

Summary Table: Characteristics of the Ecoregions of Colorado

18. WYOMING BASIN

Level IV Ecoregions	Physiography	Geology			Natural Vegetation	Land Use and Land Cover					
		Surface and Bedrock	Soils	Climate							
18a. Rolling Sagebrush Steppe	2197	Rolling plains with hills, cuestas, mesas, terraces, and near the footlopes, alluvial fans, and outwash fans.	Quaternary alluvium, colluvium, outwash, and residual, and eolian deposits. Tertiary and Cretaceous claystone, sandstone, and other sedimentary rock. Areas of lenticular coal, oil shale, and marlstone. Rock outcrops occur.	Aridisols (Haplagids, Calcargids, Entisols (Torrismans), Mollics (Argiustols), Vertisols (Haplusterts))	Ryan Park, Maybell, Rockvale, Maymont, Ryark, Berkefeld, Trafton, Ryer, Rueloff, Taffin, Ryer.	Frigid/ Aridic, Ustic	Mostly 10-15, up to 20 at higher elevations	60-90	4.32; 48.88	Sagebrush steppe with areas of bitterbrush shrubland and scattered juniper woodland at higher elevations. Associated vegetation may include western wheatgrass, needle-and-thread, blue grama, Sandberg bluegrass, Junegrass, rabbitbrush, fringed sage, Wyoming big sagebrush, silver and black sagebrush in lowlands, and mountain big sagebrush at the higher elevations.	Shrub-covered rangeland, with some areas of cropland, especially along the Yampa River. Crops include grain, wheat, barley, and oats. Oil, gas, and coal production.
18d. Foothill Shrublands and Low Mountains	248	Foothills, alluvial fans, hills, low mountains, ridges, and valleys.	Quaternary alluvium and colluvium derived from Tertiary sedimentary and older crystalline rocks of the surrounding mountains. Tertiary claystone, mudstone, sandstone, and oil shale. Precambrian quartzite, conglomerate, and shale.	Alfisols (Glossoscyrolys), Mollics (Argiustols), Inceptisols (Calcicustepts)	Utna, Miracle, Chitum, Rensac.	Cryic/ Ustic, Xeric	10-20	60-90	8.74; 54.84	Big sagebrush shrubland, with pinyon-juniper woodland. Higher elevations may have areas of lodgepole pine, aspen, and subalpine fir. Associated vegetation may include rabbitbrush, mountain big sagebrush, pricklypear, bluebunch wheatgrass, and Idaho fescue on fine-textured soils. Rocky Mountain juniper, Utah juniper, and mountain mahogany woodlands occur on rock outcrops.	Shrub-covered rangeland and wildlife habitat.
18e. Salt Desert Shrub Basins	718	Plains, nearly level floodplains and terraces, and rolling alluvial fans. Streams are ephemeral or intermittent; many are incised and flow into playas. Substrates are fine textured material or platy shale gravels. Seasonal playas have high levels of soluble salts.	Quaternary alluvium and colluvium; gravel and fan deposits in stream and floodplain areas. Tertiary shale, siltstone, and sandstone. Tertiary claystone, mudstone, sandstone, and oil shale. Precambrian quartzite, conglomerate, and shale.	Entisols (Torrismans), Aridisols (Haplocalcids), Mollics (Calcicustepts), Inceptisols (Calcicustepts)	Luhon, Browns, Tiart, Rensac, Achee, Mikam, Hugoburn, Neigart.	Frigid, Mesic/ Ustic, Aridic	8-15	60-90	6.32; 50.88	Desert shrublands dominated by alkaline-tolerant shrubs and grasses: greasewood, Gardner's saltbush, fourwing saltbush, shadscale, bad sage, and big sagebrush. Sublized sand dunes are dominated by alkali cordgrass, Indian ricegrass, blowout grass, alkali wildrice, and needle-and-thread.	Shrub-covered rangeland and wildlife habitat. Oil and gas production.
18f. Laramie Basin	116	High elevation valley, nearly flat floodplains, and low terraces. Streams and rivers are moderate gradient, with cobble, gravel, and sandy substrates.	Quaternary alluvium and colluvium. Tertiary gravel and fan deposits in stream and floodplain areas. Tertiary shale, siltstone, and conglomerate. Triassic and Permian siltstone, shale, and sandstone.	Mollics (Argiustols), Entisols (Haplolysols), Inceptisols (Eutrocyrepts)	Driggs, Newfork, Pendergrass, Clergen	Cryic/ Xeric, Ustic	15-20	60-90	4.30; 40.76	Mixedgrass prairie with needle-and-thread, creosote wheatgrass, blue grama, Indian ricegrass, and other mixgrass species, along with rabbitbrush, fringed sage, and various forb and shrub species.	Grassland and shrubland. Rangeland, seasonal grazing, some hay production.

20. COLORADO PLATEAUS

Level IV Ecoregions	Physiography	Geology			Natural Vegetation	Land Use and Land Cover					
		Surface and Bedrock	Soils	Climate							
20a. Monticello-Cortez Uplands and Sagebrush Valleys	951	Nearly level to rolling plains and basins containing stream terraces, alluvial fans, and low rolling hills and ridges.	Quaternary alluvium, alluvium, and eolian deposits. Western area underlain by Cretaceous Dakota sandstone formation. Eastern areas underlain by Cretaceous Cliff House and Pictured Cliffs sandstone and Lewis shale, or Tertiary arkosic sandstone, siltstone, and shale.	Aridisols (Calcargids, Natrigids), Alfisols (Haplustolls), Entisols (Torrismans), Vertisols (Haplusterts)	On uplands: Witt, Sharps, Cahona, Lazar, Palpit. In valleys: Talia, Arboles, Bayfield, Uzoia.	Mesic/ Aridic, Ustic	10-15	90-120	12.38; 52.88	Sagebrush steppe and associated grasses, with scattered pinyon-juniper woodland. Dominant species include Wyoming big sagebrush, western wheatgrass, and Indian ricegrass. Some two-needle pinyon pine, bitterbrush, and serotiny.	Dryland cropland with some areas of irrigated cropland, shrubland, and rangeland. Crops include pinto beans, Anasazi beans, winter wheat, and alfalfa.
20b. Shale Deserts and Sedimentary Basins	2923	Nearly level to rolling plains and basins, with benches, low rounded hills, and badlands.	Quaternary alluvium, alluvium, and eolian deposits. Cretaceous Mancos shale (northwest of Rangely, east of Meeker), and Tertiary Drey Creek Basin, Disappointment Valley, and in the southwest, just north of the Mancos River). Tertiary claystone, siltstone, mudstone, shale and sandstone (areas west of Meeker, and in the Colorado River valley outside of Rifle). Jurassic and Triassic shale and siltstone; salt anticlines (Paradox Valley, Big Gypsum Valley).	Entisols (Torrismans), Aridisols (Haplagids, Calcargids, Entisols (Torrismans), Mollics (Argiustols), Endoquolls)	Bulkeley, Evanson, Forelle, Paradox, Diamondville, Rock River, Persayo, Farh, Redlands, Hagerman, Palma, Tomlin, Callan, Skan, Chipeta, Uncompagure	Frigid, Mesic/ Aridic, Ustic	8-15	90-150	6.36; 48.92	Sparsely coverd of mat subshrub shrubland and salt desert scrub: shadscale, Nuttall's saltbush, blackbrush, fourwing saltbush, Wyoming big sagebrush, desert trumpet, galletta grass, and other associated grasses. Flooding areas support grasswood, alkali sacaton, seepweed, and shadscale. Badland areas have little to no vegetation cover.	Shrubland and rangeland, areas of saltland and irrigated cropland, with winter wheat, small grains, forage crops, and pinto beans. Orchards of apples, peaches, pears, and apricots support grasswood, alkali sacaton, seepweed, and shadscale. Badland areas have little to no vegetation cover.
20c. Semiarid Benchlands and Canyonlands	9079	Benches, mesas, cuestas, alluvial fans, hilltops, cliffs, arches, and canyons. A few isolated peaks. Areas of low relief alternate with areas of high relief.	Quaternary alluvium and colluvium. Tertiary and Cretaceous siltstone, sandstone, claystone, oil shale, and marlstone. In deep canyons and cliffs: areas of Permian siltstone, sandstone, and shale, and Pre-Pennsylvanian Paleozoic shale, limestone, and sandstone.	Entisols (Torrismans), Alfisols (Haplustolls), Mollics (Argiustols), Haplolysols, Aridisols (Haplagids, Calcargids, Haplocalcids), Inceptisols (Calcicustepts)	Achee, Cahona, Hagerman, Lamplish, Lazar, Mikam, Palma, Persayo, Redrecks, Rensac, Shavano, Skan, Skyway, Tomlin, Uzoia, Veatch, Zym, Callan, Castner, Chipeta, Cochetopa	Mesic, Frigid/ Cryic/ Aridic, Ustic	10-15, on highest elevations/ 20-25	60-120	8.40; 48.88	Pinyon-juniper woodland, Gambel oak woodland, and sagebrush steppe with black sagebrush, winterfat, taro, fourwing saltbush, shadscale, galletta grass, and blue grama.	Woodland and shrubland. Rangeland, recreation, coal mining, oil and gas production. Oil shale extraction.
20d. Arid Canyonlands	70	Narrow canyons, cliffs, valley floors, floodplains, structural benches, mesas, and cuestas. Terrain deeply eroded by major rivers and their tributaries.	Quaternary alluvium and colluvium. Cretaceous sandstone, shale, and conglomerate. Rock outcrops are common.	Entisols (Torrismans), Aridisols (Natrigids)	Clovisyngs, Myton, Uzoia, Tocio	Mesic/ Aridic	8-10	120-150	18.40; 60.92	Desert shrubland: blackbrush, shadscale, Indian ricegrass, fourwing saltbush, blue grama, mat subshrub, saline wildrice, and galletta grass.	Shrubland. Recreation, rangeland, and wildlife habitat.
20e. Escarpments	1013	High, dissected cliffs, escarpments, mesa tops, and breaks with a wide alluvial fan. Includes the areas of oil shale. Rock outcrops are common.	Quaternary alluvium and colluvium. Tertiary and Cretaceous sandstone, shale, siltstone, and conglomerate. Rock outcrops are common.	Entisols (Torrismans), Aridisols (Natrigids)	Clovisyngs, Myton, Uzoia	Mesic/ Aridic	Mostly 10-15, up to 32 at higher elevations	60-90	4.36; 46.84	Pinyon-juniper woodland, mountain mahogany, aspen, and Douglas-fir forest at higher elevations.	Shrubland, evergreen and deciduous woodland, some forests. Recreation and wildlife habitat, some limited grazing.
20f. Uinta Basin Floor	39	Synclinal basin containing mountain-front terraces, floodplains, hills, and ridges.	Quaternary alluvium, alluvium, and eolian deposits. Tertiary and Cretaceous sandstone, shale, and marlstone.	Mollics (Haplustolls), Entisols (Haplolysols), Aridisols (Haplagids, Haplocalcids)	Pots, Walklocks, Veatch, Redrecks, Tocio	Mesic/ Aridic	8-10	90-120	6.34; 56.88	Desert shrubland: saltbush, greasewood, and alfalfa. Indian ricegrass, winterfat, Wyoming big sagebrush, fourwing saltbush, winterfat, needle-and-thread.	Shrubland, Rangeland, cropland, and residential. Increasing urban and residential development.

21. SOUTHERN ROCKIES

Level IV Ecoregions	Physiography	Geology			Natural Vegetation	Land Use and Land Cover					
		Surface and Bedrock	Soils	Climate							
21a. Alpine Zone	3690	Glaciated. High mountains with steep slopes, ridges, and exposed rock. Tertiary andesitic lavas, basalts, breccia, tuffs, and conglomerates. Precambrian metamorphic rocks: pelitic schist, amphibole schist, quartzite, diamictic, quartz-pebble conglomerate, and marble. Permian and Pennsylvanian Sangre de Cristo Formation: arkosic conglomerate, sandstone, and siltstone.	Quaternary glacial drift, and colluvium. Exposed bedrock. Tertiary andesitic lavas, basalts, breccia, tuffs, and conglomerates. Precambrian metamorphic rocks: pelitic schist, amphibole schist, quartzite, diamictic, quartz-pebble conglomerate, and marble. Permian and Pennsylvanian Sangre de Cristo Formation: arkosic conglomerate, sandstone, and siltstone.	Inceptisols (Dystricrypts)	Mirror, Rose, Whitecross, Heron, Tecowitch	Cryic/ Ustic	15-70; Deep snowpack	Less than 30	-8.74; 36.72	Alpine meadows. Dominated by histon, alpine cushion plants, alpine areas, alpine bluegrass, alpine clover, tufted hairgrass, and various sedges. Trees if present are krummholz (dwarf and/or prostrate shrubs) and include spruce, fir, and pine. Willow thickets occur in depressions and wet meadows.	Snow, ice, bare rock, alpine meadows, and scattered deciduous forest. Snowmelt and wildlife habitat. Source to lower-elevation ecoregions.
21b. Crystalline Subalpine Forests	4737	Glaciated. High mountains with steep slopes. High gradient perennial streams with boulder, cobble, and bedrock substrates.	Quaternary glacial till and colluvium. Tertiary intrusive rocks. Precambrian metamorphic, metavolcanic, and igneous rocks: pelitic schist, amphibole schist, quartzite, diamictic, quartz-pebble conglomerate, and marble. Precambrian granitic gneiss, felsic gneiss, amphibolite, and granitic rocks. Copper, silver, and gold deposits.	Alfisols (Glossoscyrolys), Entisols (Torrismans), Mollics (Argiustols), Haplolysols, Haplocalcids)	Boyle, Grande, Keblor, Lakelahn, Leadville, Limber, Lucky, Peeler, Resort, Seitz, Argeryolls, Haplustolls	Cryic, Ustic/ Ustic	30-58	30-60	-4.28; 36.72	Subalpine forests dominated by Engelmann spruce and subalpine fir. Often interspersed with aspen groves, lodgepole pine forest, or mountain meadows. Includes Douglas-fir at lower elevations. Understory may include winterberry, kinnikinnick, snowberry, sedges, mountain brane, and forbs.	Evergreen and some deciduous forest. Timber production, recreation, hunting, wildlife habitat, and seasonal grazing. Some gold mining. Snow cover is a major source of water for lower, more arid ecoregions.
21c. Crystalline Mid-Elevation Forests	4455	Partially glaciated. Low mountain ridges, slopes, and outwash fans. Moderate to high gradient perennial streams with boulder, cobble, and bedrock substrates.	Quaternary glacial till, colluvium, and alluvium. Precambrian metamorphic, metavolcanic, and igneous rocks: pelitic schist, amphibole schist, quartzite, diamictic, quartz-pebble conglomerate, and marble. Precambrian granitic gneiss, felsic gneiss, amphibolite, and granitic rocks. Copper, silver, and gold deposits.	Alfisols (Haplostsols), Glossoscyrolys, Entisols (Cryobrensis), Inceptisols (Dystricrypts), Mollics (Argiustols), Haplolysols, Haplocalcids)	Boyet, Grande, Larson, Peeler, Seitz, Wetmore, Legault, Spiras, Catamount, Loynd, Cabin, Frenchcreek, Pendant, Pheran, Rensac, Robert, Tootill, Woodhall	Cryic, Ustic/ Ustic	20-32	60-90	8.76; 50.80	Ponderosa pine forest with areas of Douglas-fir forest. Understory may include mountain mahogany, bitterbrush, winterfat, skunkbrush, woods rose, mountain mulch, Junegrass, Arizona fescue, king spike-fescue, and various sedges.	Evergreen and some deciduous forest. Wildlife habitat, rangeland, timber production, recreation, and mineral extraction. Some gold mining.
21d. Foothill Shrublands	4780	Unglaciated. Hills, ridges, and outwash fans. Moderate to high gradient perennial streams with boulder, cobble, and sandy substrates.	Quaternary glacial till, colluvium, and alluvium. Tertiary and Cretaceous shale and sandstone. Permian sandstone, limestone, and siltstone. Precambrian metamorphic rocks: amphibolite, schist, gneiss, quartzite, quartz-pebble conglomerate, and marble.	Alfisols (Haplagids), Aridisols (Haplostsols), Mollics (Argiustols), Entisols (Torrismans), Ustisols, Mollics (Argiustols), Haplolysols, Argiustols, Haplocalcids, Inceptisols (Haplostsols)	Ring, Bond, Broad, Brown, Browns, Coakale, Pots, Kerhavy, Neville, Pant, Kishner, Bowers, Bushvalley, Castner, Dammison, Embargo, Gekkie, Kestler, Libeg, Lucky, Montrose, Niederland, Norden, Nisrabel, Pando, Parlin, San Isabel, St. Elmo	Mesic, Frigid/ Cryic/ Ustic, Aridic	12-20	75-100	10.36; 46.84	Sagebrush shrubland, pinyon-juniper woodland, and foothill-mountain grasslands. Also includes areas of mountain mahogany shrubland and scattered Gambel oak woodlands. The woodlands are often interspersed with mountain big sagebrush, skunkbrush, serviceberry, fringed sage, rabbitbrush, blue grama, Junegrass, western wheatgrass, Indian ricegrass, Schreier needlegrass, meadowgrass, and blue grama.	Shrubland and grassland, some woodland. Rangeland and wildlife habitat.
21e. Sedimentary Subalpine Forests	6196	Glaciated. High mountains with steep slopes. High gradient perennial streams with boulder, cobble, and bedrock substrates.	Quaternary drift and colluvium. Faulted and folded Tertiary sedimentary rocks of limestone, siltstone, shale, and sandstone. Permian arkosic conglomerate, sandstone, and siltstone. Precambrian metamorphic rocks: amphibolite, schist, gneiss, quartzite, quartz-pebble conglomerate, and marble.	Alfisols (Haplostsols), Entisols (Cryobrensis), Inceptisols (Dystricrypts), Mollics (Argiustols), Haplolysols, Haplocalcids)	East, Ashcroft, Granite, Leadville, Limber, Seitz, Veitch, Wetmore, Gracie, Storm, Alder, Leaps, Ruby, Southwest, Graybill, Scotch, Needletree, Ryan, Pierian, Poncha, Southwest: Archuleta, Fripvete, Norz, Montoya, Capron, Fighes, Naylor, Uncompagure Plateau, Mayfield, Cetona, Wetopa, Lambuth, Likon	Cryic/ Ustic, Ustic	28-50	30-60	2.32; 40.76	Subalpine forests dominated by subalpine fir, Engelmann spruce, and lodgepole pine. Areas of Douglas-fir or aspen forest at lower elevations. Understory may include winterberry, kinnikinnick, snowberry, sedges, mountain brane, and forbs.	Evergreen and some deciduous forest. Timber production, recreation, hunting, wildlife habitat, and seasonal grazing. Some gold mining. Snow cover is a major source of water for lower, more arid ecoregions.
21f. Sedimentary Mid-Elevation Forests	7532	Partially glaciated. Low mountain ridges, slopes, and outwash fans. Moderate to high gradient perennial streams with boulder, cobble, and bedrock substrates.	Quaternary drift and colluvium. Faulted and folded Tertiary sedimentary rocks of limestone, siltstone, shale, and sandstone. Permian arkosic conglomerate, sandstone, and siltstone. Precambrian metamorphic rocks: amphibolite, schist, gneiss, quartzite, quartz-pebble conglomerate, and marble.	Alfisols (Haplostsols), Entisols (Cryobrensis), Inceptisols (Dystricrypts), Mollics (Argiustols), Haplolysols, Haplocalcids)	East, Allens Park, Granite, Gules, Lakelahn, Melnyre, Malgon, Seitz, Troutville, Ula, Watavona, Brownston, Venable, Quander, Norrison, Pierran, Poncha, Southwest: Archuleta, Fripvete, Norz, Montoya, Capron, Fighes, Naylor, Uncompagure Plateau, Mayfield, Cetona, Wetopa, Lambuth, Likon	Frigid, Cryic/ Ustic, Ustic	20-32	60-90	6.34; 44.84	Ponderosa pine forest, Gambel oak woodland, and aspen forest (especially in the Western slope). Areas of mountain mahogany and two-needle pinyon pine. Shrub vegetation includes antelope bitterbrush, fringed sage, serviceberry, sedges, mountain brane, and forbs.	Evergreen and some deciduous forest. Timber production, recreation, hunting, wildlife habitat, and seasonal grazing. Some gold mining. Snow cover is a major source of water for lower, more arid ecoregions.
21g. Volcanic Subalpine Forests	3940	Glaciated. High mountains with steep slopes. High gradient perennial streams with boulder, cobble, and bedrock substrates.	Quaternary drift and colluvium. Tertiary pyroclastic material, breccia, and volcanic ash sands, including basalt, andesitic lavas, and water-laid volcanic and conglomerates.	Alfisols (Haplostsols), Entisols (Cryobrensis), Inceptisols (Dystricrypts), Mollics (Argiustols), Haplolysols, Haplocalcids)	Frisco, Grande, Needtack, Seitz, Snowdon, Tangle, Clayburn, Haggard, Lambuth, Wootpa, Rubble and rock, Hogspoor.	Cryic/ Ustic, Ustic	28-50	30-60	2.32; 40.74	Subalpine forests dominated by Engelmann spruce, subalpine fir, aspen and in the north, lodgepole pine. Understory may include winterberry, kinnikinnick, snowberry, sedges, mountain brane, and forbs.	Evergreen and some deciduous forest. Timber production, recreation, hunting, wildlife habitat, and seasonal grazing. Some gold mining. Snow cover is a major source of water for lower, more arid ecoregions.
21h. Volcanic Mid-Elevation Forests	1010	Partially glaciated. Low mountain ridges, slopes, and outwash fans. Moderate to high gradient perennial streams with boulder, cobble, and bedrock substrates.	Quaternary drift and colluvium. Tertiary pyroclastic material, breccia, and volcanic ash sands, including basalt, andesitic lavas, and water-laid volcanic and conglomerates.	Alfisols (Haplostsols), Entisols (Cryobrensis), Inceptisols (Dystricrypts), Mollics (Argiustols), Haplolysols, Haplocalcids)	Frisco, Granite, Seitz, Shale, Cochetopa, Youman	Cryic/ Ustic	20-32	60-90	4.32; 42.76	Ponderosa pine, Douglas-fir, and aspen forests with scattered areas of Gambel oak woodlands. Understory of dwarf juniper, western wheatgrass, Oregon grape, blue grama, sideoats grama, and needlegrass.	Evergreen and some deciduous forest. Timber production, summer livestock grazing, wildlife habitat, and recreation. Some copper, silver, and gold mining.
21i. Sagebrush Parks	2098	High intermontane valleys. Moderate gradient perennial streams with cobble, gravel, and sandy substrates.	Quaternary alluvium, colluvium, and loess. Cretaceous and Tertiary sandstone, shale, siltstone, and conglomerate. Tertiary volcanic rocks.	Mollics (Argiustols), Entisols (Haplostsols), Argiustols, Haplolysols, Haplocalcids)	Evanson, Gold Creek, Lucky, Parlin, Cheadle, Gas Creek (Haplostsols)	Cryic, Frigid/ Ustic, Aridic	10-16	60-90	-4.28; 44.76	Sagebrush shrubland. Wyoming big sagebrush, mountain big sagebrush, black sagebrush, mountain mulch, bluebunch wheatgrass, needle-and-thread, Junegrass, and slender wheatgrass.	Shrubland and some grassland. Recreation, rangeland, and wildlife habitat. Some hay production. Oil and gas production in North Park.
21j. Grassland Parks	1254	High intermontane valleys. Moderate gradient perennial streams with cobble, gravel, and sandy substrates. Some wetlands.	Quaternary alluvium, colluvium, and sand. Tertiary siltstone, sandstone, conglomerate, volcanic basalt and ash-flow tuff. Precambrian gneiss, schist, and quartzite.	Mollics (Haplostsols), Argiustols, Argiustols, Endoquolls, Cryobrensis)	Gebson, Alvarado, Beeks, Bushvalley, Coitis, Fehonia, Gas Creek, Gekkie, Hodden, Venable, Quander, Norrison, Moreset, Libeg, Hoodele	Cryic, Frigid/ Ustic, some Aquic	10-20	60-90	6.36; 40.76	Foothill grasslands with hunchgrasses (dominant): Arizona fescue, Idaho fescue, Columbia needlegrass, Canby bluegrass, mountain mulch, bluebunch wheatgrass, needle-and-thread, Junegrass, and slender wheatgrass.	Grassland. Recreation, rangeland, and wildlife habitat.

22. ARIZONA/NEW MEXICO PLATEAU

Level IV Ecoregions	Physiography	Geology			Natural Vegetation	Land Use and Land Cover					
		Surface and Bedrock	Soils	Climate							
22a. San Luis Shrublands and Hills	993	Low mountains, hills, mesas, and foothills.	Quaternary gravels and alluvium. Tertiary and Cretaceous sandstone, shale, and conglomerates. Lava, breccia, tuffs, and conglomerates.	Entisols (Torrismans), Mollics (Argiustols)	Travelers, Garin, Lahon, Spicer, Cortez, Tolman, Bendre, Curcanti, Rock River, Sumner, Hesperus	Frigid/ Aridic, Ustic	10-14	30-60	4.32; 42.76	Shrublands, grasslands, and pinyon-juniper woodland on higher elevations. Species include big sagebrush, rubber rabbitbrush, winterfat, western wheatgrass, green needlegrass, blue grama, and needle-and-thread.	Shrub- and grass-covered rangeland. Low density grazing, wildlife habitat.
22b. San Luis Alluvial Flats and Wetlands	1217	Irregular plains. Wetlands, springs, and areas with a high water table. Few large perennial streams which originate at the higher elevations.	Quaternary alluvium of gravel, sand, and silt.	Mollics (Argiustols), Entisols (Haplostsols), Calcicustepts, Aridisols (Torrismans), Psammaquents)	Graypoint, Platono, Dunal, San Aracazo, Zizano, Acaico, Alamos, Laguna, Ventim, Gunbarrel, Mosca, San Aracazo	Frigid/ Aridic, Aquic, Ustic	6-10	60-90	0.34; 46.80	Shrublands dominated by shadscale, fourwing saltbush, and greasewood.	Irrigated cropland has replaced most of the natural vegetation. Crops include potatoes, alfalfa, barley, wheat, and wheat. Small areas of vegetables such as lettuce, spinach, and carrots.
22c. Salt Flats	866	Irregular plains and alkaline basins.	Quaternary alluvium of gravel, sand, and silt.	Entisols (Torrismans), Aridisols (Natrigids)	Space City, Costilla, Cotopaxi, Hooper, San Luis, Corlett	Frigid/ Aridic	6-8	60-90	0.34; 46.80	Shrublands dominated by shadscale, fourwing saltbush, greasewood, horsebrush, spiny hopvine, and rubber rabbitbrush. Salts, and alkali sacaton.	Shrub-covered rangeland with low density grazing, wildlife habitat, and some small areas of irrigated cropland.
22e. Sand Dunes and Sand Sheets	254	Large dunes, low parabolic and longitudinal shrub-stabilized dunes, and sand sheets.	Quaternary eolian sand deposits, dunes, and sand sheets.	Entisols (Torrismans), Mollics (Endoquolls), Argiustols, Aridisols (Haplocalcids)	Cotopaxi, Space City, Costilla, Alamos, Laguna, Vastine	Frigid/ Aridic	8-12	60-90	0.34; 47.80	Sand sagebrush, rubber rabbitbrush, sand dropped, and western, prairie sunflower and spiny hopvine on sand sheets. Dune areas are mostly devoid of vegetation, some Indian ricegrass, blowout grass, and lemon scurpee.	Hare sand, shrublands, grasslands. Recreation, some low density rangeland on vegetatively stabilized sand sheets. Wildlife habitat.

25. HIGH PLAINS

Level IV Ecoregions	Physiography	Geology			Natural Vegetation	Land Use and Land Cover					
		Surface and Bedrock	Soils	Climate							
25b. Rolling Sand Plains	4820	Undulating plains with areas of active sand dunes. Few perennial streams. Drainage network is not well established due to a lack of runoff and sand-choked drainage ways. Disappearing subterranean streams.	Quaternary eolian sand sheets and dunes. Underlain by Tertiary claystones and sandstones of the Ogallala Formation.	Entisols (Torrismans), Alfisols (Haplustolls), Mollics (Argiustols), Haplostsols, Haplocalcids)	Valent, Vona, Juleburg, Hartun, Jayem, Busber, Bijou	Mesic/ Aridic, Ustic	12-20	140-160	14.42; 60.92	Sandspice prairie: sand sagebrush, sand bluestem, prairie sandreed, blowout grass, lemon scurpee, little bluestem, rabbitbrush, Indian ricegrass, and sand dropped.	Grassland and rangeland with some areas of irrigated cropland.
25c. Moderate Relief Plains	6206	Irregular plains with moderate slope. Intermittent streams, with a few large perennial streams which mostly originate in higher relief areas. Silty and sandy substrates. Small, open, depressional wetland "playas" scattered throughout region.	Quaternary loess, sandy gravel, and loamy alluvium, and some thin residual. Tertiary claystone, sandstone, and conglomerate, including the Ogallala Formation in the east. Cretaceous shales, sandstones, claystones, and coal beds in the west.	Mollics (Argiustols), Alfisols (Haplostsols), Entisols (Torrismans), Aridisols (Haplagids), Entisols (Torrismans)	Olney, Acanon, Planter, Stoneham, Nuck, Kim, Dix, Alfons, Alheim, Keith, Kuma, Ulysses, Colby, Norfolk	Mesic/ Ustic, Aridic	12-18	140-160	14.44; 60.92	Shortgrass prairie: blue grama, buffalograss, with threadleaf sedge, fringed sage, Junegrass, and western wheatgrass. Riparian areas contain cottonwood/shrub/herbaceous species.	Grassland and rangeland with areas of dryland and irrigated agriculture. Gas and oil production.
25d. Flat to Rolling Plains	13219	Flat to rolling plains. Intermittent streams, with a few large perennial streams. Silty and sandy substrates. Small, open, depressional wetland "playas" scattered throughout region.	Quaternary loess, alluvial deposits, and some thin residual. Tertiary gray, claystone, sandstone, and sand deposits, including the Ogallala Formation in the east. Cretaceous shales, sandstones, claystones, and coal beds in the west.	Mollics (Argiustols), Paleustols, Haplostsols, Alfisols (Haplostsols), Entisols (Torrismans)	Stoneham, Fort Collins, Olney, Richfield, Keith, Colby, Ulysses, Rosebud, Manter, Ascalon, Patner, Hartun, Rago, Alliance, Canyon, Weld, Norfolk, Adena	Mesic/ Ustic, Aridic	12-18	140-180	16.46; 62.94	Shortgrass prairie: blue grama, buffalograss, with threadleaf sedge, fringed sage, Junegrass, and western wheatgrass. Riparian areas contain cottonwood/shrub/herbaceous species.	Dryland and irrigated cropland with winter wheat, grain sorghum, corn, barley, sunflowers, and sugar beets (grown under irrigation). Some grassland and rangeland. Gas and oil production, especially in the Denver Basin.
25e. Front Range Fans	782	Fans, irregular plains, and scattered low hills. Intermittent and perennial streams with gravelly, silty and sandy substrates. Streams are generally colder and may contain species found more commonly in the Southern Rockies (21).	Quaternary gravel and sandy alluvium, eolian sand deposits. Underlain by sandstone, claystone, and shale of the Cretaceous Laramie on hills formations and sandstone, mudstone, claystone, and conglomerate of the Tertiary Denver and Arapahoe formations to the south.	Mollics (Argiustols), Aridisols (Haplagids), Alfisols (Haplostsols), Entisols (Torrismans)	Alvon, Ascalon, Larimer, Stoneham, Dacson, Nunn, Remhold, Shingle, Otero, Thaddeus, Olney, Lim, Englewood, Netherland, Kutch, Denver	Mesic/ Ustic, Aridic	14-18	120-140	12.40; 56.88	Shortgrass and mixgrass prairie: blue grama, needle-and-thread, western wheatgrass, buffalograss, Junegrass, and little bluestem. Big bluestem is scattered in low concentrations throughout the region. Riparian areas contain cottonwood/shrub/herbaceous species.	Urban and residential, some irrigated cropland with grain, wheat, and barley. Many manmade lakes and gravel pits.

26. SOUTHWESTERN TABLELANDS

Level IV Ecoregions	Physiography	Geology			Natural Vegetation	Land Use and Land Cover					
		Surface and Bedrock	Soils	Climate							
26a. Piedmont Plains and Tablelands	13373	Irregular and dissected plains. Intermittent streams, with a few large perennial streams which mostly originate in mountainous higher relief areas. Silty and sandy substrates.	Quaternary alluvium and eolian deposits of loess, silt, and sand. Cretaceous shale, limestone, and sandstone.	Alfisols (Haplostsols), Paleustols, Alfisols (Haplostsols), Entisols (Torrismans), Aridisols (Haplagids), Haplocalcids)	Wiley, Beas, Colby, Marvel, Minnesota, Penrose, Rocky Fort, Nepeta, Ascalon, Fort Collins, Fort Collins, Fort Collins, Rader, Midway, Limon, Deertrail, Abster, Harvey, Mackston, Yoder, Blackeland, Ordway, Cadoma, Camp, Planter	Mesic/ Ustic, Aridic	Mostly 12-16, with 10-12 in lying area between Pueblo and Las Animas	120-160	14.46; 60.92	Shortgrass prairie: blue grama, green needlegrass, buffalograss, needle-and-thread, and red threadgrass. Also may include mixed-river environments, such as the Rio Grande galletta grass, sand dropped, and little bluestem. Sand sagebrush, yucca and cholla cactus can also occur.	Mostly grass-covered rangeland with scattered areas of dry and irrigated cropland. Dryland agriculture is concentrated in the north of the Arkansas River.
26b. Mesa de Maya/ Black Mesa	585	Dread mesa, knobs, and dissected plains with deep canyons. Rough, steep slopes are common.	Quaternary alluvium and colluvium. Capping the mesa: Tertiary basalt, 60 to 70 feet thick. Cretaceous sandstone and shale. On slopes and exposed canyons: Jurassic sandstone, claystone, and limestone. Triassic sandstone, siltstone, and limestone.	Mollics (Argiustols), Haplostsols, Entisols (Torrismans), Aridisols (Haplocalcids)	Capulin, Torrance, Ampco, Travessilla, Carnero, Fruitland, Marano, Alicia, Kim, Rock outcrops	Mesic/ Ustic, Aridic	14-18	100-150	16.46; 58.90	Pinyon-juniper woodland and shortgrass prairie. On top of the mesa: shortgrass prairie dominated by blue grama, hairy grama, sideoats grama, galletta grass, buffalograss, and western wheatgrass. On rocky slopes and in canyons: juniper with pinyon oak woodlands with a few isolated areas of mesquite shrublands.	Woodland, rangeland, grassland, and wildlife habitat.
26g. Purgatoire Hills and Canyons	1041	Dissected plains and tablelands with some hills, steep canyons, and rock outcrops.	Quaternary alluvium and colluvium. Cretaceous sandstone and shale. Jurassic sandstone, claystone, and shale. Triassic sandstone and siltstone. Permian siltstone, dolomite, and sandstone.	Entisols (Torrismans), Alfisols (Haplostsols), Entisols (Torrismans), Aridisols (Haplostsols)	Travessilla, Baca, Marvel, Minnesota, Penrose	Mesic/ Ustic, Aridic	12-16	100-150	14.46; 58.90	Juniper woodland and shortgrass prairie. Rocky Mountain juniper, onceed juniper, Utah juniper, blue grama, and buffalograss.	Woodland and wildlife habitat.
26h. Pinyon-Juniper Woodlands and Savannas	997	Dissected plains and tablelands with some scattered ridges and hills.	Quaternary alluvium and colluvium. Cretaceous shale, limestone, and sandstone.	Entisols (Torrismans), Alfisols (Haplostsols), Entisols (Torrismans), Aridisols (Haplagids)	Travessilla, Baca, Noden, Bond, Rader, Midway, Limon, Marvel, Minnesota, Penrose, Wozner (in west at the base of mountains), Rock outcrops.	Mesic, Frigid/ Ustic, Aridic	12-20, with highest near the mountains	90-120	16.44; 56.88	Pinyon-juniper woodlands: pinyon pine, Rocky Mountain juniper, eastern cedarwood, and onceed juniper.	Woodland and wildlife habitat.
26i. Pine-Oak Woodlands	580	Dissected plains and tablelands.	Quaternary alluvium and colluvium. Tertiary and Cretaceous sandstone, conglomerate, sandstone, claystone, and shale.	Mollics (Argi							