

Websites are constantly being created and updated. Please let us know if you find something that is out of date, changed, or should be included – thanks! Contact info is on the REA website (<https://spp.blm.gov/programs/rea/using-reas>).

We recommend that users of these datasets read through the websites and metadata to fully understand how the data were collected and produced, and any limitations of the data.

The data listed here come from a variety of sources, including BLM, other agencies, and non-governmental organizations. We highlight BLM's landscape-scale data -- just look for the BLM logo.

We describe and link to data in the following sections:

- [Aerial Photographs and Satellite Imagery](#)
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Aerial Photographs and Satellite Imagery

[NAIP](#) is aerial imagery collected by the USDA during the agricultural growing seasons in the continental U.S. [Download NAIP data from the USDA Geospatial Data Gateway](#).

[Landsat](#) represents the world's longest continuously acquired collection of space-based moderate-resolution land remote sensing data. You can [download both NAIP and Landsat imagery using The National Map Viewer](#).

Esri's [Imagery with Labels](#) map service is a conglomeration of products from various aerial and satellite imagery providers that can be added as a base map to any ArcGIS map document or service.

[USGS Long Term Archive](#) has a very large collection of satellite and aerial imagery.



BLM compiles collections of aerial photos to support its land management activities. They are managed through the: **BLM's Aerial Photography Spatial Index (APSI)** –Geospatial database of the BLM's national aerial photography collection. BLM's National Aerial Photography Collection contains approximately 826,000 frames of original large-format (9 x 9 inch) imagery that have been purchased in support of land management activities since the 1940s.

Air Quality

The [U.S. EPA Air Science](#) personnel "conduct air research to protect human health and the environment in support of the Clean Air Act and [National Ambient Air Quality Standards](#)(NAAQS)." The EPA develops the [National-Scale Air Toxic Assessment](#) (NATA), which is a "comprehensive evaluation of air toxics in the U.S." that can be "used to focus on geographic patterns and ranges of risks across the country."

The [National Atmospheric Deposition Program](#) (NADP) provides spatial data for:

- Precipitation Chemistry (NTN, National Trends Network)
- Mercury Deposition (MDN, Mercury Deposition Network).

[Atmospheric spatial data can be downloaded](#) annually in Grid or KMZ format. Static PDF maps can also be downloaded.

The NADP also provides non-spatial data for:

- AIRMoN (Atmospheric Integrated Research Monitoring Network)
- AMNet (Atmospheric Mercury Network) – Data available by request for a minimal cost
- AMON (Ammonia Monitoring Network).

A variety of static maps and non-spatial data related to air quality are also available via the following resources:

- [AirData](#) (EPA)
- [Clean Air Status and Trends Network \(CASTNET\)](#) (EPA).



Several of the BLM's Rapid Ecoregional Assessments (REAs) analyzed air quality and the resulting data sets are available for download on the [Landscape Approach Data Portal](#).

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Biophysical and Geopolitical Boundaries

[TIGER](#) (Topologically Integrated Geographic Encoding and Referencing) products include political boundary data such as national, state, county, and tribal boundaries, cities, and urban areas. These features are extracted from the Census Bureau's MAF/TIGER database. The data available for download are national and for multiple years:

- [TIGER/Line Shapefiles and TIGER Geodatabases](#)
- [Small-scale Cartographic Boundary Shapefiles](#).

The [National Boundary Dataset \(NBD\)](#) represents a collection of boundary data sets such as towns, cities, states, counties, Federal, and Native American lands, and can be downloaded from or viewed in the [National Map Viewer](#).

The [Public Land Survey System \(PLSS\)](#) data layer subdivides land in the U.S. into 6-mile square townships containing 36 one-mile-square sections (BLM). [PLSS data are available for download by state](#).

The [Protected Areas Database](#) (PAD-US) "illustrates and describes public land ownership, management and conservation lands nationally, including voluntarily provided privately protected areas." The PAD-US data are provided by and can be downloaded from the [USGS Gap Analysis Program \(GAP\)](#).

Biophysical ecoregion boundary datasets are provided by a couple of agencies:

[USDA Forest Service Ecoregions](#): Robert G. Bailey ([Publication](#)) identified and compiled the USDA Forest Service ecoregion boundaries for the four areas listed below. The ecoregion boundaries for these areas can be downloaded via the links under the [Download Map](#) section of the USDA Forest Service Ecoregions Maps and Posters webpage.

- Ecoregions of the U.S.
- Ecoregions of North America
- Ecoregions of the Continents
- Marine Ecoregions

[EPA Ecoregions \(Western Ecology Division\)](#): J.M. Omernik ([Publication](#)) identified and compiled EPA ecoregion boundaries for the ten EPA regions. Click on the region of interest to download [maps and GIS data](#).



The BLM publishes several boundary data sets for BLM lands which can be downloaded from the [Landscape Approach Data Portal National Data Page](#):

- **BLM National Administration Units** – Shows BLM state, district, and field unit boundaries and offices locations.
- **Surface Management Areas (SMA)** – Depicts Federal land for the U.S., classified by its active Federal surface managing agency.
- **National Land scape Conservation System (NLCS)** – Some of the BLM's premier designations.
- **Areas of Critical Environmental Concern (ACEC)** – Designated areas that need special attention for environmental degradation.
- **BLM Land Use Planning Areas (LUPA)**.

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Climate

[WorldClim - Global Climate Data](#) provides access to current, future, and past world-wide climate data (Museum of Vertebrate Zoology).

[PRISM Climate Group](#) (Parameter-elevation Regressions on Independent Slopes Model) provides spatial data to "reveal short- and long-term climate patterns...covering the period from 1895 to the present" (Oregon State University). Data can be downloaded for the following categories: Normals, This Month, Prior 6 months, Recent Years, and Historical Past.

[Climate Change Scenarios](#) GIS data is provided by the National Center for Atmospheric Research (NCAR), but you must be registered to download data and more advanced GIS experience is required to join the non-spatial data with the spatial data for use in ArcMap.

Some other resources for climate data are:

- [Climate Data Online](#) (NOAA)
- [Climate Hubs Tool Shed](#) (USDA) – Check "Climate"
- [Drought Tools](#) (USDA)
- [USGS Geo Data Portal](#).



All of the BLM's Rapid Ecoregional Assessments (REAs) analyzed and compiled climate data and the resulting data sets are available for download on the [Landscape Approach Data Portal](#).

Development and Infrastructure

[TIGER](#) products include transportation data, such as roads and railroads, and urban areas which are "spatial extracts from the Census Bureau's MAF/TIGER database." These data available for download are national and for multiple years:

- [TIGER/Line Shapefiles - New 2016 Shapefiles](#)
- [TIGER/Line Geodatabases](#)
- [TIGER/Line with Selected Demographic and Economic Data](#)
- [Cartographic Boundary Shapefiles](#)
- [KML - Cartographic Boundary Files](#)
- [TIGERweb](#)

The [USGS Human Footprint in the West](#) project ([Publication](#)) has developed a model that "focuses on shrubland ecosystems and combines models of habitat used by synanthropic predators ("top-down" effects) and the risk of invasive plant presence ("bottom-up" effects) to estimate the total influence of human activity.

The [USGS Multiscale Index of Landscape Intactness](#) quantifies the cumulative impacts of land use. The multiscale index of landscape intactness represents a gradient of anthropogenic influence as represented by development levels at two analysis scales

Another resource for spatial data related to transportation is the [U.S. DOT Bureau of Transportation Statistics](#), which has made road, railroad, and a variety of other transportation related spatial data available via the National Transportation Atlas Database (NTAD).

Esri's [World Transportation](#) map represents highways, roads, railroads and airports for the entire world. It can be added as a base map to any ArcGIS map document or service.

The [USGS Mineral Resources Program](#) has oil and gas spatial data available for download by geographic areas via the USGS Mineral Resource Data System (MRDS).

The [U.S. FWS Ecological Services](#) has wind turbine location data available for downloaded via the U.S. FWS FAA Wind Turbine Location Data Downloads.

Data related to renewable energy potential is available via a couple of resources:

- [National Renewable Energy Laboratory](#) (NREL)

- [Global Energy Network Institute \(GENI\)](#). [Download from the GIS Library](#)



All of the BLM's Rapid Ecoregional Assessments (REAs) analyzed and compiled development and infrastructure data and the resulting data sets are available for download on the [Landscape Approach Data Portal](#).

The BLM is working on some landscape-level planning efforts related to development and infrastructure:

- **Ground Transportation Linear Feature (GTLF)** – "GTLF data not only serve the crucial function of improving BLM transportation planning, but it is also invaluable to numerous other BLM programs affected by transportation." The public BLM [GTLF map service](#) displays the "ground transportation linear features as part of the recreational web mapping project."
- [Desert Renewable Energy Conservation Plan \(DRECP\)](#) –The DRECP is a planning effort that covers more than 22 million acres in the California desert. The plan is a collaboration between the BLM, U.S. FWS, California Energy Commission, and California Department of Fish and Wildlife. Data related to this effort is available via the [DRECP Gateway](#).

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Fire

The [Monitoring Trends in Burn Severity \(MTBS\)](#) project maps burn severity and fire perimeters across the U.S. from 1984 to the present (USGS, USDA Forest Service). You can [download data](#) or [view map services](#).

[GeoMAC](#) (Geospatial Multi-Agency Coordination) tool "gives fire managers near real-time information, fire perimeter data" and is updated daily (USGS). You can view fire data in the [GeoMAC Viewer](#) or download fire perimeters from the GeoMAC FTP site.

[LANDFIRE](#) (Landscape Fire and Resource Management Planning Tools) (USDA Forest Service and DOI) provides "vegetation and wildland fire/fuels information for strategic fire and resource management planning and analysis" including:

- [Fuel Data](#) for predicting fire conditions.
- [Fire Regime Data](#) for predicting fire frequency and severity.

The USDA Forest Service also provides:

- [Wildland Urban Interface](#) – Depicts areas across the U.S. with human-environment conflicts such as wildland fire.
- [Wildfire Hazard Potential](#) – "Can help to inform evaluations of wildfire risk or prioritization of fuels management needs across very large landscapes."

The National Fire Plan Operations & Reporting System (NFPORS) "is used by the five federal wildfire agencies to track Hazardous Fuels Reduction (HFR) and Burned Area Rehabilitation (BAR) treatment projects." (This website has disappeared as of Sept 2017).

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Land Cover/Land Use (see also Vegetation)

The Multi-Resolution Land Characteristics Consortium (MRLC) produces the National Land Cover Database (NLCD). The [NLCD](#) is based on 30m Landsat imagery and provides a temporal collection of spatial data for the different types of analysis listed below. All but the Shrubland Cover data are available for various years of NLCD data.. ▼ [Download](#)

- Land Cover
- Land Cover Change
- Percent Developed Impervious
- Percent Developed Impervious Change
- Tree Canopy
- Shrubland Cover

[Terrestrial Ecological Systems of the U.S.](#) is a standardized classification of terrestrial ecosystems and vegetation (NatureServe'). This dataset is the basis for a couple of other land cover datasets:

- [GAP Land Cover Data](#) (Gap Analysis Program, USGS) –Vegetation and land use patterns for the continental U.S., with a focus on habitat identification.
- [EVT](#) (Existing Vegetation Type) (LANDFIRE; USFS and DOI) – Complexes of plant communities, representing the species composition present at a given site.

In addition to the Existing Vegetation Type data, [LANDFIRE](#) produces a variety of other datasets related to land cover:

- Existing Vegetation Cover
- Existing Vegetation Height
- Biophysical Settings
- Environmental Site Potential
- Vegetation Disturbance

The [Cropland Data Layer](#) (CDL) depicts agricultural land cover over the continental U.S. Multiple years of this data is available for download via the USDA National Agricultural Statistics Service (NASS).

The USGS [Land Cover Institute](#) (LCI) also provides links to a variety of resources for land cover data for North America, the United States, and other countries.



BLM publishes [national land use](#) data related to grazing, which is available online at the BLM [Landscape Approach Data Portal](#) or [BLM Navigator Site](#):

- **BLM National Grazing Allotments** – Land designated and managed for grazing of livestock. It may include private, state, and public lands under the jurisdiction of the BLM and/or other federal agencies.
- **BLM National Grazing Pastures** – An allotment is derived from its pastures, where the grazing of livestock is occurring.
- **Wild Horse and Burro Herd Areas** – areas designated in 1971 as the result of wild horses and/or burros being found during initial flights of them that same year.
- **Wild Horse and Burro Herd Areas Management Areas** – Congressionally-designated areas of land to which specific laws and regulations pertaining to the management of wild horses and burros.

Did you know...?

- BLM produces the [NLCD Shrubland](#) data set in conjunction with USGS. The BLM National Operations Center (NOC) analyzes Landsat imagery to improve shrubland classification.
- BLM contributes vegetation data to the LANDFIRE project to help improve its accuracy.

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National Management – BLM



Databases exist that hold national land management data; online interfaces allow for advanced queries.

- [Land Treatment Digital Library \(LTDL\)](#) catalogs information about land treatments on all federal lands in the Western US. Approved users can query and access data, view maps, open documents, and download data.
- [Surface Disturbance Analysis and Reclamation Tracking Tool \(SDARTT\)](#) is a national inventory for disturbance and reclamation data that requires a BLM permit. Data can be queried, mapped, and analyzed; approved users can upload and edit data.

Soils

The [USDA Natural Resource Conservation Service](#) (NRCS) is the provider of the [Web Soil Survey](#) (WSS), which is the "largest natural resource information system in the world":

- SSURGO "contains information about soil as collected by the National Cooperative Soil Survey over the course of a century...The information was gathered by walking over the land and observing the soil. Many soil samples were analyzed in laboratories."
- [Gridded SSURGO](#) (gSSURGO) is similar to the standard USDA-NRCS Soil Survey Geographic (SSURGO) Database product but in the format of a ESRI® file geodatabase. A file geodatabase has the capacity to store much more data and thus greater spatial extents than the traditional SSURGO product.
- STATSGO is a "broad-based inventory of soils and non-soil areas that occur in a repeatable pattern on the landscape...The level of mapping is designed for broad scale planning and management uses..."

SSURGO and STATSGO data are available for download via the USDA [NRCS Online Web Soil Survey \(WSS\)](#). Follow the instructions on the web site.

Also available for download is the NRCS [Major Land Resource Area \(MLRA\) Geographic Database](#). Per the National Soil Survey Handbook, "MRLAs are based upon aggregations of geographically associated land resource units and identify nearly homogeneous areas of land use, elevation, topography, climate, water resources, potential natural vegetation, and soils."

The [USDA NRCS Geospatial Data Gateway](#) can also be used to download SSURGO, STATSGO, and MLRA data by county via the Geospatial Data Gateway web app.



Several of the BLM's [Rapid Ecoregional Assessments \(REAs\)](#) analyzed soils for sensitive soils and early and late successional soil crust (biocrust). The resulting data sets are available for download on the [Landscape Approach Data Portal](#).

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Topography and Elevation

The [National Map Small Scale Data](#) (USGS) is a source to [download](#) various topographic products, such as those listed below.

- Contours
- Elevation
- Natural Earth
- North American Atlas
- Ocean Depth
- Satellite View
- Shaded Relief

[LIDAR](#) (Light Detection and Ranging) Digital Elevation is another type of topographic product however, due to its higher accuracy and precision, coverage is sparse and file sizes are large.

The [National Map 3DEP View](#) (3D Elevation Program) (USGS) provides a map viewer download platform for variety of standard and enhanced elevation data products including:

- Standard DEM (Digital Elevation Model)
- Contours
- DEM Source (OPR)
- Ifsar Digital Surface Model (DSM)
- Ifsar Orthorectified Radar Image (ORI)
- Lidar Point Cloud (LPC).

Esri provides a few topographic base maps that can be added to any ArcGIS map document:

- [Topographic](#)
- [Terrain with Labels](#)
- [USA Topo Maps.](#)

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Vegetation (see also Land Cover)

[Landsat](#) satellite imagery (USGS and NASA) is frequently used for vegetation analysis. Landsat spectral bands can be combined to highlight vegetation in a variety of ways. When looking at Landsat imagery, it is important to pay attention to how the data are being displayed.

The USDA has a couple of resources for vegetation data:

- [Invasive and General Plant Species Databases](#) – This list provides links to various resources for spatial and non-spatial plant data.
- [Plant Hardiness Zone Map](#) – [Interactive Map](#) and static [Map Downloads](#). U.S. Federal Government and Military Employees can [download](#) the spatial data for free, with a valid e-mail address, after they create an account.

[BISON](#) (Biodiversity Information Serving Our Nation) (USGS) provides U.S. plant species occurrence point data, which is available for download by species.

[EDDMapS](#) (Early Detection and Distribution Mapping System) is a web-based mapping system for documenting and downloading invasive species distribution data.

The [U.S. National Vegetation Classification System](#) (USNVCS) provides geospatial data standards that, if followed, would help streamline the vegetation data collection process and data sharing.

Vegetation data may also be available through the independent Natural Heritage Programs for various U.S. states, Canadian provinces, and countries. A list of the programs, with contact information and a link to the program's website, is available via the [NatureServe Network Directory](#). Due to the independent nature of these programs the availability of data and products varies between them.



BLM collects and analyzes vegetation data at landscape scales across the West. The following data can be downloaded or viewed on the [BLM Landscape Approach Data Portal](#):

- [BLM Assessment, Inventory, and Monitoring](#) (AIM) – Terrestrial and aquatic indicator data collected on the ground across BLM land (in coordination with USAD National Resource Inventory (NRI) program).
- [National Land Cover Database \(NLCD\) Shrubland Products](#) – Collaborative effort between BLM, USGS, and other partners to classify grassland and shrubland based on Landsat on all lands (private and public) across areas of the Western U.S.
- **BLM Vegetation Treatments** – Areas of BLM land that received chemical, physical, biological, and prescribed fire treatments.

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Water and Wetlands

The [National Hydrography Dataset \(NHD\)](#) (USGS) "represents the drainage network with features such as rivers, streams, canals, lakes, ponds, coastline, dams, and stream gages." The [Watershed Boundary Dataset \(WBD\)](#) (USGS) contains hydrologic unit boundaries in a hierarchy of eight different size categories. Both of these can be downloaded via the National Map:

- [Hydrography Viewer and Download Platform](#)
- [Small-Scale Data Download \(Water\)](#).

The [National Wetlands Inventory \(NWI\)](#) (USFWS) data represents the distribution and types of wetlands according to Federal standards for wetland classification. Seamless wetlands data is available for [download](#).

The [Global Lakes and Wetlands Database \(GLWD\)](#) (World Wildlife Federation) is another resource for wetlands data, which can be downloaded for the levels 1-3.

- Level 1 – Polygons of the largest lakes (area $\geq 50\text{km}^2$) and reservoirs (storage capacity $\geq \text{km}^3$).
- Level 2 – Polygons of permanent open waterbodies (surface area $\geq 0.1\text{km}^2$), excluding those contained in Level 1.
- Level 3 – 30-second resolution raster map of lakes, reservoirs, rivers, and wetland types in the form.

[USGS Office of Water Information \(OWI\)](https://waterservices.usgs.gov/) supports data on the National Water Information System (USGS NWIS) at <https://waterservices.usgs.gov/> and on the [water quality portal](https://www.waterqualitydata.us/) (<https://www.waterqualitydata.us/>)

The U.S. EPA provides [water data and tools](https://www.epa.gov/waterdata/waters-geospatial-data-downloads) including impaired water data submitted by each state. <https://www.epa.gov/waterdata/waters-geospatial-data-downloads>

Some other resources for water related spatial and non-spatial data are:

- [Groundwater Resources Program \(GWRP\)](#) (USGS) – Aquifer system boundaries and related hydrogeologic unit information.
- [National Water Information System \(NWIS\)](#) (USGS)
- [Nitrogen and Phosphorus Pollution Data Access Tool](#) (U.S. EPA) – More advanced GIS experience is required to join the non-spatial data with the spatial data for use in ArcMap.
- [USGS Water Resources Division National Spatial Data Inventory](#)
- [USGS Water Resources of the United States](#).

Groundwater

Groundwater is an important national resource providing drinking water, supporting agriculture and industry, sustaining surface water and ecosystems.

The USGS Groundwater Resources Program stores [groundwater data and information](#) in tabular and geospatial format. For example, data for the [Desert Basins of the Southwest \(factsheet, pdf\)](#) are provided.

Base flow is the component of stream flow that can be attributed to groundwater discharge into streams. The USGS [base flow index \(BFI\) dataset](#) (xml and link to data) for the conterminous US was created by interpolating BFI values estimated at USGS stream gages. THE BFI grid was developed to estimate BFI values for ungaged streams and groundwater recharge.

[Predicted probability of nitrate contamination](#) (xml and link to data; > 4mg/L) of shallow groundwater was calculated from a logistic regression model that used nitrogen (N) fertilizer loading, percent cropland-pasture, natural log of human population density, percent well-drained soils, depth to the seasonally high water table, and presence or absence of unconsolidated sand and gravel aquifers.

Several regional studies on groundwater quality and quantity exist:

Agricultural and industrial water needs have resulted in unsustainable groundwater withdrawals because part of the extracted resources in from paleorecharge , i.e. groundwater recharge during different (wetter) climate regimes (Stonestrom and Harrill, 2007). In the second part of this study, the Basin Characterization Model was used to calculate potential evapotranspiration, soil-water storage, in-

place ground-water recharge, and runoff (potential stream flow) for the arid and semiarid southwestern US (Flint and Flint, 2007).

Groundwater withdrawals are also causing declines in the High Plains Aquifer. [McGuire \(2014\)](#) calculated area-weighted, average water-level changes; change in water in storage; and total water in storage for 111.8 million acres in 8 States for predevelopment to 2013 and 2011 to 2013 resulting in a raster of water level changes at 500m cell size (<https://pubs.er.usgs.gov/publication/sir20145218>).

[Geodatabase compilation of Hydrogeologic, Remote Sensing, and Water Budget Component Data for the High Plains Aquifer, 2011](#) (Houston et al, 2013).

Death Valley Regional Flow System:

- The flow model is an important water management tool for the Death Valley Region but was primarily developed to assess the feasibility of isolating nuclear waste from the accessible environment for over 10,000 years and the migration of contaminants from nuclear testing.
- [Fact sheet on regional groundwater flow modeling concepts](#) (note that the hyperlinks in this sheet are out of date)
- [Estimated Ground-Water Withdrawals from the Death Valley Regional Flow System, Nevada and California, 1913-98](#): this study quantified ground-water pumping to help calibrate the Death Valley Regional Flow Model.
- [An update of the Death Valley regional groundwater flow system transient model, Nevada and California](#). Scientific Investigations Report 2016-5150

Wildlife

The [USGS GAP Species Data Portal](#) is a resource for distribution data by species.

The [Crucial Habitat Assessment Tool \(CHAT\)](#) (Western Association of Fish and Wildlife Agencies (WAFWA)) has a variety of wildlife related data available for download. Registration is required. Data input layers for CHAT include: Species of Concern, Landscape Condition, Large Natural Areas, Natural Vegetation Communities, Landscape Condition Summary, Freshwater Integrity, Important Connectivity Zones, Riparian and Wetland habitat Distribution, Wildlife Corridors, Species of Economic and/or Recreational Importance.

The U.S. Fish and Wildlife Service (USFWS) Geospatial Services provide access to a variety of wildlife related data, such as critical habitat and migratory bird data, and applications such as the Geospatial Fisheries Information Network, via:

[USFWS National Digital Library](#)

[USFWS National GIS Data](#)

[USFWS Regional GIS Data Sites](#).

[BISON](#) (Biodiversity Information Serving Our Nation) (USGS) provides U.S. animal species occurrence point data, which is available for download by species.

[EDDMapS](#) (Early Detection and Distribution Mapping System) is a web-based mapping system for documenting and downloading invasive species distribution data.

The [NatureServe Tool, Listed and Imperiled Species by County and Watershed](#) provides interactive map viewers to view information regarding listed and imperiled wildlife. There is a fee to download data.

Rare species data may also be available through the independent Natural Heritage Programs for various U.S. states, Canadian provinces, and countries. A list of the programs, with contact information and a link to the program's website, is available via the [NatureServe Network Directory](#). Due to the independent nature of these programs the availability of data and products varies between them.

Wildlife data may also be available through U.S. state agencies that manage fish and wildlife resources. A list of such agencies, with a link to their website, is available via the USFWS [State, Territorial, and Tribal Fish and Wildlife Offices](#) list. Due to the independent nature of these agencies the availability of data and products varies between them.



All of the BLM's [Rapid Ecoregional Assessments \(REAs\)](#) analyzed a large variety of wildlife species and the resulting data sets, such as current and future distribution maps, are available for download on the [Landscape Approach Data Portal](#).

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Data Centers and Repositories

Below are some helpful data repositories that provide access to a large variety of data at various spatial scales, including landscape-scales:

- [Data Basin](#) (Conservation Biology Institute)
- [Data.gov](#) (U.S. Government)
- [EnviroAtlas](#) (EPA)
- [Environmental Dataset Gateway](#) (EPA)
- [EROS Center](#) (USGS)
- [GeoPlatform.gov](#) (Federal Geographic Data Committee (FGDC))
- [Geospatial Data Gateway](#) (USDA NRCS)
- [Heart of the Rockies Initiative](#)
- [LANDFIRE](#) (USDA Forest Service and DOI)
- [LTDL - USGS Land Treatment Digital Library](#) of BLM land treatment information across 14 western states. Provides maps, ability to run queries, and graph summary statistics.
- [Landscape Conservation Cooperatives](#)
- [NatureServe](#)
- [ScienceBase-Catalog \(USGS\)](#)
- [The National Map](#) (USGS)
- [TIGER](#) (U.S. Census Bureau).



The BLM's [Landscape Approach Data Portal](#) provides geospatial data, maps, models, and reports produced by their landscape initiatives including:

- Rapid Ecoregional Assessments (REAs),
- Fire & Invasives Assessment Tool (FIAT),
- Assessment Inventory and Monitoring (AIM) strategy,
- Integrated Rangeland Fire Management Strategy (IRFMS)
- Greater Sage-Grouse (GRSG) initiative, and
- BLM National data, such as:
 - Administrative Units
 - Ground Transportation (GTLF)
 - National Land Conservation System (NLCD): Wild & Scenic Rivers, Wilderness Area, and National Scenic & Historic Trails, National Monuments & Conservation Areas).
 - NLCD Shrubland (including sagebrush data),
 - Recreation Areas
 - Surface Management Agency (SMA)
 - Wild Horse and Burro (WHB).

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References

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Flint, Lorraine E., and Flint, Alan L., 2007, Regional analysis of ground-water recharge, in Stonestrom, David A., Constantz, Jim, Ferre, Ty P.A., and Leake, Stanley A., eds., Ground-water recharge in the arid and semiarid southwestern United States: U.S. Geological Survey Professional Paper 1703-B, p. 29-60