

Useful Internet Sites for GIS and Water Resources

Data for the United States

Geospatial One Stop <http://www.geodata.gov/>

A central source for US Government data. This is a very large compendium of data sources and also information about data.

The National Map

General source for USGS map products <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.

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.ncgc.nrcs.usda.gov/products/datasets/watershed/>

EPA Reach File 1 (RF1), Version 2.0

Description http://water.usgs.gov/GIS/metadata/usgswrd/XML/erf1_2.xml

Get the data http://water.usgs.gov/GIS/dsdl/erf1_2.e00.gz It used to be that you could get RF1 for each 2-digit water resources region of the nation separately, but it appears that is no longer the case, and this file contains RF1 for the whole nation.

EPA Basins Model

Description <http://www.epa.gov/OST/BASINS/>

Get the data <http://www.epa.gov/waterscience/basins/b3webdwn.htm>

Contains a large inventory of environmental data organized by 8-digit hydrologic cataloging units

National Hydrography Dataset (NHD)

Description <http://nhd.usgs.gov>

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

NHD in Geodatabase http://nhd.usgs.gov/geodatabase_review.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>

USGS Seamless Data Warehouse

USGS National Elevation Dataset DEM, Orthoimagery and Land Cover data from EROS Data Center <http://seamless.usgs.gov/>

US Coastline from National Geophysical Data Center

Coastline Extractor <http://www.ngdc.noaa.gov/mgg/coast/>

USDA Soils Data

Statsgo – State Soil Database (1:250,000 scale)

<http://www.soils.usda.gov/survey/geography/statsgo/>

Ssurgo – County Soil Database <http://www.soils.usda.gov/survey/geography/ssurgo/>

Statsgo 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 data on the seamless server <http://seamless.usgs.gov/>

Land Cover Change 1992 to 2001 <http://www.mrlc.gov/>

Exercise on analyzing Land Cover Change

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>

Climate

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://www.daymet.org/>

Gridded daily precipitation and temperature on a 1 km grid, 1980—1997.

Nexrad stage III precipitation data

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

(<http://dipper.nws.noaa.gov/hdsb/data/nexrad/nexrad.html>). (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

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

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
http://eros.usgs.gov/#/Find_Data/Products_and_Data_Available/GTOPO30
Hydro1K – hydrologic derivative datasets from GTOPO30
http://eros.usgs.gov/#/Find_Data/Products_and_Data_Available/gtopo30/hydro
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>

Nebraska Data

Nebraska Data Bank Spatial/GIS Databases <http://www.dnr.ne.gov/databank/spat.html>
Nebraska View (Center for Advanced Land Management Information Technologies)
<http://nebraskaview.unl.edu/neview02.php>
Nebraska School of Natural Resources Statewide Digital Databases for
Geography/GIScience <http://snr.unl.edu/data/geographygis/index-geographygis.asp>
National Drought Mitigation Center Drought Monitor <http://droughtmonitor.unl.edu/>
High Plains Regional Climate Center <http://www.hprcc.unl.edu/index.php>
