

# Useful Internet Sites for GIS and Water Resources

## Data for the United States

### Hydrologic Unit Maps (HUC)

Description <http://water.usgs.gov/GIS/huc.html>

Get the data <http://water.usgs.gov/lookup/getspatial?huc250k>

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/>

### National Hydrography Dataset (NHD)

Description <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.

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

### Elevation Data

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 Soils Data

STATSGO2 – Nationwide State Soil Database (1:250,000 scale) and SSURGO County Soil Database <http://www.soils.usda.gov/>

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/>

National Atlas of the United States <http://www.nationalatlas.gov>

National Atlas Raw Data Download <http://www.nationalatlas.gov/atlasftp.html>

## **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/>

**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**

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>

Description of how to use Climate Data Online:

<http://www.ce.utexas.edu/prof/maidment/gradhydro2005/docs/ncdcdata.doc>

USDA Water and Climate Center (PRISM maps of mean precipitation)

<http://www.wcc.nrcs.usda.gov/climate/prism.html>

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

For an exercise using PRISM and land cover data to estimate nonpoint source pollution, see: <http://www.ce.utexas.edu/prof/maidment/giswr2005/ex6/ex6.doc>

National Center for Atmospheric Research DayMET <http://daymet.org/>

Gridded daily precipitation and temperature on a 1 km grid, 1980-2011.

Nexrad stage III precipitation data

<http://dipper.nws.noaa.gov/hdsb/data/nexrad/nexrad.html> and procedures for using it.

No more recent than 2005 and rather awkward to use.

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 Hydrologic Information System <http://his.cuahsi.org>

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

## **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.state.tx.us/>  
Texas Water Development Board GIS Data  
<http://www.twdb.state.tx.us/mapping/gisdata.asp>  
TNRIS Data <http://www.tnris.state.tx.us/datadownload/download.jsp>

## **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>