was developed to consume data collected in the field, view other critical event information such as weather hazards, and display metrics on key operational information needed to inform decision making. Below is a summary of efforts to-date:

- Developed and shared a **standardized field form** (using Survey123) for mobile field collection by SAR teams responding in the affected areas.
- Developed and shared a **command dashboard** that consumed, analyzed, and visualized the data collected in the field.
- Provided **technical assistance** and knowledge transfer to the IAFC for ongoing hosting and maintenance.
- Produced a web-based **SAR Toolkit Guide** of all resources including how to access and download the survey and points of contact. (<https://arcg.is/1zaby4>)

SAR SUPPORT SUMMARY

126 SAR TEAMS FROM +11 STATES

FEMA (IST AND REGION) AND US COAST GUARD

51,532 FIELD FORMS SUBMITTED | **400+ USERS**

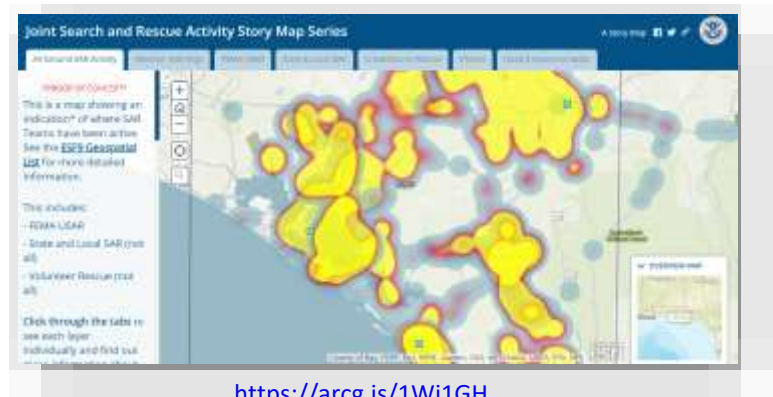


IN PARTNERSHIP WITH:



Joint SAR Activity Application– Prototype

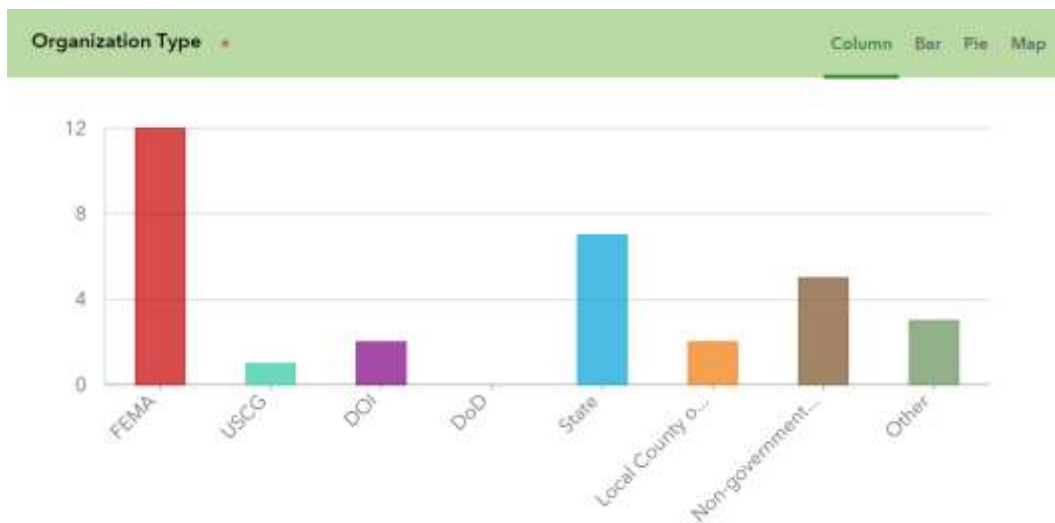
In collaboration with FEMA, developed a [proof-of-concept application](#) pulling in 20 disparate search and rescue operational data sources from across multiple platforms and field mobile devices, design to increase situational awareness of SAR operations for informed decision making.



- Map displaying where SAR teams have been active in the past 72 hours during the incident.
- Integrates information across: FEMA USAR teams, state USAR, local SAR, and volunteer rescue.
- Incident Impact Information: storm surge, wind and riverine flooding, overlaying heatmap of team locations.

ESF9 / Search and Rescue Geospatial Coordination

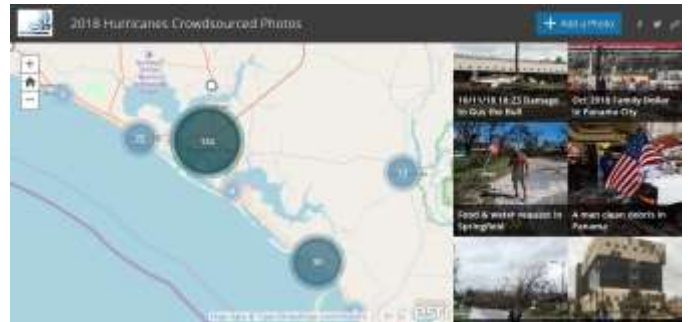
- Daily coordination calls to facilitate technology transfer between FEMA, SUSAR, USCG, Florida State EOC, and Volunteer SAR organizations. 32 individuals participated.
- Hosted an [ESF9 / SAR Geospatial List](#) of resources of where to find key layers, maps, and apps.
- This coordination has been well-received, and each organization agreed to provide representation for an Interagency SAR Geospatial Coordination Group during “clear-skies” to discuss standardization and concept of operations for future events.



Crowdsourced Story Map

NAPSG Foundation deployed a 2018 Hurricane Crowdsourced Photo Story Map. The application is a curation of photos and videos from social media. A cadre of volunteers have geolocated 1,500+ images.

- Shared by the FEMA Crowdsourcing Team.
- Shared with several state and local EOCs.
- Virginia Division of Emergency Management consuming the layer in their EOC map and combining with their more focused crowdsourcing app.
- Photos/videos are tagged in Slack Channel group where volunteers search for the location and add to story map.
- Volunteer help disseminated through and supported by GISCorps.



<http://bit.ly/2018HurricanePhotos>

Slack Channels

- USARWG – Channel with 50+ members to discuss ongoing USAR work.
- Crowdsourcing Volunteers – Channel with ~60 members for mining hurricane photos from Social Media to support the Crowdsourcing Story Map.



Links to Technical and User Guides

SAR Decision Support and Analysis Tools Cascade story map

<https://iafc.maps.arcgis.com/apps/Cascade/index.html?appid=46fbacc4bbcb4d0ca82911868179fdcc>

- Summary of the tools and resources available.
- Directions for access to the IAFC portal.
- Links to user guides and videos.
- Points of contact for access and help.

USAR FIELD DATA COLLECTION FORM (PHASE II) DEPLOYMENT KIT

<https://napsg.maps.arcgis.com/home/item.html?id=43ebe60acd7c43109c9d736951963011>

- Item Page in NAPSG AGOL portal with Instructions and Resources.

First Responder User Guide (General Deployment from NAPSG portal)

<https://napsg.maps.arcgis.com/sharing/rest/content/items/1c0d11cbfb724367814669355007f23c/data>

- PDF instructions for first responders and field teams to download and use the Survey123 form.

TECHNICAL USER GUIDE (GENERAL DEPLOYMENT FROM NAPSG PORTAL)

<https://napsg.maps.arcgis.com/sharing/rest/content/items/49bff18702fd4463baef6e7124176af0/data>

- PDF instructions for technologist to download the Survey123 XLS and deploy in their own organizations.

Video Quick Start

<https://youtu.be/XVGa7SKm2rc>

- Survey123 App installation and IAFC SAR Field Data Collection Survey download instructions.