Ecological site group DX035X04CESG01 Chaco Mesa LRU subset - Bottomlands

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Key Characteristics

- Chaco Mesa. This LRU subset is composed of Cretaceous materials, is generally above 1900 m in elevation, and does not drain directly into the San Juan River. The Chaco Mesa subset is further distinguished from the Bisti Lowlands in that the former receives more monsoonal moisture, harbors more warm-season grasses, and experiences a considerable amount of blowing sands.
- Site occurs on landforms that are concave in one or more dimensions, and receive extra moisture from runoff, throughflow, or discharge in the landscape.

Provisional. A provisional ecological site description has undergone quality control and quality assurance review. It contains a working state and transition model and enough information to identify the ecological site.

Physiography

Bottoms of drainageways and swales.

Soil features

Soil properties for this group are variable. Salinity and sodicity range from slight to high. Flooding frequency is occasional. Soils well-to poorly-drained. This variability can be found within a single site/delineation, as well as between individual ecosites linked to this grouped concept.

Major Land Resource Area

MLRA 035X Colorado Plateau

Subclasses

- R035XB018NM–Loamy Bottom 6-10"
- R035XB024NM-Saline Bottom 6-10"
- R035XB028NM-Sandy Bottom 6-10"
- R035XB211AZ–Loamy Wash 6-10" p.z. Saline-Sodic
- R035XB216AZ—Sandy Wash 6-10" p.z.
- R035XC312AZ–Loamy Wash 10-14" p.z.

Correlated Map Unit Components

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Stage

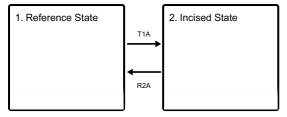
Provisional

Contributors

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State and transition model

Ecosystem states



State 1 Reference State

This state is defined based on hydrology and channel morphology. The channel is not markedly-incised, so a broader swath of land is flooded and/or subirrigated than in State 2. Plant communities in this state are variable, but tamarisk is generally absent.

Dominant plant species

- fourwing saltbush (Atriplex canescens), shrub
- greasewood (Sarcobatus vermiculatus), shrub
- shadscale saltbush (Atriplex confertifolia), shrub
- alkali sacaton (Sporobolus airoides), grass
- western wheatgrass (Pascopyrum smithii), grass
- Indian ricegrass (Achnatherum hymenoides), grass
- saltgrass (Distichlis spicata), grass

State 2 Incised State

This state is defined based on hydrology and channel morphology. The channel is markedly-incised, so a narrower swath of land is flooded and/or subirrigated than in State 2. Plant communities in this state are variable, but tamarisk is generally dominant in the overstory.

Dominant plant species

- tamarisk (Tamarix), tree
- rubber rabbitbrush (Ericameria nauseosa), shrub
- fourwing saltbush (Atriplex canescens), shrub

Transition T1A State 1 to 2

Incision of the stream channel. This can result from a number of phenomena, including: prolonged herbivory, water diversions, and establishment of stock tanks in the channel.

Restoration pathway R2A State 2 to 1

This pathway involves the reversal of incision. A combination of restoration practices will likely be required. These may include: installing erosion-control structures, removal of earthen dams, creating livestock exclosures, and removing tamarisk.

Citations