

# Useful Internet Sites for GIS and Water Resources

## Data for the United States

### The National Map

A central source for US Government data. <http://nationalmap.gov/>. This includes elevation, hydrography, land cover, orthoimagery, watershed boundaries and topographic maps of use for GIS in Water Resources, among much other content.

### Watershed Boundaries (Hydrologic Units)

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

Information on Watershed Boundary Dataset (2 to 12 digit HUCs for the US)

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

National Flood Interoperability Experiment: NFIE-Geo in HydroShare

<https://www.hydroshare.org/resource/31f35199a2e548e29786182fbb3e2941/>

### Hydrography

National Hydrography Dataset (NHD). National Map Hydrography viewer

<http://viewer.nationalmap.gov/viewer/nhd.html?p=nhd>

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://nationalmap.gov/elevation.html>

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

USGS Earth Explorer <http://earthexplorer.usgs.gov/> A variety of USGS data holdings including ASTER Global DEM, GTOPO30, Coastal National Elevation Database (CoNED)

### 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>

There are two primary soil data sources in the US

- SSURGO State and County Data. Specify an area of interest then access data for area of interest in Web Soil Survey
- STATSGO2 (US General Soil Map at 1:250,000 scale). Download by State in Web Soil Survey

STATSGO2 is available for the whole United States. SSURGO is much more detailed but is not available everywhere.

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

## **Land Use/Land Cover Data**

National Land Cover Dataset. <http://viewer.nationalmap.gov/viewer/> and Multi-Resolution Land Characteristics Consortium (MRLC). <http://www.mrlc.gov/>  
National Land Cover Institute <http://landcover.usgs.gov/>  
Land Cover Change 1992 to 2001 <http://www.mrlc.gov/nlcdrlc.php>  
Land Cover Change 2001 to 2006 to 2011 [http://www.mrlc.gov/nlcd11\\_data.php](http://www.mrlc.gov/nlcd11_data.php)  
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>  
USDA Agricultural Applied Climate Information System  
<http://www.wcc.nrcs.usda.gov/climate/index.html>  
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>  
[UW Hydro | Computational Hydrology Data http://uw-hydro.github.io/data/](http://uw-hydro.github.io/data/)  
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/> and HydroClient at  
<http://data.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>  
National Water Model <http://water.noaa.gov/about/nwm>. <http://water.noaa.gov/tools/nwm-image-viewer>  
HydroShare National Water Model Apps <http://apps.hydroshare.org>

## **Environment**

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

## Satellite

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

USGS Earth Explorer <http://earthexplorer.usgs.gov/>

NASA EarthData <https://earthdata.nasa.gov>

NASA Worldview (includes MODIS) <https://worldview.earthdata.nasa.gov/>

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

## Global Data

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

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.texas.gov/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/>

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

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

## ESRI Data Services

These must be used in ArcGIS as GIS services and are not directly accessible through a web browser.

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