

US EPA ARCHIVE DOCUMENT

# THE SOUTHWEST REGIONAL GAP PROJECT: PLANT COMMUNITIES OF NEVADA

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USGS  
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**Ecological Systems of Nevada**

The Southwest Regional Gap Analysis Project used contemporary (1999-2001) Landsat 7 Enhanced Thematic Mapper satellite imagery from three seasons, i.e., spring (leaf-on), summer (peak greenness), and fall (leaf-off). The information comprised 63 thumbnail scenes for the state of Nevada and they were composited into biogeographically unique mapping units that span political boundaries of the adjacent states. Vegetation mapping was conducted at the "ecological systems" level of the National Vegetation Classification provided by NatureServe. The data set used to "train" the imagery contains over 17,500 ground truth sites collected across the state, and it includes 73 natural and seminatural ecological systems. The funding to undertake this project was provided by the National Gap Analysis Program of the USGS Biological Resources Discipline and the Landscape Ecology Branch of the U.S. Environmental Protection Agency. Invaluable assistance was received from the U.S. Bureau of Land Management/Nevada State Office and the Eastern Nevada Landscape Coalition. This land cover map and other geospatial data for Nevada can be found online at: <http://www.epa.gov/nrelsd1/land-sci/gap.htm>

Notes: Although this work was reviewed by EPA and approved for publication, it may not necessarily reflect official agency policy. Mention of trade names or registered products does not constitute endorsement or recommendation by EPA.

# THE SOUTHWEST REGIONAL GAP PROJECT: LAND OWNERSHIP IN NEVADA

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**Map Legend**

- City and Towns
- State Boundaries
- Major Rivers
- Water Features
- Land Owner Categories
- Bureau of Indian Affairs (BIA)
- Bureau of Land Management (BLM)
- Bureau of Reclamation (BOR)
- City Lands
- County Lands
- Department of Defense (DOD) and Department of Energy
- Fish and Wildlife Service (FWS)
- Federal Service (USFS)
- National Park Service (NPS)
- Other Land Owner
- Other Local Government Lands
- Other State Lands
- Private Unincorporated for Development
- Regional Government Lands
- State Parks & Recreation Areas
- State School Lands
- State Wildlife Reserves
- The Nature Conservancy (TNC)
- Water

Approximately 80% of Nevada is held in the public trust. The largest land manager in Nevada is the Bureau of Land Management. Other extensive land management agencies in the state include the U.S. Forest Service, the Department of Defense, and the Department of Energy. These public lands serve a variety of purposes including livestock grazing, military training, homeland defense, recreation, timber harvesting, mining, and biological research and conservation. A primary objective of the Gap Analysis Program is to provide an assessment of the management status for certain elements of biodiversity (vegetation communities and animal species throughout their U.S. range) and to provide land stewards with information on the representation of those elements so they can make informed decisions about their management practices regarding biodiversity. To accomplish this, the mapped distributions of vegetation communities are compared to a map of land ownership. Though we record the ownership entities of public lands and privately owned conservation lands, we also acknowledge that these attributes are complex and rapidly changing. This state land ownership map and other geospatial data for Nevada can be found online at: <http://www.epa.gov/nrelsd1/land-sci/gap.htm>

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# THE SOUTHWEST REGIONAL GAP PROJECT: NEVADA TOPOGRAPHY

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**Map Legend**

- State Boundaries
- Major Rivers
- Cities & Towns
- Lakes & Reservoirs
- Mountain Summits
- Elevation Values
- High: 3,023 meters
- Low: 1 meter

Nevada is located in the Great Basin, an ecoregion in which all rivers and streams drain into interior basins rather than the ocean. The Great Basin roughly covers the northern two-thirds of the state. This region is also known as the Basin and Range since it consists of alternating north-south trending ranges and low elevation valleys. The Great Basin sits in the rain-shadow of the Sierra Nevada mountain range on the California-Nevada border and thus receives little precipitation and experiences large variations in temperature. The vegetation of the Great Basin is dominated by sagebrush in low elevation valleys, dry-summer woodlands of middle elevation, aspen-fir forests at high elevations, and alpine environments at the highest elevations. The southwestern portion of Nevada falls in the Mojave Desert, a hot and arid region that receives only 4 inches of precipitation on average per year. Consequently, the vegetation of the Mojave Desert is composed of drought-tolerant shrubs such as creosotebush and silvercholla. The northernmost region of Nevada lies in the Columbia Plateau, a region that receives more precipitation and experiences cooler temperatures on average than the Great Basin. The dominant vegetation of the Columbia Plateau is a mosaic of sagebrush and perennial bunchgrasses known as sagebrush steppes. This state topography map and other geospatial data for Nevada can be found online at: <http://www.epa.gov/nrelsd1/land-sci/gap.htm>

The historic map images of Nevada, California, and Utah were used by permission from the Nevada Historical Society and the Mary B. Asari Map Library, University of Nevada, Reno.

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