Ecological site group DX035X04BESG06 Bisti Lowlands LRU Subset - Bottomland Subgroup

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Key Characteristics

- Bisti Lowlands. This LRU subset is composed of Cretaceous materials, and is generally below 1900 m in elevation. The Bisti Lowanads subset is further distinguished from Chaco Mesa in that the former receives less monsoonal moisture, harbors less warm-season grass, and experiences low amounts 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

This site occurs on drainageway bottoms. True flooding (as opposed to overland flow) occurs on this site. Watershedding landforms, including elevated terraces, are excluded from this concept.

Soil features

Soils are quite variable in texture and hydrology. Their unifying property is that they receive periodic flooding.

Major Land Resource Area

MLRA 035X Colorado Plateau

Subclasses

- DX035X03E005–Salt Flats
- R035XB018NM–Loamy Bottom 6-10"
- R035XB024NM–Saline Bottom 6-10"
- R035XB028NM–Sandy Bottom 6-10"
- R035XB216AZ–Sandy Wash 6-10" p.z.
- R035XB273AZ–Sandy Bottom 6-10" p.z. Perennial
- R035XC312AZ–Loamy Wash 10-14" p.z.

Correlated Map Unit Components

23436595, 23436222, 23436566, 23436248

Stage

Provisional

Contributors

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State and transition model

Ecosystem states



State 1 Reference State

A mix of shrubs, forbs, and grasses. The channel has not incised significantly, so significant acreage is effectively flooded and/or subirrigated. Tamarisk is generally absent. Fremont cottonwood generally present in perennial systems.

Dominant plant species

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

State 2 Incised State

A mix of shrubs, forbs, and grasses with an overstory of tamarisk. The channel is significantly incised, so minimal acreage is effectively flooded and/or subirrigated.

Dominant plant species

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

Transition T1A State 1 to 2

Various mechanisms that result in incision of the channel. These can include: heavy traffic, water diversions, and establishment of stock tanks in the drainageway.

Restoration pathway R2A State 2 to 1

Restoration practices that reverse incision and restore hydrology. This pathway will involve a combination of practices such as: establishing exclosures, contouring, dam removal, and installing erosion control structures.

Citations