Leveraging Public GIS Data for Floodplain Mapping and Situational Awareness

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An Ever Expanding List Of Options

With the proliferation of the Internet, there is now a website (or a thousand) for every need or interest.

- But what’s authoritative data? Where is it?
- How is an FPA or EM to know which to use?
- In an emergency, we can wind up rotating through a list of bookmarks that looks a little like this:
FEMA Mapping – National Flood Hazard Layer Viewer

Just Google “FEMA National Flood Hazard Layer Viewer” or jot this address down:
https://www.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd

For direct data downloads, there’s always the FEMA Map Service Center:
https://msc.fema.gov/portal/advanceSearch
What’s More Oklahoma-Sourced Than The Mesonet?

Mesonet Rainfall
http://mesonet.org
Emerging Federal Portals

NWS SAFER Hazard Dashboard - Situational Awareness For Emergency Response

https://arcg.is/aanH5
FEMA Mapping – ArcGIS Online

Just search for the “National Flood Hazard Layer”, then zoom in enough for the Flood Hazard Zones layer to render.
If You Just Have An ArcGIS Online Account...

Not “free”, but close. Just sign in at https://arcgis.com and start searching
Look At What’s Available Without Desktop Licensing…

As federal agencies and Esri increase collaboration, more resources coming online (radar, precipitation, traffic, etc.)
...And You Can Bring It Into Desktop Software, Too
National Water Model

Time enabled (animated, if you just click “Play”) forecast of every stream* in the country* (NHD Medium-Res)

In ArcGIS Online, just search “National Water Model”
You can also view the forecast “Anomalies” (above and below normal)

In “National Water Model” results, look for “Anomaly”
Stream Gauges

You can view the status of stream gauges without leaving your GIS application (desktop or browser).

The “More Info” link opens the NWS hydrograph page.
You may already know StreamStats (https://streamstats.usgs.gov/ss/)

Here you can delineate upstream watersheds and trace downstream flow paths
But you can do some of this in ArcGIS Online, too (no credits used, either)

→ Under any of your layers, click “Perform Analysis”, then expand “Find Locations” and see the “Create Watersheds” and “Trace Downstream” buttons

→ You can use existing points or draw new points to use on the fly
For general project coverage area questions ("Is it covered yet", "When will it be", "What grade will it be"): [https://coast.noaa.gov/inventory/](https://coast.noaa.gov/inventory/)

For actual data downloads:
- OKMaps (not fully up to date, but that may be changing..) [https://okmaps.org/ogi/search.aspx](https://okmaps.org/ogi/search.aspx)
- NRCS Data Gateway (good for pre-3DEP / 2-meter data, but with download limits making it likely you’ll need to draw an AOI): [https://datagateway.nrcs.usda.gov/GDGOrder.aspx?order=iMapOrder](https://datagateway.nrcs.usda.gov/GDGOrder.aspx?order=iMapOrder)
- But maybe best of all (especially into the future) is The National Map: [https://viewer.nationalmap.gov/basic/](https://viewer.nationalmap.gov/basic/)
- Current 3DEP status (1-meter), acquired and underway: (OK: Green = 3DEP current or planned; White = 2-meter)
Thank you.

Communities need trusted partners to safeguard today and build a stronger tomorrow — it’s why we exist.

Oklahoma City Office: **October 1**\textsuperscript{st}  
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Thank you.