Individual Map Project at Hood College

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Background

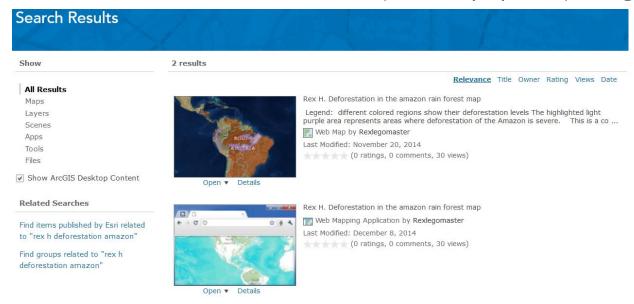
- ☐ Fall 2014: Intro to GIS Mapping with ArcGIS
 - □ Digital Cartography
 - □Scale, Projection, and Coordinate Systems
 - □Symbolization and Generalized Geometry and Content
 - ☐Global Positioning System
- ☐ ArcGIS only. Included Catalog and ArcGIS Online.
- ☐ Individual Map Project Final
- Spring 2015: Intro to GIS Analysis, Intro to Remote Sensing

Why Amazon?

- Deforestation in Amazon is well-publicized, but regions do not normally have resources to give us visuals. This puts the picture in people's minds, making it "more" real.
- ☐ People in Amazon preserve cultures, knowledge, and languages that will likely disappear without stronger efforts to protect the rain forest.
 - □Current efforts are a good start.
- In addition to being a carbon sink, the Amazon rain forest has biodiversity almost unrivaled in the rest of the world with numerous medicines, crops, and opportunities for eco-tourism that can benefit people who protect the rain forest and the rest of the world.
- Personal connection.

ArcGIS Online

- □ First a map layer showing deforestation in the Amazon Basin was added to the document by searching with ArcGIS Online. This shows country borders and names, deforestation percentage, forest condition, and area affected by deforestation.
- ☐ The name of the layer was "Rex H Deforestation in the Amazon Rain Forest Map". It is displayed on the WGS 1984 Web Mercator (Auxiliary Sphere) Geographic Coordinate System.



The latest data in the layer is from 2010. More recent maps with data on deforestation and forest conditions in the Amazon were not found.

Developing Layers: Forest Conditions



- ☐ To better show the information available, the layer was copied and pasted.
- In one copy, "Areas affected by deforestation, "Deforestation in the world", and "Deforestation in the world FOA" were turned off to better show the current conditions of Amazon forest in South and Central America.
- ☐ This layer's name was later changed to "Forest Conditions in Amazon".

Developing Layers: Deforestation in Amazon



Final Touches

- □ In both layers, the city names and locations where kept in order to show the effects of large cities in the Amazon on local forest degradation, at the risk of the map looking confusing with many names displayed.
- ☐ Extant Indicators were used and gave each map the same size.
- ☐ The final result is two maps, comparing deforestation levels with forest degradation in the Amazon Basin, both displaying large centers of human population.
- ☐ The final product was exported to Adobe, at a size of 7.5 inches wide and 11 inches tall.

Figure 1

Fig. 1. Large Cities and Forest Conditions in Amazon Rain Forest 2010



Figure 2

Fig. 2. Large Cities and Deforestation in Amazon Rain Forest 2010



Sources

Sources Used in Map Layers: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community, Esri, HERE, DeLorme, TomTom, MapmyIndia, © OpenStreetMap contributors, and the GIS user community