

Department of Forest Resources University of Minnesota
FNRM 3131 & 5131 GEOGRAPHICAL INFORMATION SYSTEMS FOR
NATURAL RESOURCES
Homework 1

Due as stated on the Moodle site.

Go to the Minnesota Geospatial Commons: <https://gisdata.mn.gov/>

Note: Make sure you do not use a browser (i.e. Chrome or Internet Explorer) while on the Citrix virtual desktop. Start you Chrome, Firefox, Internet Explorer directly from your computer. The browsers within the Citrix virtual desktop will not allow you to DOWNLOAD.

If you have any questions about this site please use the HELP, it is very good.

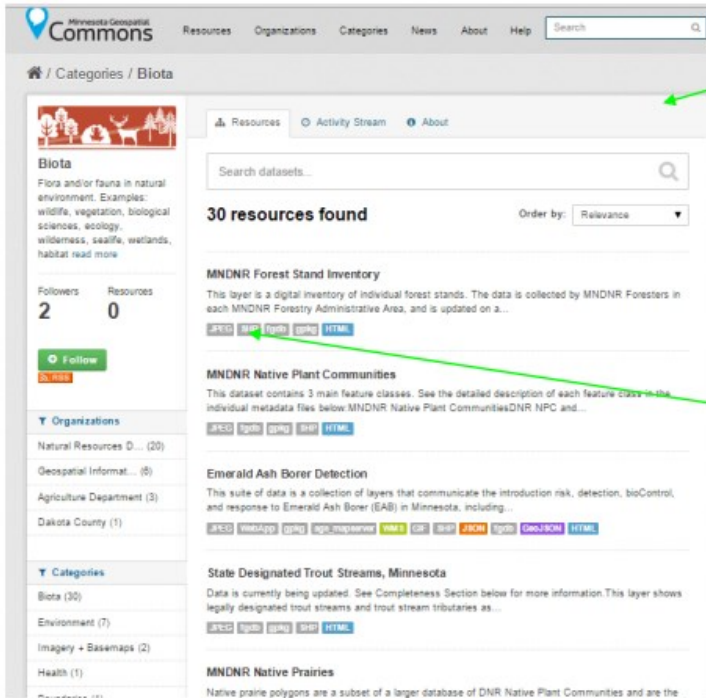
Select data layers that interests you.

Download and if necessary unzip at least 3 data layers for the same an area.

Create a .pdf displaying the 3 layers you chose in ArcGIS Pro (Create a new Map, set layer Properties to meters, add and display your three Data Layers, switch to Print Layout/Composer, add north arrow, legend, scale, title, your name and Export your map as a PDF, submit via the Canvas dropbox).

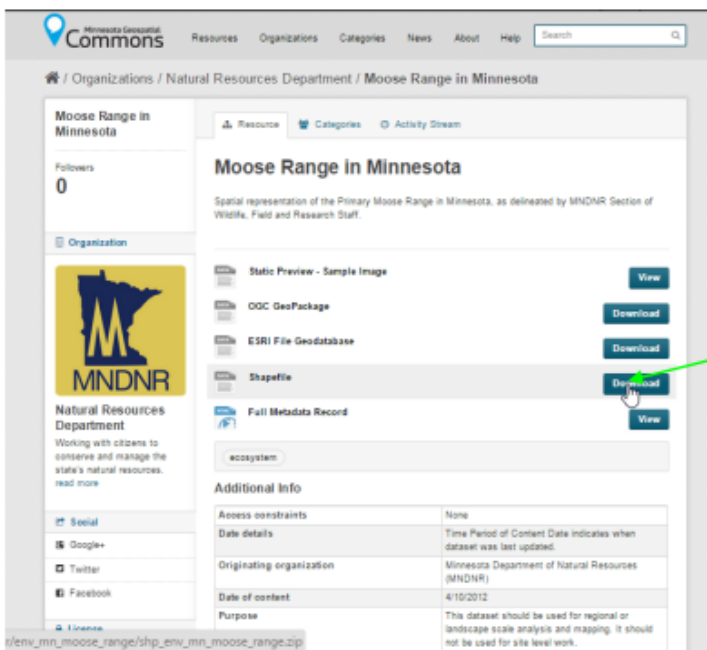
On the Internet go to <https://gisdata.mn.gov/>

The screenshot shows the homepage of the Minnesota Geospatial Commons. At the top left is the logo with the text "Minnesota Geospatial Commons". A navigation menu includes "Resources", "Organizations", "Categories", "News", "About", and "Help", along with a search bar. The main banner features the text "Working Together" and "The Geospatial Commons brings together data from public and private organizations". Below this is a search bar with the placeholder text "Search For Resources" and "eg. Water, Counties, Environment, etc...". The "Categories" section is highlighted with a green box and a callout that says "Select the a catagory". The categories shown are "Biota", "Boundaries", "Environment", "Climatology, Meteorology, and Atmosphere", and "Economy". Below the categories are sections for "News" and "Featured organizations", with the latter featuring logos for MNDNR and the Minnesota Department of Transportation.



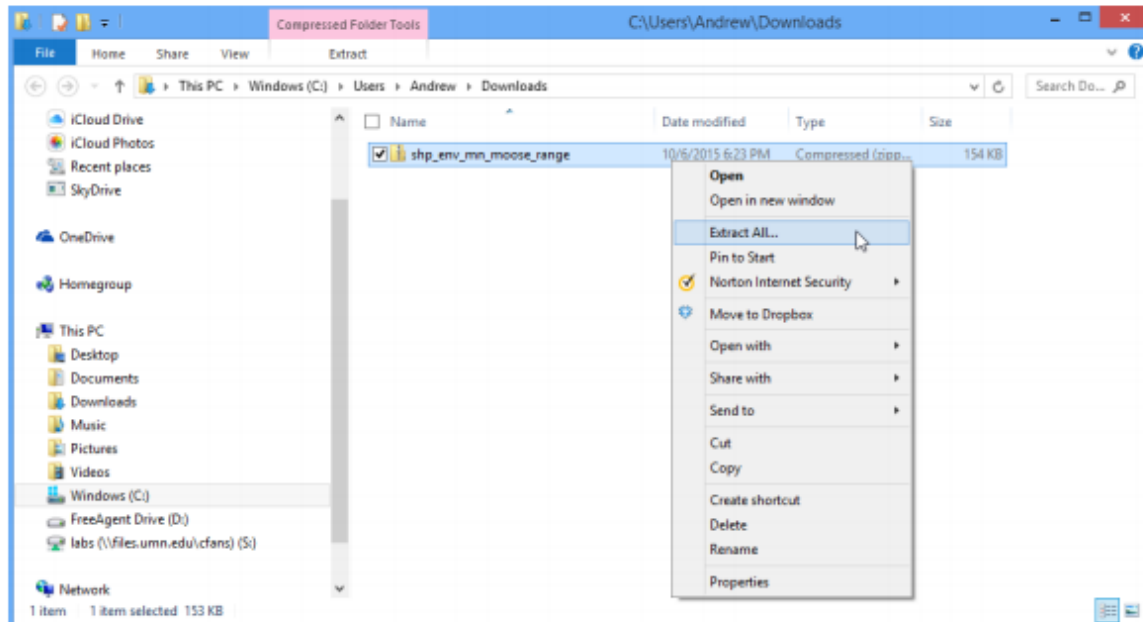
This is what you see next.

1st select a "Available Layer", this is the data you want to download.



You select a data layer and click in the title and it will bring up a detail screen where you can download the SHAPEFILE

Once the file is downloaded, use Windows Explorer to find the file and click on the .zip file and “uncompress” the data; right click and select “Extract All”.



The data should be ready to open in ArcMap. Repeat this process for all 3 (or more) of the data layers you want to use for the Homework 1 assignment. All the MN GeoCommons data is in UTM 15, NAD83 but sometimes they do not have the projection information included with the data. You should check to see if all your layers have a Projection (NAD_1983_UTM_Zone_15N). If not, use ArcToolbox >Data Management Tools>Projections and Transformations>Define Projection to create the necessary projection file. DO NOT REPROJECT the data, it is already projected correctly, it is just missing the definition file.

Finally

In ArcMap create a one map with all three layers or three separate maps. Make sure to add Title, north arrow, legend, scale and your name. Export Map to a .pdf or Print the Map to a .pdf and submit on Moodle.

