From “Soil Survey of Paonia Area, Colorado, Parts of Delta, Gunnison and Montrose Counties”, by William R Hunter. US Department of Agriculture, Soil Conservation Service in cooperation with Colorado Agricultural Experiment Station, January 1981.

18-Bulkley clay loam, 12 to 25 percent slopes.

This is a deep, well drained soil that overlies shale and interbedded sandstone. It formed in fine textured alluvium and is on mountain side slopes and uplands. Elevation ranges from 6,500 to 8,500 feet. Average annual precipitation is about 18 inches, average annual air temperature is about 37 degrees F, and the average frost-free season is about 100 days.

Typically the surface layer is grayish brown clay loam about 3 inches thick. The subsoil is grayish brown or light brownish gray clay about 42 inches thick. The substratum, to a depth of 60 inches, is pale brown silty clay loam.

Permeability is slow, and available water capacity is high. Effective rooting depth is about 60 inches. Surface runoff is rapid. The hazard of erosion from wind is slight and from water is moderate to high.

Included with this soil in mapping are a few small areas of Fughes and Cochetopa soils. Also included are rock outcrops on knobs and crests of hills. In some areas the surface layer is light clay. In some small areas, mostly on hilltops, gravel and cobbles are on the surface. In some areas shale or interbedded sandstone is at a depth of 40 to 70 inches.

The native vegetation on this soil consists mainly of western wheatgrass, fescue, oakbrush, serviceberry, and aspen.

Because annual precipitation is low and has poor seasonal distribution, this soil is not suited to nonirrigated crops. Where native grasses have been depleted or destroyed, however, a high degree of success can be expected from pasture plantings of nonirrigated grasses in spring, late in summer, and in fall to protect the soil from erosion and to provide grazing for livestock. Smooth brome, crested wheatgrass, and intermediate wheatgrass are suitable for seeding. Good pasture management must be practiced to maintain the grasses.

The potential plant community on this soil consists mainly of wheatgrasses, bluegrasses, and needlegrasses. As range condition deteriorates, wheatgrasses and needlegrasses decrease, forbs and woody shrubs increase, and undesirable weeds and annual plants invade and become more abundant.

Seeding is advisable where slopes do not exceed 20 percent, if range is in poor condition. Bluebunch wheatgrass, western wheatgrass, and big bluegrass are suitable for seeding. Grasses that meet the seasonal requirements of livestock should be selected. Preparing a seedbed and drilling the seed help to obtain the best results. On some sites, control of competing shrubs is required to improve range condition. Seeded or brushed areas should be fenced.

This soil is used for grazing, recreation, and wildlife. It is used for winter range by mule deer and elk. Some important plant species which can be managed for optimum production are bitterbrush, mountainmahogany, Gambel oak, serviceberry, and elk sedge. Berry-producing shrubs are an important habitat element of black bear. This soil provides habitat for Merriam turkey, blue grouse, and band-tailed pigeon. In favorable years, mature Gambel oaks produce acorns, which are used by Merriam turkey.

If this soil is used for urban development, the main limitations are shrink-swell potential and slope. If this soil is used for septic tank absorption fields, permeability is the main limitation. The limitations can be overcome by the use of proper design and construction methods.

This soil is in capability subclass VIe, nonirrigated.