

## Creating a Regional GIS Project

Developing an Urban Ecosystem Analysis project for your region using ArcGIS is a giant first step in weaving nature and the human network together. Unfortunately, developing the project is rarely anybody's official responsibility. So if you can, take the initiative to develop the project yourself. Over the next few months American Forests hopes to formalize a system for sharing projects over the web.

Identifying the boundaries of a region is not an exact science but rather one that you need to determine. First identify a metropolitan area as the central feature of your project and establish regional boundaries around the natural features that encompass the metro area. What follows is an example of a project we created for the Mobile Bay region. We have included URLs links to find data.

Mobile Bay lies near the center of the Gulf Coast and Mobile is one of the most historic cities in the region. Mobile sits at the confluence of a robust estuary system that relies on the structure of the landcover for its functionality. The richness of those systems offers the city and region unique opportunities for the future of their economic and social development.



1. Here are some important questions to ask when defining your ecological region.

What watershed or watersheds is your metro area located in?

What is the extent of your watershed?

Source: USGS National Hydrography Dataset <http://nhd.usgs.gov/>



What are the major waterways?

Where are the wetlands and estuaries?

Source: USGS National Hydrography Dataset <http://nhd.usgs.gov/>



Where are the transportation networks?

How are they connected to nearby cities?

Source: TIGER line files

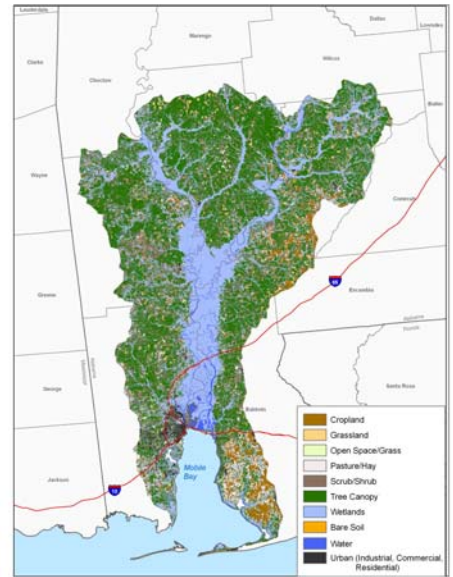
[http://arcdata.esri.com/data/tiger2000/tiger\\_download.cfm](http://arcdata.esri.com/data/tiger2000/tiger_download.cfm)



What is the land cover?

Source: USGS 2001 National Landcover Dataset

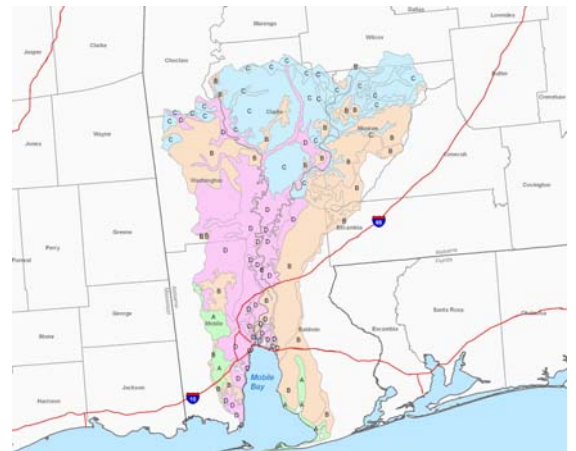
<http://seamless.usgs.gov/website/seamless/viewer.php>



What types of soils underlie the land cover?

Source: Hydrological Soil Groups - Natural Resource Conservation Service (NRCS)

<http://www.nrcs.usda.gov/products/datasets/statsgo/>



What is the topography?

USGS Seamless data distribution website to download data relating to topography (DEM) and landcover.  
<http://seamless.usgs.gov/>

What to do?

- Start a project
- Gather data for your region
- Collaborate with others in your region
- Create a single depository for data
- Set standards for sharing data

Please let us know if you develop a project for your region. Email: [gmoll@amfor.org](mailto:gmoll@amfor.org)