

Delivering Actionable Information

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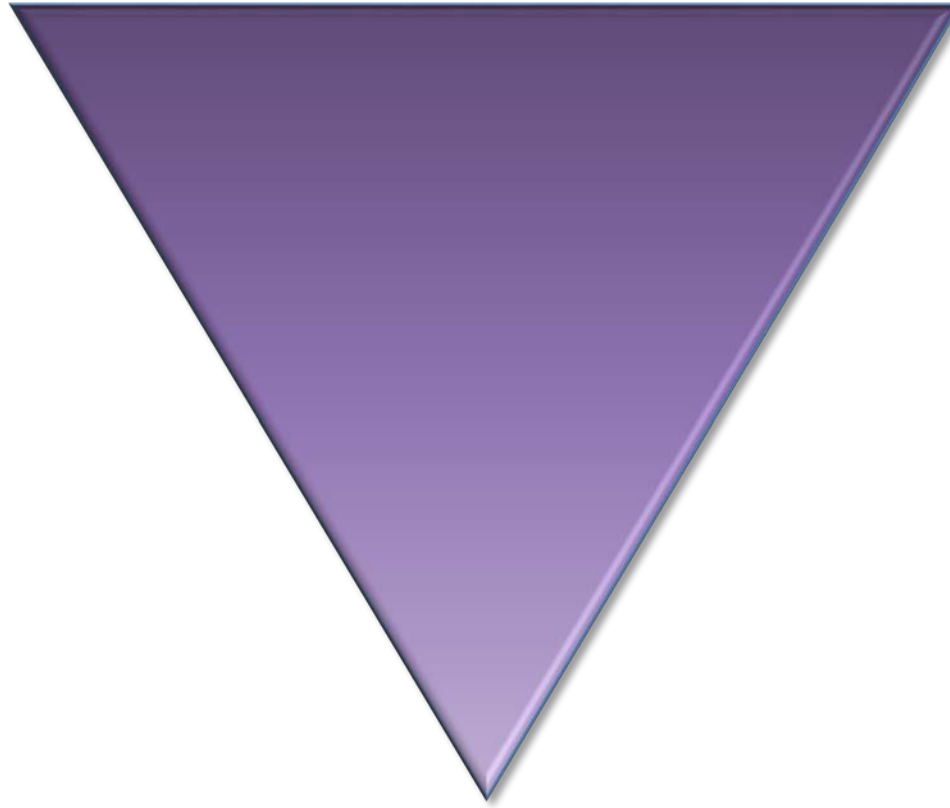
End-users, Customers, Stakeholders, and Decision-Makers

- GIS is a fantastic decision-support tool
- Yet, the decision-makers are often

Drowning in Data...Thirsting for Information

The Data to Wisdom Pathway

- Data
- Information
- Knowledge
- Wisdom



What is?

- Data

171412	10060007	Brush Lake Closed Basin
45219	10110203	Middle Little Missouri
117254	10120108	Hat
22445	10180013	Pumpkin
100637	10190017	Sidney Draw
66448	10190018	Lower South Platte
241536	10250006	Stinking Water
349270	10150002	Niobrara Headwaters
940319	10180009	Middle North Platte-Scotts Bluff
1104145	11080001	Canadian Headwaters
671680	11080002	Cimarron

What is?

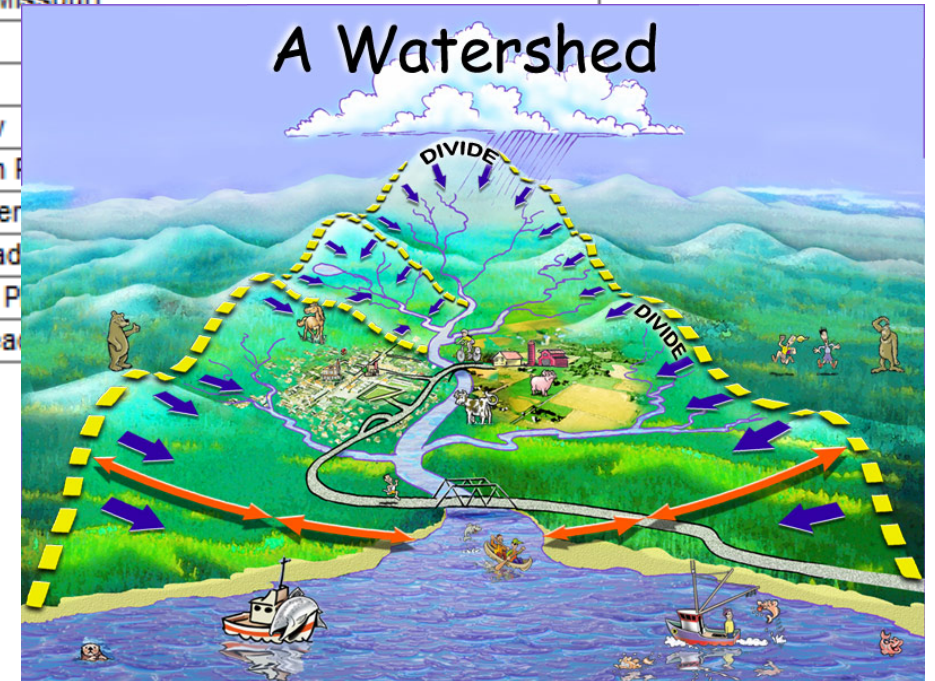
- Information
 - Context
 - Meaningful

ACRES	HUC_8	WBD_Name
171412	10060007	Brush Lake Closed Basin
45219	10110203	Middle Little Missouri
117254	10120108	Hat
22445	10180013	Pumpkin
100637	10190017	Sidney Draw
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What is?

- Knowledge
 - Context
 - Meaningful
 - Speaks to you
 - Part of *your* paradigm

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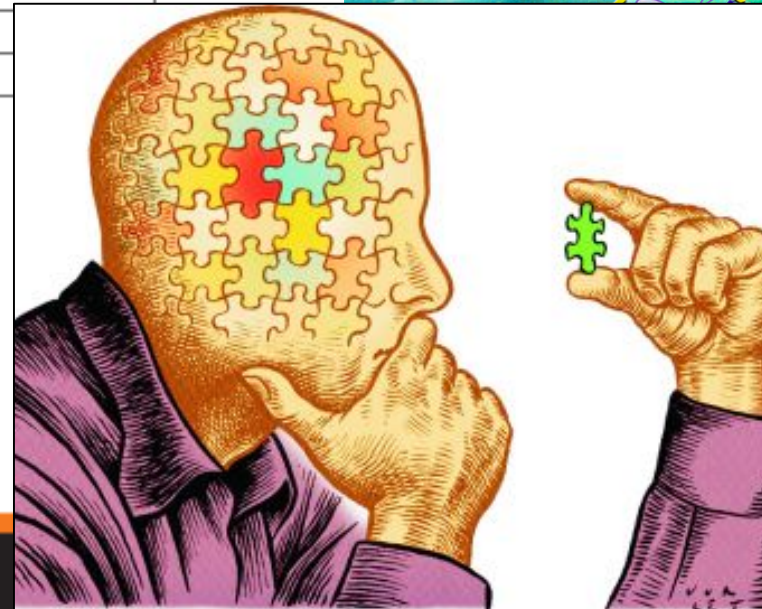
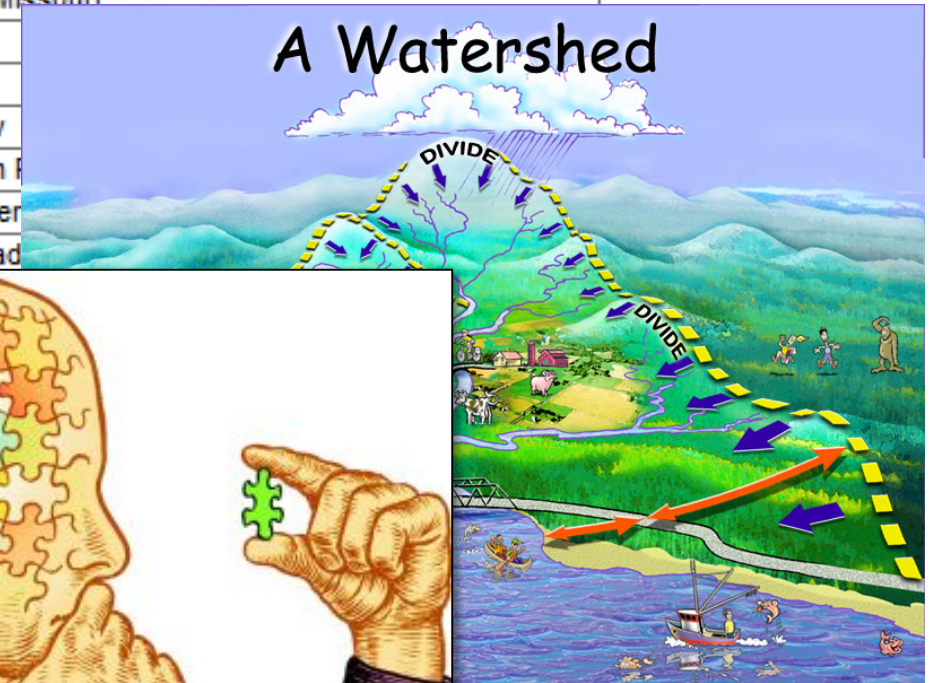


What is?

- **Wisdom**

- Context
- Meaningful
- Speaks to you
- Part of your paradigm
- Appropriate use of knowledge

ACRES	HUC_8	WBD_Name
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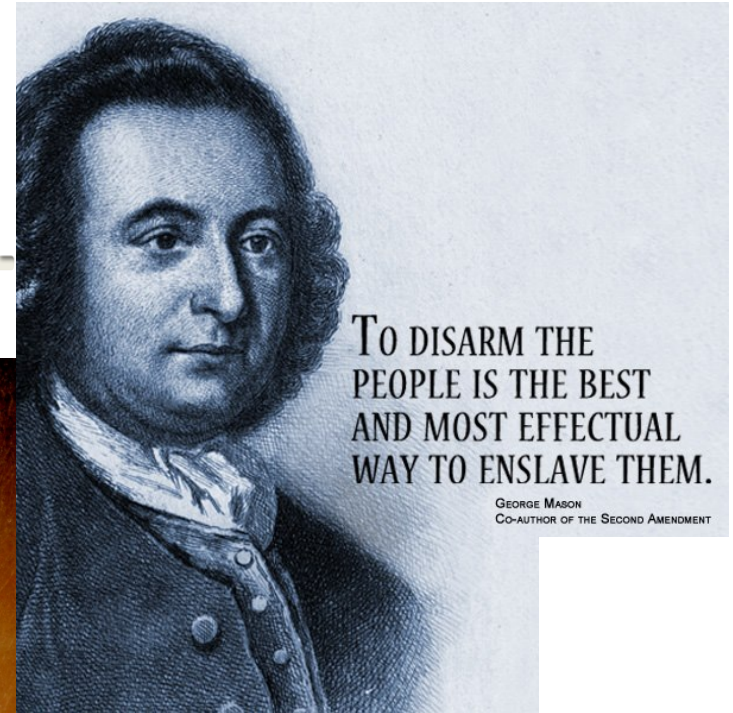


Wisdom

- Where has all the wisdom gone?



1776-1791



Are you Delivering Data or Information?

View NICB imagery using

<https://vexcelimagery.maps.arcgis.com/apps/StorytellingSwipe/index.html?appid=a1aa3f33ff49045e8b9a6ef31a67869a7#> Enter Napa, CA in location box on upper right.

Also available in swipe mode

Eagle Vision

<http://dev.evr2est.us/scenes/table> and <http://evr2est.us/>

Responders register for

The REST end point

<http://vexcel.arcgis.com>

Domestic Operations

The National Guard Unclassified
products to DAART (FMV, C) may be granted to all Domestic Operations

<https://daart.us/>

To request DAART

MQ-9 was up

<https://daart.us/>

Digital Globe Imagery

Digital Globe imagery

Service. Users with

<https://evwhs.digitaglobe.com>

Imagery available for

NIFC Enterprise Geospatial

For the Fire Community

<https://egis.nifc.gov>

Users can register

For the Public

<https://nifc.gov>

CAL FIRE

<http://www.fire.ca.gov/>

FS Active Fire Mapping

<https://fsapps.nwcg.gov/>

Current Lake

October

Imagery available for

FS Fire Data Web Services

<https://fsapps.nwcg.gov/afm/wms.php>

Fire Perimeters

https://rmgsc.cr.usgs.gov/outgoing/GeoMAC/current_year_fire_data/current_year_all_states/

<https://rmgsc.cr.usgs.gov/ArcGIS/rest/services>

InciWeb

<http://inciweb.nwcg.gov/>

Red Cross Imagery Derived Assessment App

<https://maps.rcview.redcross.org/portal/apps/webappviewer/index.html?id=84059f84d45d407b9b775fec066be245>

Red Cross DR 453-18 California Wildfires Director's Brief

<https://maps.rcview.redcross.org/portal/apps/MapSeries/index.html?appid=1ecdd0cad3e941dc8a20e20b76ac3e06>

US Wildfire Activity Public Information Map (ESRI ArcGIS)

<http://www.arcgis.com/apps/PublicInformation/index.html?appid=4ae7c683b9574856a3d3b7779162b3f4>

Google Crisis Map (Add Layers for Wildfire)

http://google.org/crisismap/weather_and_events

NASA RECOVER DSS

https://recover2.giscenter.isu.edu/ClearLakeFire_CA

https://recover2.giscenter.isu.edu/GrassValleyFire_CA

Mendocino complex: https://recover2.giscenter.isu.edu/MendocinoComplexFire_CA

Adobe: https://recover.giscenter.isu.edu/AdobeFire_CA/

Atlas: https://recover.giscenter.isu.edu/AtlasFire_CA/

Pocket: https://recover.giscenter.isu.edu/PocketFire_CA/

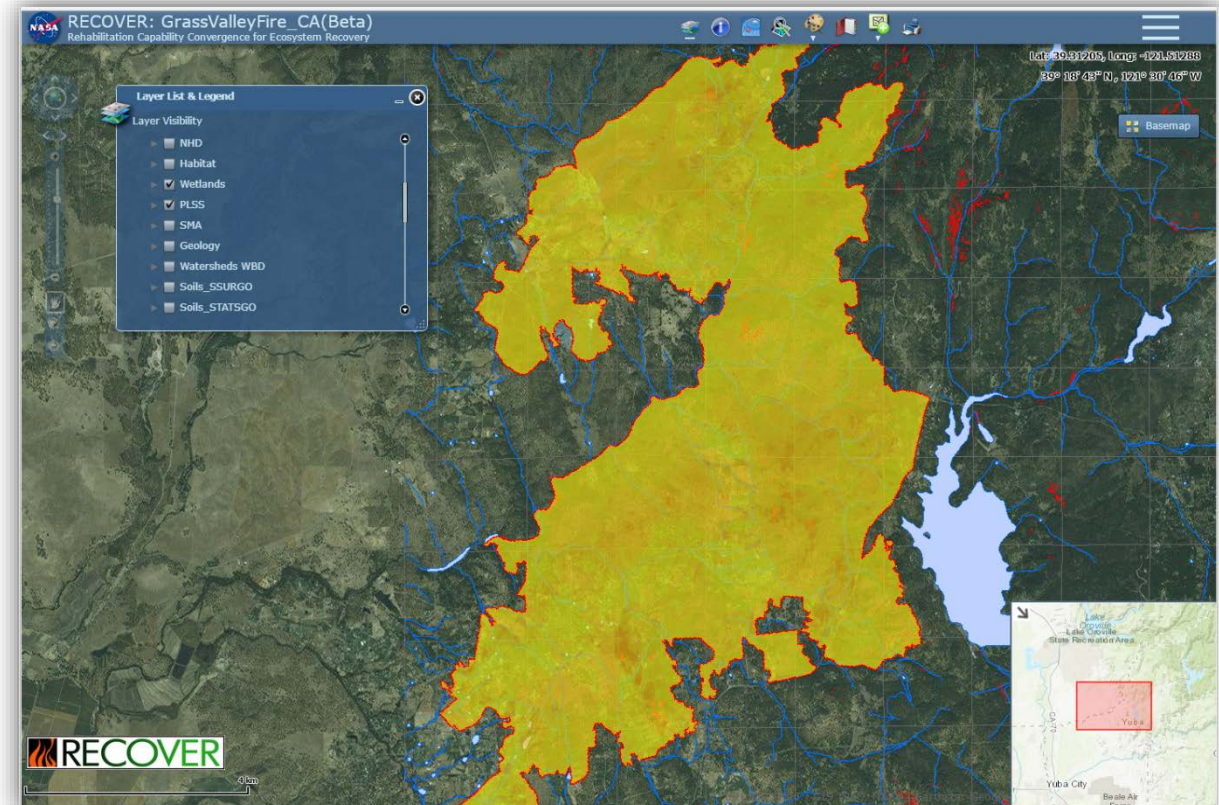
Tubbs: https://recover.giscenter.isu.edu/TubbsFire_CA/

Air Now (Air Quality)

<https://www.airnow.gov/>

Pre-Event NAIP Imagery Download NAIP by County:

<https://nrccs.app.box.com/v/naip/>



It's about Communication

- How do we communicate with geospatial data?
 - First, we need data
 - Ideally from reliable and/or *authoritative source*
 - Use standardized or accepted symbology
 - Regardless of how you feel about it cartographically
 - Consider generalization or reclassification
 - High, medium, or low instead of 0-10000
 - Using meaningful values and words

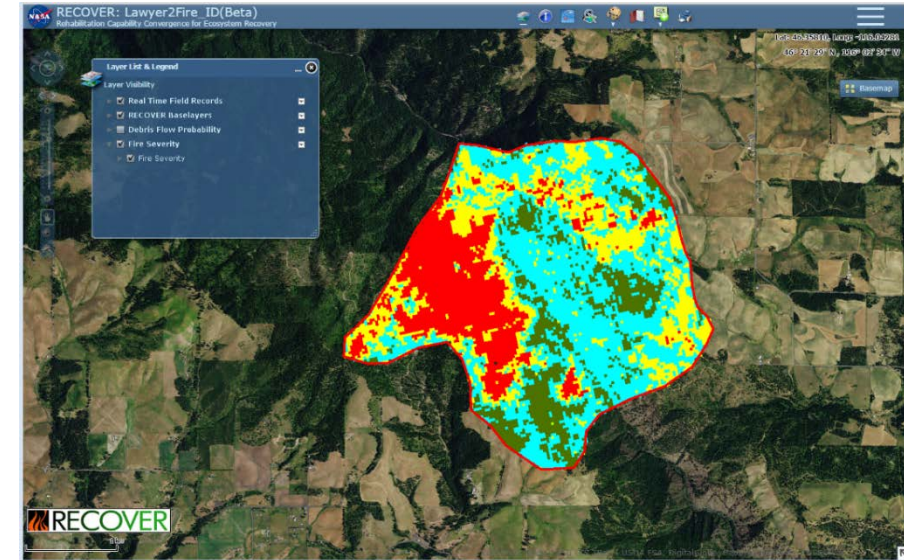
What does this mean?

It's about Communication (cont'd)

- Use meaningful units
 - Acres instead of the number of pixels
 - Miles instead of meters
 - “Sagebrush-steppe” instead of code 4622

An Example

- Q: How much of the 2015 Widget fire was considered a high severity burn?
 - A: 1,968 pixels
 - A: 1,771,200 m² (1,968 30x30 m (900 m²) pixels)
 - A: 437.673052 acres (be cognizant of significant digits)
 - A: 437 acres



How can we fix it...

- Brainstorm

A Checklist

- When you have finished spatial analysis and are ready to deliver the results...
- Ask yourself:
 - How can I explain this, so the results can immediately support sound decisions
 - How can I best communicate these data
 - How can I help turn these data/results into *actionable information*

A recent study* has found that the top skills in highest demand for GIS candidates are:



1. Analysis & Modeling
2. Communication, Interpersonal skills, Self-Motivation and Independence

Questions

