

# Useful Internet Sites for GIS and Water Resources

## Data for the United States

### The National Map

A central source for US Government data. This is a very large compendium of data sources and also information about data. <http://nationalmap.gov/>. Downloads seem to not work in Firefox.

### Hydrologic Unit Maps (HUC)

Description <http://water.usgs.gov/GIS/huc.html>. The 8-digit hydrologic cataloging units are the basic water resources subdivision of the United States

Watershed Boundary Dataset (12 digit HUCs for the US)

<http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/water/watersheds/dataset/>

### Hydrography

National Hydrography Dataset (NHD) <http://nhd.usgs.gov>. Get the data

<http://nhd.usgs.gov/data.html>

NHDPlus <http://www.horizon-systems.com/nhdplus/> A dataset that integrates the National Hydrography, Elevation, and Land Cover Datasets.

National Weather Service Rivers of the U.S.

<http://www.weather.gov/geodata/catalog/hydro/html/rivers.htm>. Shapefiles of Rivers of the U.S. and low and high degrees of detail. Not as precise or as annotated as NHD/NHDPlus. Only recommended for generalized mapping.

### Elevation Data

National elevation dataset <http://ned.usgs.gov>

George Mason University DEM Explorer <http://ws.csiss.gmu.edu/DEMExplorer/>

Open Topography high resolution LIDAR data <http://www.opentopography.org/>

USGS Earth Explorer <http://earthexplorer.usgs.gov/> LIDAR, DEM, Aerial imagery and more

### Global Coastline from National Geophysical Data Center

<http://www.ngdc.noaa.gov/mgg/shorelines/gshhs.html>

### USDA NRCS Soils Data

Soils Portal <http://www.nrcs.usda.gov/wps/portal/nrcs/site/soils/home/>

Web Soil Survey <http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>

STATSGO2 – Nationwide State Soil Database (1:250,000 scale) and SSURGO County Soil Database. STATSGO2 is available for the whole United States. SSURGO is much more detailed but is not available everywhere. For an exercise on how to interpret STATSGO, see: <http://www.ce.utexas.edu/prof/maidment/giswr98/statland/webfiles/viewstat.htm>

USDA Data Gateway <http://datagateway.nrcs.usda.gov/>

### Land Use/Land Cover Data

National Land Cover Institute <http://landcover.usgs.gov/>

Land Cover Change 1992 to 2001 <http://www.mrlc.gov/nlcdrlc.php> Exercise on

analyzing Land Cover Change

[http://www.ce.utexas.edu/prof/maidment/giswr2007/Land\\_Change/LandChange.mht](http://www.ce.utexas.edu/prof/maidment/giswr2007/Land_Change/LandChange.mht) National Wetlands Inventory Center <http://www.fws.gov/wetlands/>

**Water Resources Maps and GIS Information** <http://water.usgs.gov/maps.html>. This site is a listing data sources with map data from the USGS or organizations connected with the USGS.

### **Climate and weather**

Climate.gov maps: <http://www.climate.gov/maps-data>

National Climate Data Center <http://www.ncdc.noaa.gov/>

NCDC Climate Data Online <http://cdo.ncdc.noaa.gov>

PRISM Climate Group Oregon State University <http://prism.oregonstate.edu/>

DayMET <http://daymet.ornl.gov/> Gridded daily precipitation and temperature on a 1 km grid.

Nexrad radar data (including precipitation)

<http://www.ncdc.noaa.gov/oa/radar/radardata.html> (May require NOAAWeather and climate toolkit and online ordering)

University of Washington gridded meteorological data

<http://www.hydro.washington.edu/SurfaceWaterGroup/Data/gridded/index.html>

NRCS National Water and Climate Center <http://www.wcc.nrcs.usda.gov/> that includes water supply forecasts, snow, precipitation and temperature.

SNOTEL <http://www.wcc.nrcs.usda.gov/snotel/> real time snow data

US Drought Portal <http://www.drought.gov/>

### **Water Resources**

USGS National Water Information System <http://water.usgs.gov/usa/nwis/>

Real Time USGS Data on Water Watch <http://water.usgs.gov/nwis/rt>

CUAHSI Water Data Center <https://wdc.cuahsi.org/>

WaterOneFlow web services for water data [http://hiscentral.cuahsi.org/pub\\_services.aspx](http://hiscentral.cuahsi.org/pub_services.aspx)

National Weather Service Advanced Hydrologic Prediction Service  
<http://water.weather.gov/ahps>

### **Environment**

EnviroAtlas: <http://enviroatlas.epa.gov/enviroatlas/>

### **Satellite**

Free Landsat Scenes <http://glovis.usgs.gov>.

NASA Land Processes DAAC <https://lpdaac.usgs.gov/>

### **Global Data**

Natural Earth Data <http://www.naturalearthdata.com/>

Shuttle Radar Topography Mission (SRTM) <http://srtm.usgs.gov/>

HydroSheds – hydrologic derivative datasets from SRTM <http://hydrosheds.cr.usgs.gov/>

GTOPO30 - 30 arc-second cell (1:1,000,000 scale) global DEM

<https://lta.cr.usgs.gov/GTOPO30>

Hydro1K – hydrologic derivative datasets from GTOPO30

<https://lta.cr.usgs.gov/HYDRO1K>

Global Water and Energy Experiment (GEWEX) <http://www.gewex.org/>

Global Runoff Data Centre <http://grdc.bafg.de/servlet/is/1890/>

ArcGIS.com <http://www.arcgis.com>

## **Texas Data**

Texas Natural Resource Information System <http://www.tnris.org/>

<http://www.tnris.state.tx.us/>

Texas Water Development Board GIS Data

<http://www.twdb.state.tx.us/mapping/gisdata.asp>

## **Utah Data**

Utah GIS Portal <http://gis.utah.gov/> contains USGS Maps, DEM's, Orthophoto quads within Utah. Also includes if you look hard enough, liquefaction potential, Hydrography and Environmental data for certain locations. Also – 2 m resolution bare earth LIDAR data for Wasatch front.

Utah Geological Survey <http://geology.utah.gov/maps/gis/index.htm>

Western Regional Climate Center <http://www.wrcc.dri.edu/>

Bear River Watershed Information System. <http://www.bearriverinfo.org/>

Great Salt Lake Information System. <http://greatsaltlakeinfo.org/>

Utah Climate Center. <http://climate.usurf.usu.edu/>

Colorado Basin River Forecast Center. <http://www.cbrfc.noaa.gov>

## **North Carolina Data**

NC One Map: <http://www.nconemap.com/>

NC Floodmaps.com <http://www.ncfloodmaps.com/>

## **ESRI Data Services**

These must be used in ArcGIS

<http://landscape1.arcgis.com/arcgis/services/> USA vector data

<http://landscape2.arcgis.com/arcgis/services/> USA raster data

<http://landscape3.arcgis.com/arcgis/services/> USA raster and elevation data

<http://elevation.arcgis.com/arcgis/services/> USA elevation data

<http://hydro.arcgis.com/arcgis/services> Watershed delineation services