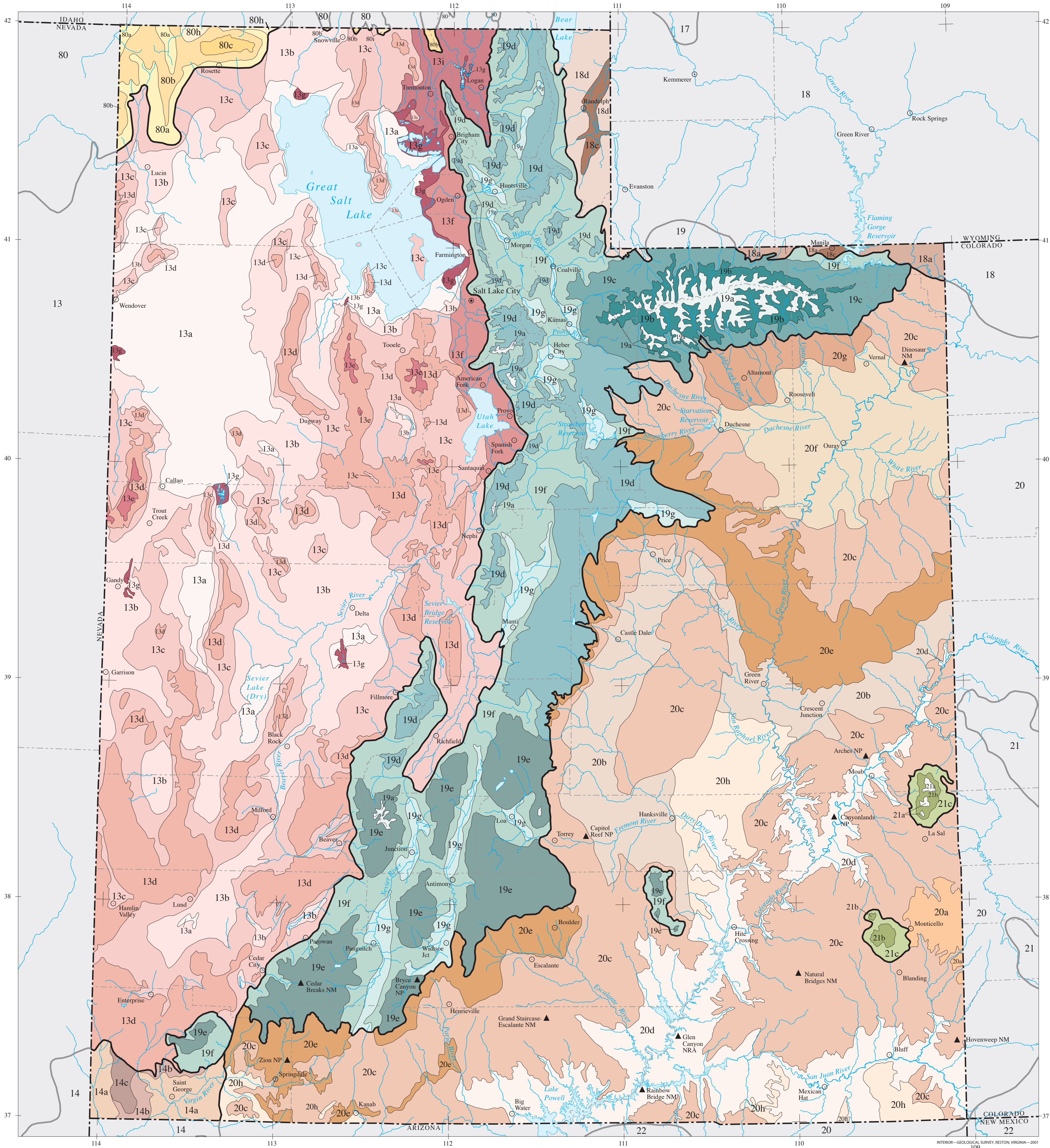


Ecoregions of Utah



- | | | | | |
|--|--|--|--|---|
| 13 Central Basin and Range <ul style="list-style-type: none">13a Salt Deserts13b Shadscale-Dominated Saline Basins13c Sagebrush Basins and Slopes13d Woodland- and Shrub-Covered Low Mountains13e High Elevation Carbonate Mountains13f Moist Wasatch Front Foothills13g Wetlands13i Malad and Cache Valleys | 18 Wyoming Basin <ul style="list-style-type: none">18a Rolling Sagebrush Steppe18c Wet Valleys18d Semiarid Bear Hills | 20 Colorado Plateaus <ul style="list-style-type: none">20a Monticello Upland20b Shale Deserts20c Semiarid Benchlands and Canyonlands20d Arid Canyonlands20e Escarpments20f Uinta Basin Floor | 20 Colorado Plateaus (continued) <ul style="list-style-type: none">20g Northern Uinta Basin Slopes20h Sand Deserts | 80 Northern Basin and Range <ul style="list-style-type: none">80a Dissected High Lava Plateau80b Semiarid Hills and Low Mountains80c High Elevation Forests and Shrublands80h Saltbush-Dominated Valleys80i Sagebrush Steppe Valleys |
| 14 Mojave Basin and Range <ul style="list-style-type: none">14a Creosote Bush-Dominated Basins14b Arid Foothills14c Mountain Woodland and Shrubland | 19 Wasatch and Uinta Mountains <ul style="list-style-type: none">19a Alpine Zone19b Uinta Subalpine Forests19c Mid-elevation Uinta Mountains19d Wasatch Montane Zone19e High Plateaus19f Semiarid Foothills19g Mountain Valleys | 21 Southern Rockies <ul style="list-style-type: none">21a Alpine Zone21b Subalpine Forests21c Dry Forests and Shrublands | | |
- Level III ecoregion County boundary Level IV ecoregion State boundary
- SCALE 1:1 175 000
- Albers Equal Area Projection
Standard parallels 38° N and 41° N

Ecoregions denote areas of general similarity in ecosystems and in the type, quality, and quantity of environmental resources; they are designed to serve as a spatial framework for the research, assessment, management, and monitoring of ecosystems and ecosystem components. Ecoregions are directly applicable to the immediate needs of state agencies, including the development of biological criteria and water quality standards and the establishment of management goals for nonpoint-source pollution. They are also relevant to integrated ecosystem management, an ultimate goal of most federal and state resource management agencies.

The approach used to compile this map is based on the premise that ecological regions can be identified through the analysis of the spatial patterns and the composition of biotic and abiotic phenomena that affect or reflect differences in ecosystem quality and integrity (Wiken 1986; Omernik 1987, 1995). These phenomena include geology, physiography, vegetation, climate, soils, land use, wildlife, and hydrology. The relative importance of each characteristic varies from one ecological region to another regardless of the hierarchical level. A Roman numeral hierarchical scheme has been adopted for different levels of ecological regions. Level I is the coarsest level, dividing North America into 15 ecological regions. Level II divides the continent into 52 regions (Commission for Environmental Cooperation Working Group 1997). At level III, the continental United States contains 104 ecoregions and the conterminous United States has 84 ecoregions (United States Environmental Protection Agency [USEPA] 2000). Level IV is a further subdivision of level III ecoregions. Explanations of the methods used to define the USEPA's ecoregions are given in Omernik (1995), Griffith and others (1994), and Gallant and others (1989).

Utah is made up of arid deserts and canyonlands, salt flats, wetlands, semiarid shrublands, irrigated valleys, woodlands, forested mountains, and glaciated peaks. Ecological diversity is enormous. There are 7 level III ecoregions and 37 level IV ecoregions in Utah and most continue into ecologically similar parts of adjacent states.

The level III and IV ecoregion map on this poster was compiled at a scale of 1:250,000 and depicts revisions and subdivisions of earlier level III ecoregions that were originally compiled at a smaller scale (USEPA 2000; Omernik 1987). This poster is part of a collaborative project primarily between USEPA Region VIII, USEPA National Health and Environmental Effects Research Laboratory (Corvallis, Oregon), Utah Department of Environmental Quality, Utah Division of Wildlife Resources, Utah Department of Natural Resources, United States Department of Agriculture-Forest Service (USFS), United States Department of Agriculture-Natural Resources Conservation Service (NRCS), United States Department of the Interior-Bureau of Land Management (BLM), and United States Department of the Interior-Geological Survey (USGS)-Earth Resources Observation Systems (EROS) Data Center.

The project is associated with an interagency effort to develop a common framework of ecological regions. Reaching that objective requires recognition of the differences in the conceptual approaches and mapping methodologies applied to develop the most common ecoregion-type frameworks, including those developed by the USFS (Bailey and others, 1994), the USEPA (Omernik 1987, 1995), and the NRCS (U.S. Department of Agriculture-Soil Conservation Service, 1981). As each of these frameworks is further refined, their differences are becoming less discernible. Regional collaborative projects such as this one in Utah, where agreement has been reached among multiple resource management agencies, is a step toward attaining consensus and consistency in ecoregion frameworks for the entire nation.

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