

NW¹/₄SE¹/₄, Section 20, T23S, R23E, NMPM, Eddy County, NM (BLM)

Map Reference: USGS Bandanna Point Quadrangle, 15 Minute Series, 1940.

Terrain

Patterson Federal Well No. 1 is situated on a low ridge within the bounds of Sotol Basin. Prominent ridges occur on the west, south, and east, and serve to crenulate the horizon. Within the immediate area, drainage is provided by Last Chance Canyon which debouches into Dark Canyon Draw to the east. Surficial deposits consist of Permian-aged, chert and limestone cobbles. Scree, resulting from the solution of limestone, mantles the ridge. Soil individuals belong to the Typic Paleorthid and Pachic Calciorthid subgroups with the former being confined to gently rolling upland areas and the latter to the small water course crossed by the access. In general, soils tend to be fine-grained, calcareous, silty clay loams and silt loams.

Floristics

Where supported by Typic Paleorthids, the local floral assemblage is distinguished by an association of Larrea tridentata, Croton pottsii, Condalia ericoides, Nolina sp., Yucca elata, Rhus trilobata, and Krameria sp. Of these, Rhus and Croton can be termed as being dominant. Forbs hosted by these soils include Cirsium sp., Solanum elaeagnifolium, Senecio longilobus, Perezia nana, Euphorbia sp., Portulaca mundula, Verbena sp., and Tradescantia wrightii. Graminae is best represented by Bouteloua barbata, Bouteloua eriopoda, Bouteloua gracilis, Hilaria mutica, and Aristida sp. Ferocactus sp., Echinocereus pectinatus, Opuntia engelmannii, and Opuntia imbricata are the principal members of the Cactaceae. A thicket of Acacia vernicosa and Rhus trilobata demarcate Pachic Calciustolls. Clematis sp. often associates with Rhus in these soils.