

# Ecological site group DX035X03DESG01

## Lake Bidahochi - Sodic

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### Key Characteristics

- Lake Bidahochi Sediments
- Soils sodic

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 ecological site occurs on nearly level to gently sloping plateaus, structural benches and fans with slopes up to 15 percent. The site does not benefit from run-on moisture. The soils are derived from shale, claystone, and sandstone and are moderately deep to soft bedrock. Soil surface textures range from very fine sandy loam to clay loam.

### Climate

This group has a very dry and windy climate that is hot in the summer and cold in the winter. The annual precipitation averages between 6 and 10 inches. The soil moisture regime is typical aridic and the soil temperature regime is mesic. A slight majority of the precipitation arrives during the late fall, winter, and early spring. This winter season moisture originates in the Pacific Ocean and arrives as rain, or sometimes snow, during widespread frontal storms of generally low intensity. The majority of the snow (average range of 1 to 17 inches) falls from December through February, but rarely lasts more than a few days. A seasonal drought occurs from late May through early July. Summer rains occur from July through September during brief intense local thunderstorms. The rain is sporadic in intensity and location. The moisture originates from the Gulf of Mexico in the early summer and the Gulf of California in the late summer/early fall. Windy conditions are common year round, but the winds are strongest and most frequent during the spring.

### Soil features

The soils on this site consist of well drained, slowly permeable, sodic soils which are moderately deep to soft bedrock. The soils formed in alluvium, slope alluvium and residuum derived from shale, claystone, and sandstone. Soil surface textures generally very fine sandy loam to clay loam. Subsurface textures are typically loam, clay loam, silty clay, silty clay loam and clay.

### Vegetation dynamics

Please see associated ecological sites under subclasses to view state and transition models.

This plant community is a perennial grassland with a moderate amount of low shrubs and a small percentage of forbs. Natural climatic variation can result in changes in the amount of and ratio of both individual plants. Dominant plants are galleta, alkali sacaton, shadscale and mound saltbush. Unmanaged grazing and prolonged drought can shift the plant community to a grassland - shrubland with increased native forbs along with the introduction of non-native invasive annuals. Warm season grasses dominate with native shrubs along with the introduction of non-native invasive annual species. Annuals, including non-natives, can make up to 15% of the total plant community composition. The amount of bare ground has increased on this site and sodic slickspots are present.

## Major Land Resource Area

MLRA 035X  
Colorado Plateau

### Subclasses

- DX035X03A118–Bottomland
- DX035X03A120–Swale
- DX035X03B134–Gravelly - Woodland
- DX035X03B633–Colluvial Slopes 13-17" p.z. (PIED)
- DX035X03G002–Western Plateau Zuni Reservation 13 to 16 inches
- R035XA101AZ–Breaks 10-14" p.z.
- R035XB225AZ–Clay Loam Upland 6-10" p.z. Sodic

### Correlated Map Unit Components

22529425, 22529551, 22529554, 22529547, 22529549, 22529747, 22529511, 22529702, 23184770, 23185040, 23185042, 23186666, 23187062, 23187521, 23187523, 23187517, 23187518, 23187484, 23187577, 23187575, 23187584, 23185889, 23436550, 23436307, 23436311, 23436313, 23436331, 23436373, 23436378, 23436394, 23436402, 23436404, 23436454, 23436513, 23436525, 23436523, 23436533

### Stage

Provisional

### Contributors

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### State and transition model

### Citations