GIS Resources for Environmental Groups

Geographic Information System

Computer based system for capturing, storing, analyzing, and displaying data related to geographic locations, allowing users to visualize and understand geographic patterns and relationships

➤ Planning - transportation, development, environmental

➤ Statistics – epidemiology, population density, business analytics

➤ Emergency response and disaster management

➤ Collecting data in the field – environmental, utilities

➤ Providing information and entertainment – virtual tours, service locators
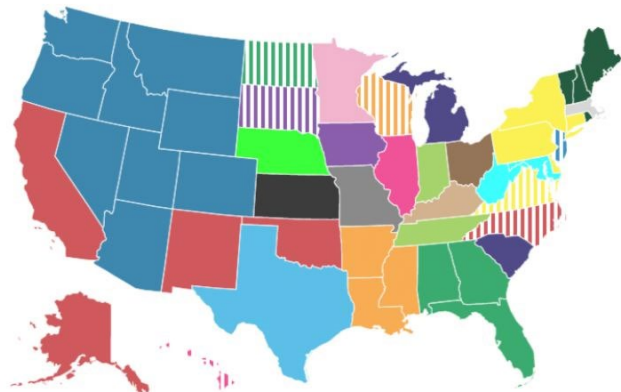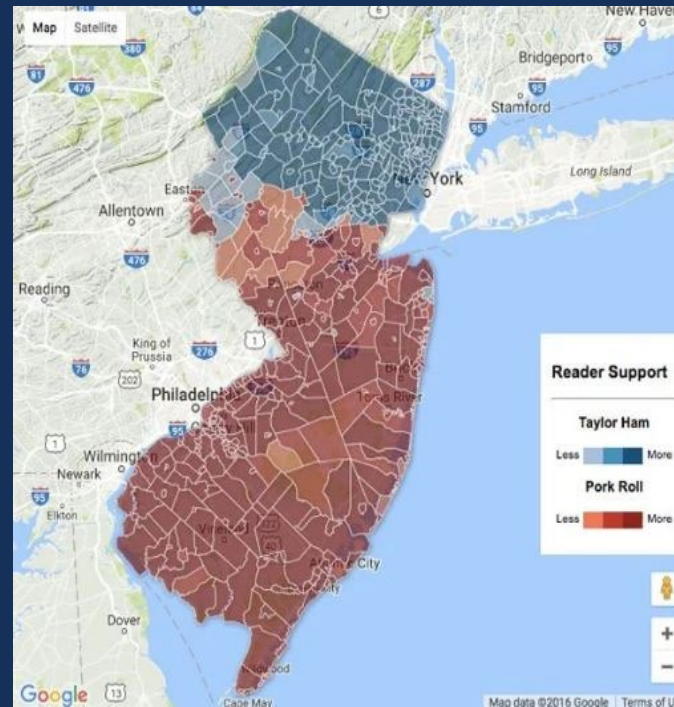
What is GIS and what do we use it for?

Cruisin' the **FIREBALL** Freeway
Sulpher - Monroe City, IN)
RiverEarth.com

What is GIS and what do we use it for?
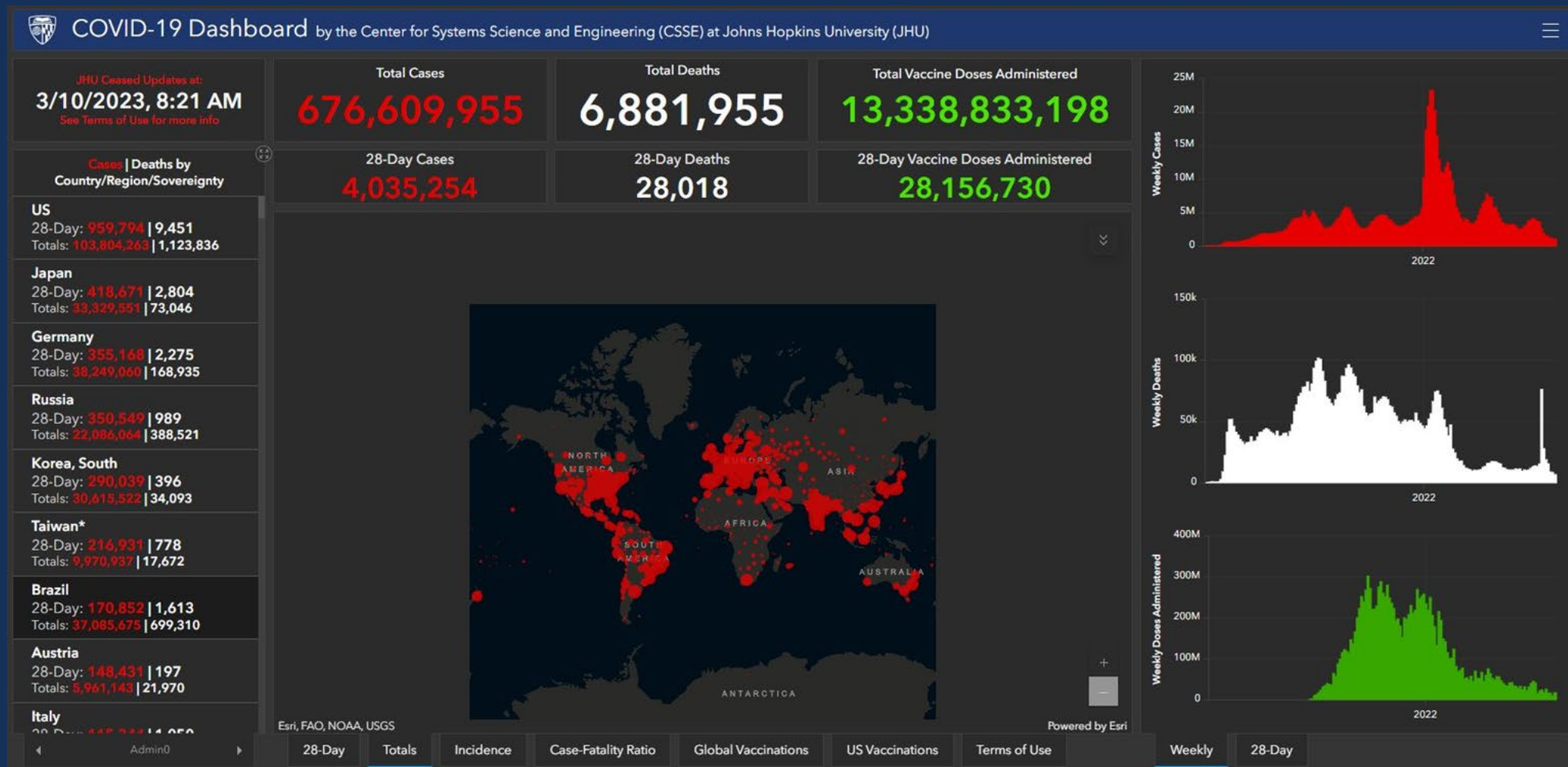

Source: WolfsToothDogFood on reddit

Source: NeilParkinsonMakes on reddit

What is GIS and what do we use it for?

Monmouth County GeoHub

Available to the public to explore the county's GIS data. Some services include:

- Property Viewer
- Self-Service Mapping Applications
- StoryMaps
- Open Data (GIS layers for download)
- Other Resources

Website:

https://data-monmouthnj.hub.arcgis.com/

Available to the public to explore the state's GIS data

NJDEP viewer website:

https://dep.nj.gov/gis/nj-geoweb/

NJDEP open data download website:

https://gisdata-njdep.opendata.arcgis.com/

NJ Geographic Information Network:

https://www.nj.gov/njgin/

Other Self-Service Web Applications Helpful for Environmental Work

- NJ MAP https://earth.rowan.edu/departments/geography/gis/geolab/njmap1.html

- FEMA National Flood Hazard Layer https://www.fema.gov/flood-maps/national-flood-hazard-layer

- NJ Flood Mapper https://www.njfloodmapper.org/

- Climate Central https://sealevel.climatecentral.org/maps/

- EPA NEPAssist https://nepassisttool.epa.gov/nepassist/nepamap.aspx

- USGS https://www.usgs.gov/programs/national-geospatial-program/topographic-maps

- USFWS https://ipac.ecosphere.fws.gov/

Monmouth County Tool for Environmental Groups-Environmental Planning Features Map

Some layers include:

- MOD-IV classifications (NJ Property Tax System) adjacent to streams and waterbodies

- Preserved open space

- Watersheds

- 2-foot contours

- Trails

- Wetlands

Website:

https://experience.arcgis.com/experience/3e45aed47ca14169a011ea5dfe6d9b26

Property Class Field (11) - three alpha-numeric characters: The class should be entered exactly as it is listed below. If it is less than three characters, leading zeros should <u>not</u> be used.

Each line item must carry one of the property class codes listed below.

For the classification of taxable real property, the following codes are applicable:

1	Vacant Land
2	Residential (four families or less)
3A	Farm (Regular)
3B	Farm (Qualified)
4A	Commercial
4B	Industrial
4C	Apartment

For the classification of railroad property, the following codes are applicable:

5A	Class I Railroad Property
5B	Class II Railroad Property

For the classification of tangible personal property of public utilities and oil refineries, the following codes are applicable:

6A	Personal Property Telephone
6B	Machinery, Apparatus or Equipment of Petroleum Refineries

For all Class 1 (Vacant Land) properties and Class 3B (Farmland-Qualified) properties, *land only is assessed*. Any farm buildings, such as silos, barns or other accessory farm buildings are assessed within the 3A classification in the improvement column.

For the classification of exempt property line items, the following codes are applicable:

15A	Public School Property
15B	Other School Property
15C	Public Property
15D	Church and Charitable Property
15E	Cemeteries and Graveyards
15F	Other Exempt properties not included in the above classifications

Class 15 properties will appear twice; once in the ratable section of the Tax List in block and lot order with the word "Exempt" in the net taxable value, and again in the exempt section of the Tax List.
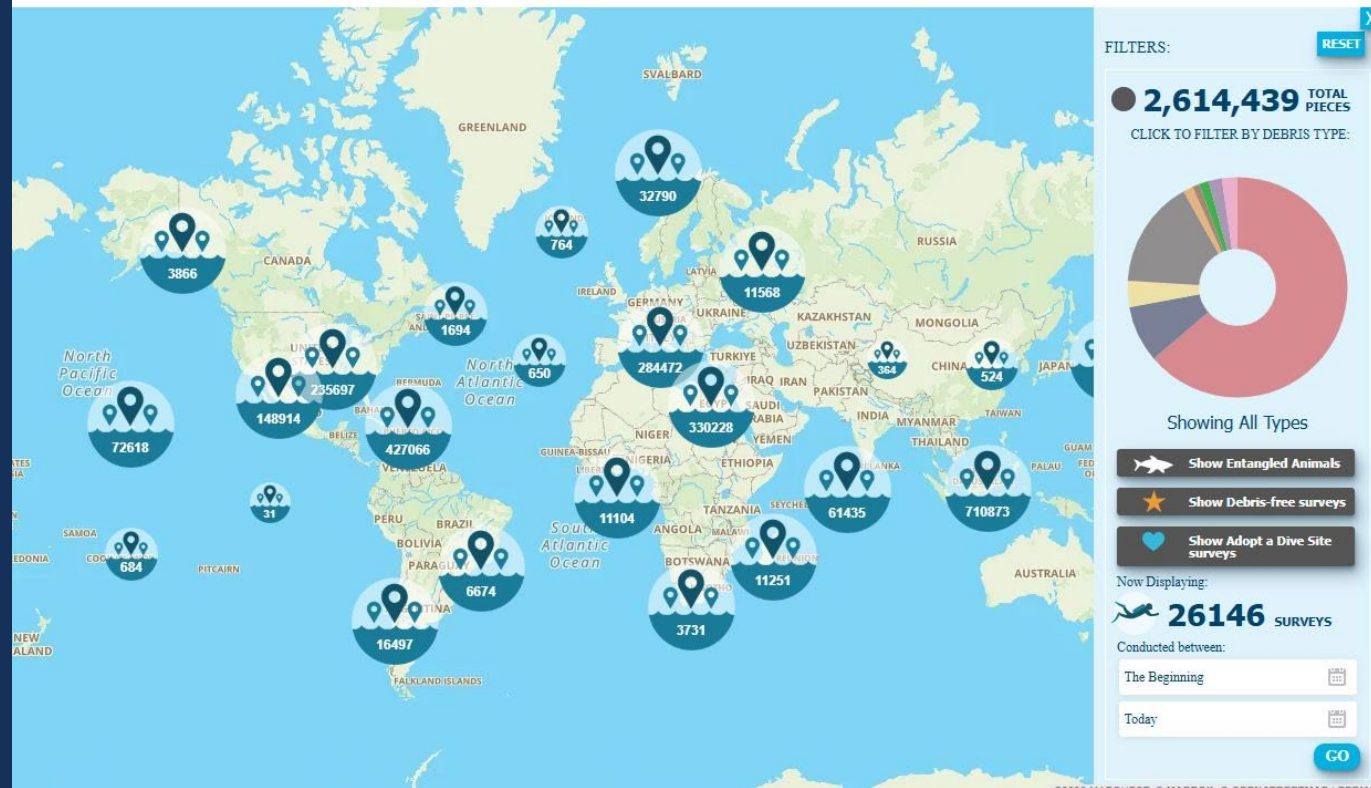
ESRI GIS Products and Other GIS Tools

- ESRI ArcGIS Online and ArcPro (desktop) https://www.esri.com/en-us/home
  - Free/"pay as you go" public accounts (more limited functions)
  - Low-cost accounts for personal and 501C3 use ($100)
  - Enterprise accounts (government or private for-profit organization)
    - StoryMaps, FieldMaps, Web Map and App builders, etc
- Google Maps
  - Accessible for everyone
- QGIS https://qgis.org/project/overview/
  - Crowd-sourced platform…free but there is a learning curve

Dive Against Debris Example

Dive Against Debris® Map

Dive Against Debris Example

Watershed StoryMap Example

https://arcg.is/mKruq0

Questions?

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