Wildland Fire Collaboration

StormCenter Communications

Wildland Fire Program

NASA Moraga-Orinda Fire District Project

Principle Investigator: Dave Jones

Phase I: Address 5 Key Pillars (Study)
Phase II: Execution of Findings

SBIR Technology Implementation

Partner

Tactical Fire Remote Sensing Advisory Committee
November 29-30, 2022 Virtual Meeting

FIRESENSE COLLABORATION ENVIRONMENT
MORAGA-ORINDA FIRE DISTRICT - MOFD

INFORMATION SOURCES

Wildland Fire Collaboration

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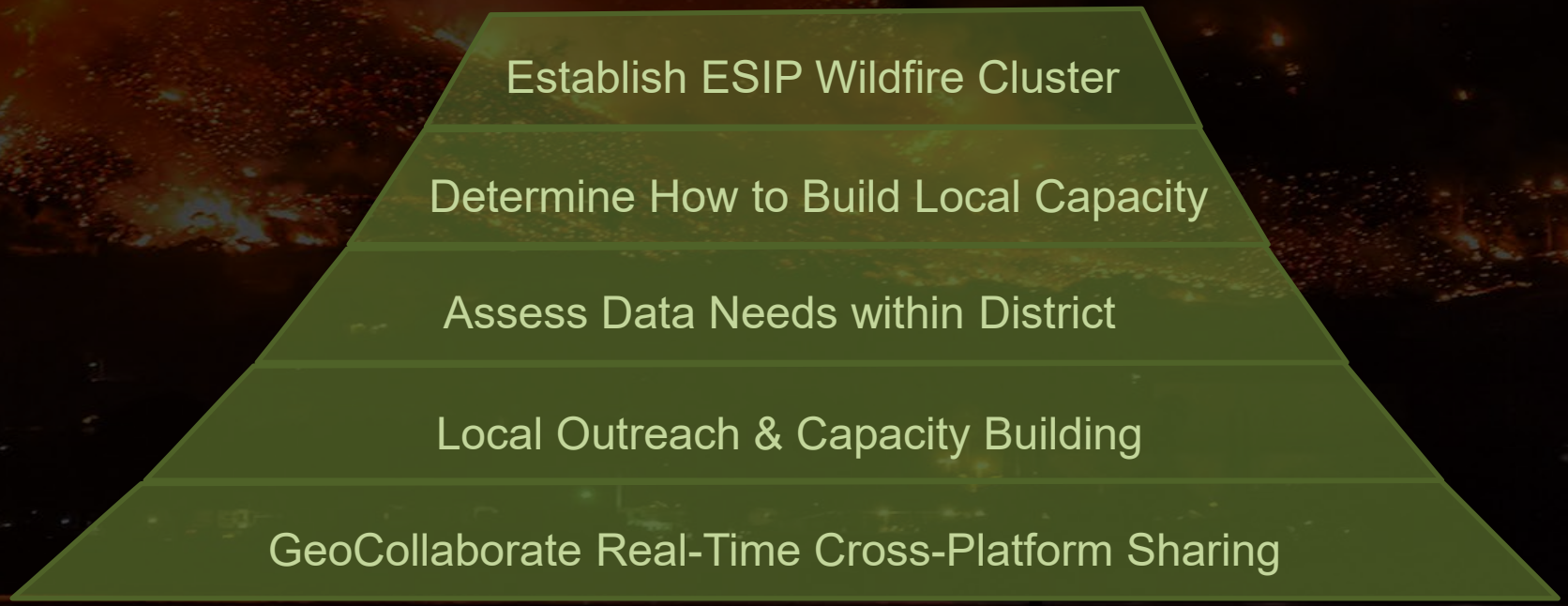
Wildland Fire Program

5 Key Pillars

- **Establish an instance of GeoCollaborate to build capacity and engage users**
- **Local outreach and capacity building within Moraga-Orinda Fire District;**
- **Assess data & needs within the Moraga-Orinda Fire District;**
- **Determine what needs to be done to increase local capacity in wildfire community**
- **Establish an ESIP Wildfire Cluster**



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INFORMATION SOURCES

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ESIP Wildfire Cluster

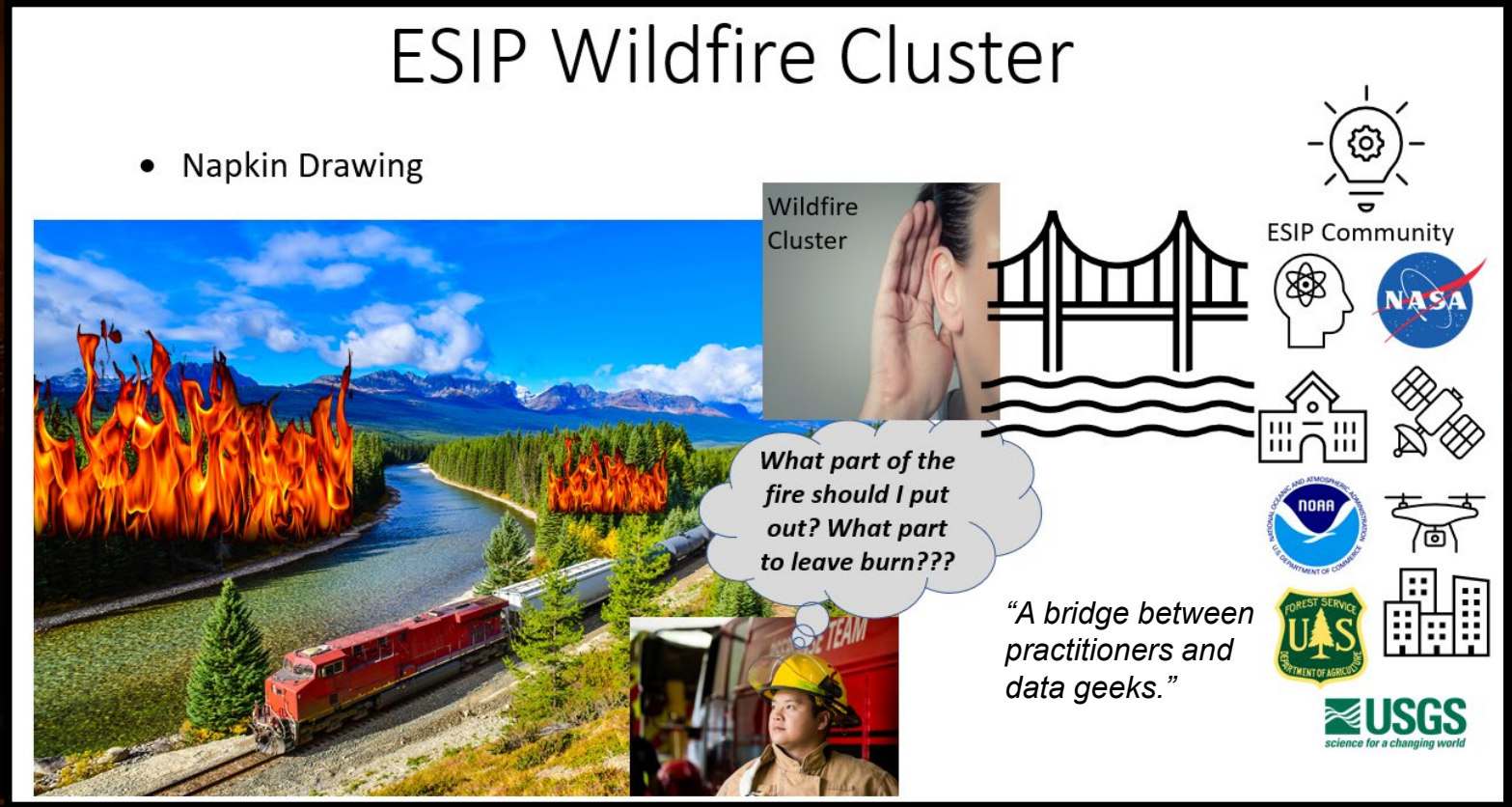
Any community working on proactive wildfire management approaches

Any agency or org that has an interest in proactive wildfire management

Monthly meetings (virtual)

Applying geospatial tech, AI, ML for rapid testing & dissemination

Establish ESIP Wildfire Cluster



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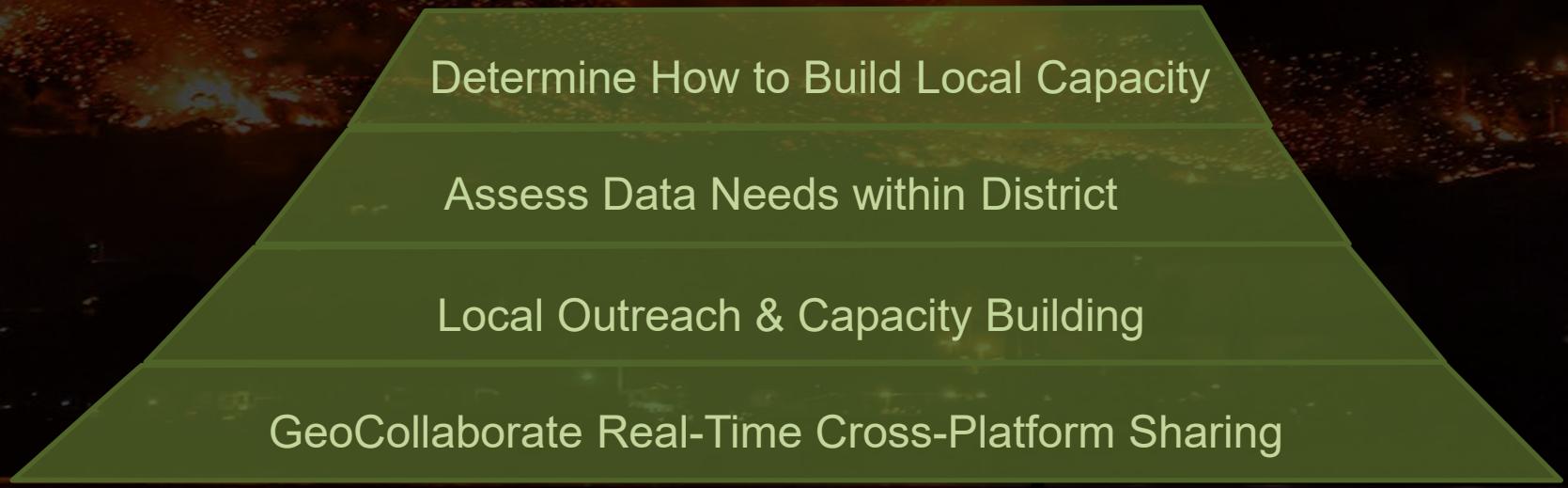

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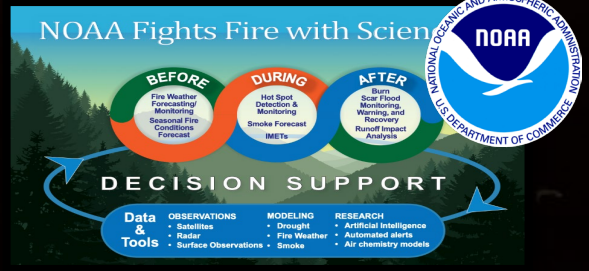
Determine How to Build Local Capacity



Equal Access to…
And sharing of…
Trusted Data

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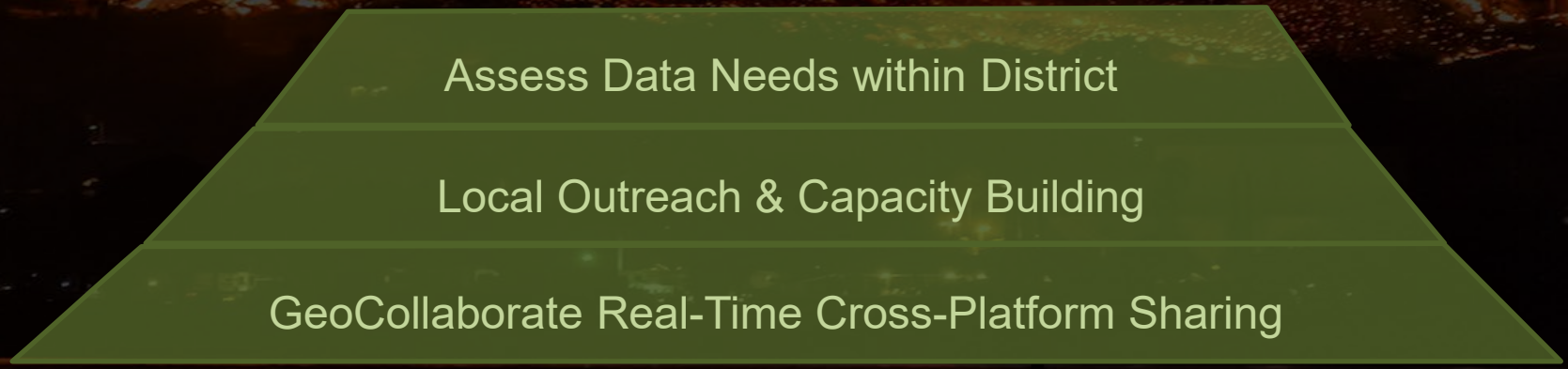

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Assess Data Needs within District

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Assess Data Needs within District

- What data is being used currently?
- What data is not available to all?
- What data would be useful?
- What data challenges exist & why?
  - Understanding
  - Timeliness / Latency

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Local Outreach & Capacity Building

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Local Outreach & Capacity Building

- How can we can improve outreach and user engagement?
- How can we best provide MOFD with the right data at the right time across the same platform collaboratively?
- Can we engage the community through existing trusted channels?
- Can the community access and trust the data?

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GeoCollaborate Real-Time Cross-Platform Sharing

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Operational Readiness Levels

Wildland Fire Program

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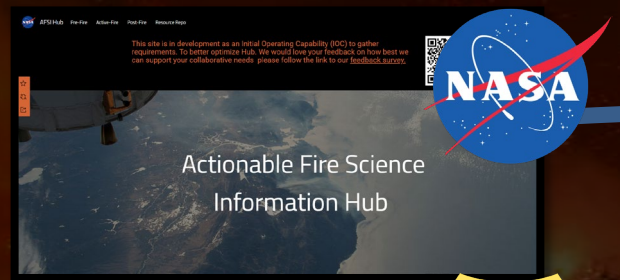

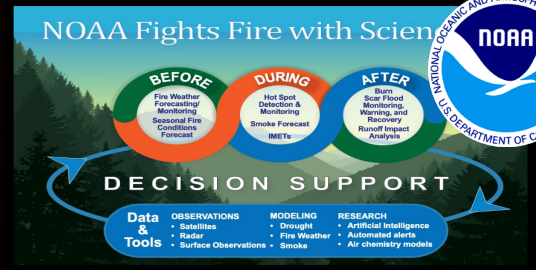

Trusted Sources

- Cross-Agency Collaboration
- LIVE collaboration sessions
- Data updating in Real-Time
- Human-Led Dashboards Prioritizing Trusted Data
- Building Community Capacity

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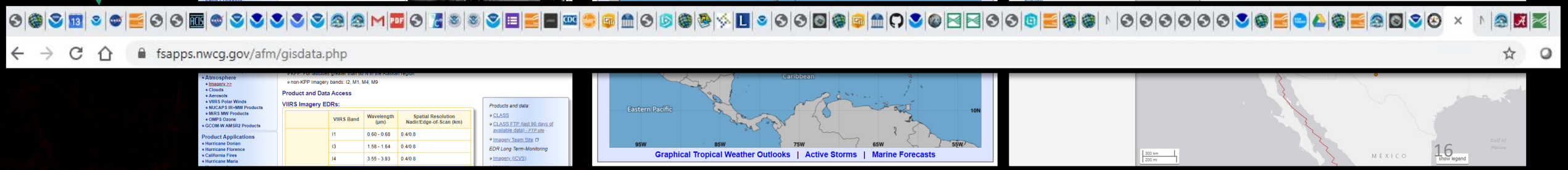
INFORMATION SOURCES

Many Websites & Data Portals Out There

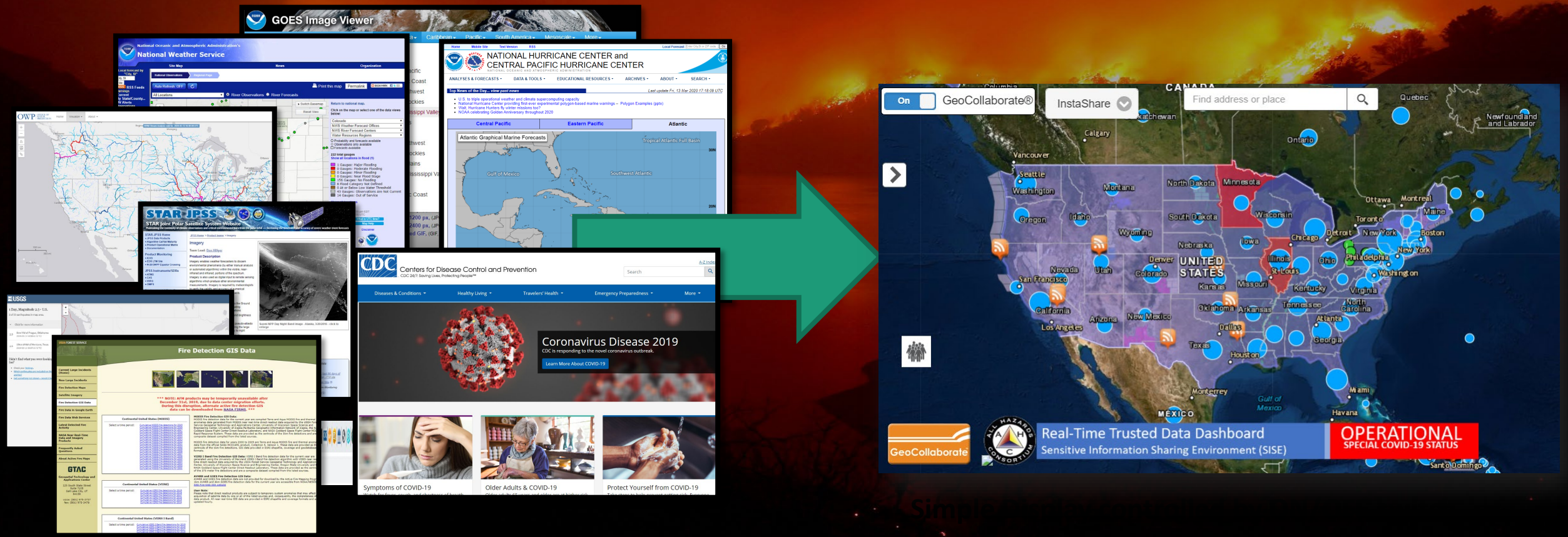
Hubs, Portals & Data Sources

Many browser windows look like this



GeoCollaborate Unifies Disparate Trusted Sources

In a collaborative environment

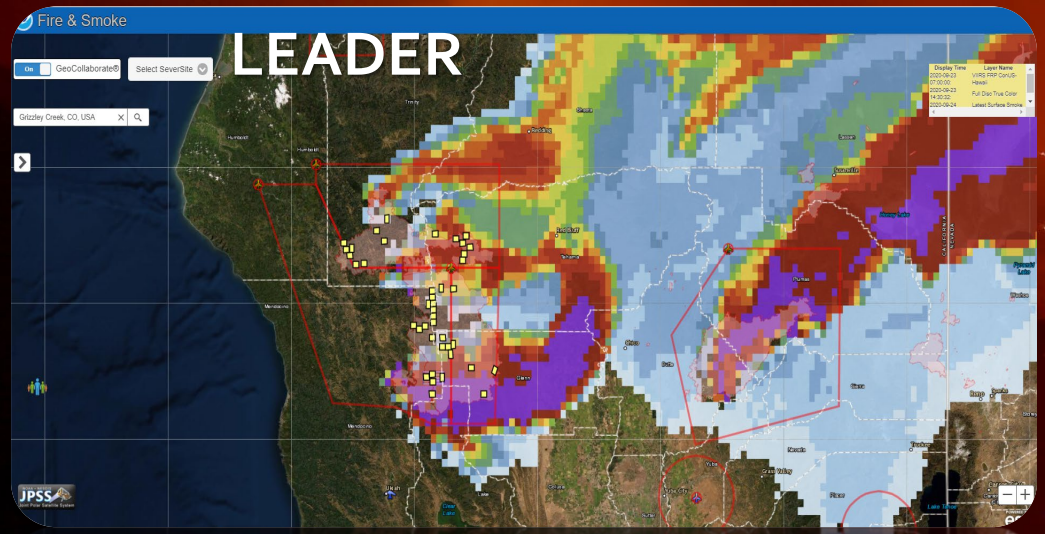


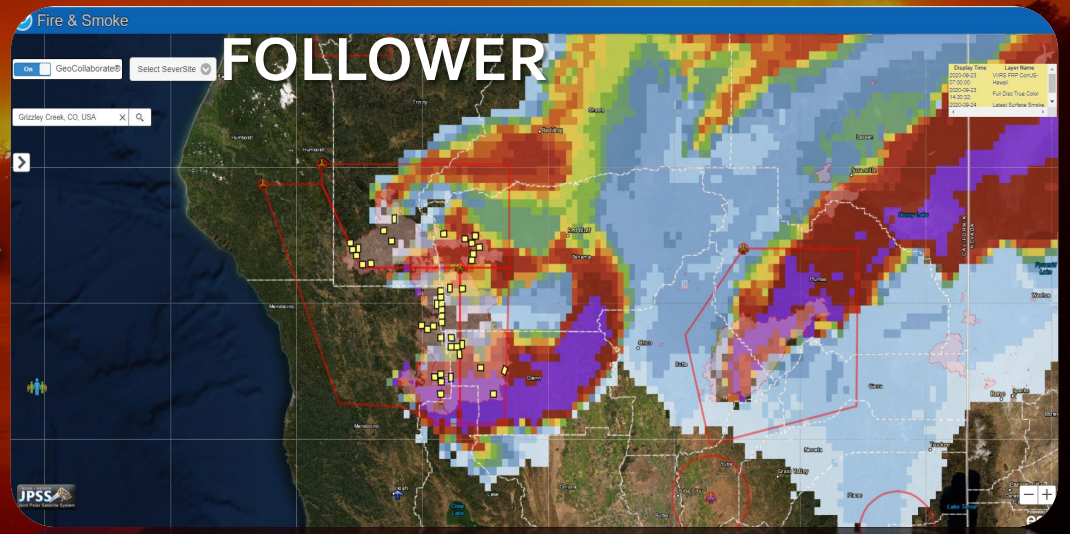
Deliver Trusted Data from disparate sources, in real-time, onto any map

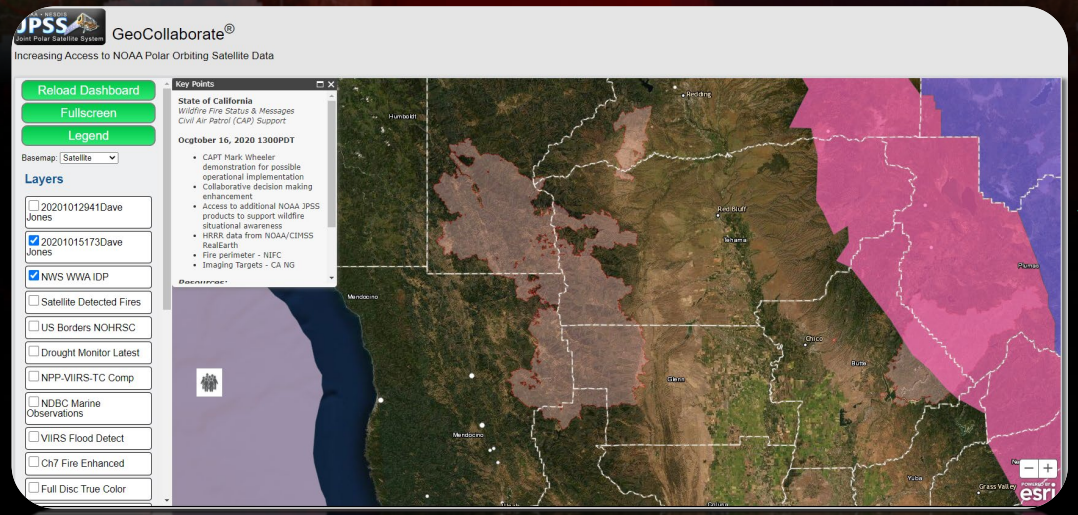
GeoCollaborate

GeoCollaborate Unifies Disparate Trusted Sources

In a collaborative environment







COLLABORATIVE DASHBOARD

Geographic location (Area of Interest & Data Layers) can be selected by individual user

OGC compliant data formats for rapid interoperability

*Satellite, drones, models, observations, reports, pictures
Output from AI, ML – data driven decision making

Fire Chief Dave Winnacker

"If we can get Fireline intensity, by acre as a fire is burning, and an understanding of where those pathways occurred, not just a perimeter but we're identifying the intensity of the fire within that perimeter and ranking it by doing what is needed to restore those landscapes to balance, we will limit the impacts of bad fire while using the good fire help restore the ecosystem."

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Redefining Collaboration through Data Sharing

SBIR/STTR
SMALL BUSINESS INNOVATION RESEARCH
SMALL BUSINESS TECHNOLOGY TRANSFER

Thank you!

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Thank you!

LIVE Brief Demonstration of GeoCollaborate During the Break

GeoCollaborate®

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NOAA
USGS science for a changing world