



Vegetation Classification List Update for Amistad National Recreation Area

Natural Resource Report NPS/CHDN/NRR—2011/296



ON THE COVER

Photograph within Amistad National Recreation Area
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Executive Summary

The National Park Service (NPS)-Chihuahuan Desert Network (CHDN) and Amistad National Recreation Area (AMIS and NRA), with the assistance of the National Vegetation Inventory Program (NVIP) staff, are preparing to conduct vegetation classification plot sampling in support of creating a vegetation map and geodatabase beginning in spring 2011. As part of study plan (NPS-AMIS 2010) preparation, a preliminary list of 23 ecological systems and component vegetation alliances and plant associations was prepared, primarily from botanical field work conducted by Dr. Jackie Poole in 2004 and the NatureServe Explorer Web site (2010), then vetted by the AMIS species list generated primarily by Dr. Richard Worthington (2002) and Dr. Jackie Poole (2004) to inform the field crews, improve planning decisions, and generate cost estimates for project tasks.

The purpose of Task 3.0: Vegetation Classification List Update for AMIS, is to refine and, when appropriate, update the preliminary classification list of vegetation occurring within AMIS to the vegetation alliance and plant association levels of the National Vegetation Classification (NVC) maintained by NatureServe. The sources of new information include the legacy data evaluated under Task 1.0 of this project, and discussions with researchers sampling classification data on-park.

The plant species list provided by (NPS-CHDN) Biological Science Technician Missy Powell numbered 873 species and varieties (NPS-AMIS 2010) and, with more than 15 legacy research projects evaluated under Task 1.0 of this project, formed the basis for selecting and updating potential vegetation alliances and plant associations occurring within AMIS. The entire updated list presented in tabular form by physiognomic types presents 82 vegetation alliances and 102 plant associations that potentially occur in AMIS. In addition, 52 provisional plant communities described by Poole (2004) are included in this classification list to alert field researchers that previously undescribed communities may be present and should be sampled. There are 15 potential forest and woodland alliances comprising 24 potential associations and 8 provisional plant communities; 33 potential shrubland, dwarf-shrubland, and shrub herbaceous alliances comprising 53 potential associations and 32 provisional plant communities; and 34 potential herbaceous and sparse alliances comprising 25 potential associations and 12 provisional plant communities. As deemed appropriate from the NVC and from legacy research, semi-natural vegetation types characterized by nonnative plant species were included in this classification (representing 10 vegetation alliances and 11 plant associations).

This vegetation classification list will be invaluable as a guidance tool for field crews to apply provisional names to vegetation stands sampled in the field with classification plots, prior to formal classification using statistical analyses. By reviewing this classification list, field crews will also be able to determine when they have encountered a previously undescribed vegetation type. A structured alliance/association list also allows field crews to tally classification plot and observation point numbers on a daily or trip basis to reduce unnecessary field sampling and also to ensure distribution of plots to sample diversity NRA-wide, saving the project time and funding while ensuring thorough vegetation type sampling.

Introduction

CHDN and AMIS, with the assistance of the NVIP staff, are preparing to conduct vegetation classification plot sampling in support of creating a vegetation map and geodatabase beginning in spring 2011. Field crews benefit from having a preliminary list of vegetation alliances and plant associations from which to inform landscape observations of vegetation stands, classification plot site selection, plot density, and community type decisions when sampling vegetation types for classification under the NVC. The list provided herein was prepared using legacy data (analyzed in a companion research report, Task 1.0: Legacy Data Evaluation for AMIS), interviews with researchers directly involved in legacy data gathering, the AMIS plant species list (provided as appendix 1), and NatureServe's Explorer Web site (NatureServe 2010).

The NVC, as developed by The Nature Conservancy (TNC) and currently maintained by NatureServe, represents a national system containing eight levels: (1) Formation Class, (2) Formation Subclass, (3) Formation, (4) Division, (5) Macrogroup, (6) Group, (7) Alliance, and (8) Association, with the finest level being the plant association. Alliances are usually aggregations of associations that are physiognomically uniform and share one or more characteristic or diagnostic species. An association is defined as a plant community or type with a consistent species composition, uniform physiognomy, and homogenous habitat conditions (Flahault and Schroter 1910). The plant association or community type is determined by environmental patterns and disturbance processes.

Associations are separated from alliances through the use of total floristic composition and are named by the most dominant and/or indicator species. For the name or title assigned to an association or alliance, a single dominant species may be used (*Prosopis glandulosa* Woodland). If two dominant species occur in the same stratum a dash is used (e.g. *Acacia berlandieri* – *Leucophyllum frutescens* Shrubland). If two dominant species occur in different strata, then a slash is used to separate them (e.g. *Prosopis glandulosa* / *Panicum virgatum* Woodland). Parentheses are used when the diagnostic species are not consistent in the association or alliance (i.e., *Bothriochloa ischaemum* – (*Pappophorum bicolor*) Herbaceous Vegetation).

The purpose of the NVC is to provide a complete, standardized listing and description of all vegetation types that represent the variation in biological diversity at the community level and to identify those communities that require protection (Grossman et al. 1998). The NVC focuses on existing vegetation rather than potential natural vegetation, climax vegetation, or physical habitats. Because it is not restricted to static vegetation types, classification units are useful both for inventory, site description, and as the basis for building dynamic ecological models. The NVC also includes vegetation along the natural-invasive-cultural (semi-natural and modified) continuum, but it emphasizes natural communities as the focus of biodiversity protection.

The project minimum mapping unit (MMU) is 0.5 hectare (1.24 acres) and vegetation stands are sampled using classification plots. Typically, between three to five classification plots are required to adequately describe most plant associations. Small, unique vegetation patches or stands are often termed “park specials” in the NVIP because of their value for overall management, but they are less than the project MMU. Resource management staff at AMIS identified such stands of unique vegetation at the AMIS Study Plan (2010) kick-off meeting.

Background

The following discussion was excerpted in part from the AMIS Study Plan (2010) and users are encouraged to review the plan to place this classification research study in context with the larger project. Uninundated reaches of the Rio Grande and Pecos and Devils rivers support most of the woodland and forest vegetation types. The majority of AMIS vegetation consists of thornscrub shrubland communities and some sparsely vegetated rock outcrops. A broad drawdown zone can occur on the reservoir shoreline that may be unvegetated or may support shrubland or herbaceous vegetation types if the drawdown occurred over several growing seasons.

The Texas Parks and Wildlife Department (TPWD) (2009) describe this reach of the Rio Grande under the Trans-Pecos, Edwards Plateau, and South Texas Brush Country (Rio Grande Basin) Natural Regions and the Level III Ecoregion of the South Texas Plains, Edwards Plateau, and Trans-Pecos. During 2007-2008, the DHS-USBP used the NVC to describe the vegetation of the Rio Grande floodplain and adjacent toeslopes and canyons in the Del Rio sector (USDHS-USBP 2008). Poole (2004) recorded plant species frequency on pre-selected sites to prepare a plant species list for AMIS, and reported 76 different plant communities. Two major vegetation types are described in the AMIS General Management Plan (NPS 2006); Floodplain/Upland Riparian and Scrub Desert and Thornscrub, as follows:

Floodplain/Upland Riparian: consists of seven general categories including Chihuahuan Desert Scrub, Tamaulipan Floodplain, Thornscrub, Savannah, and North American Arid West Emergent Marsh (USDHS-USBP 2008). The Rio Grande, Devils River, and Pecos River have high water tables and dependable year-round flows and where not confined by steep canyon walls support dense stands of vegetation. Nonnative salt cedar or tamarisk (*Tamarix* spp.) and giant reed or carrizo (*Arundo donax*) are being systematically removed from some reaches of the Rio Grande allowing native riparian and wetland plants to reestablish.

Scrub Desert and Thornscrub: this vegetation structure was compiled from 76 plant communities listed in Poole (2004), 10 vegetative structures from Larson (2002), and corresponding types including Chihuahuan Desert Scrub and Tamaulipan Thornscrub vegetation described by USDHS-USBP (2008). Desert scrub is characterized by shrubs and succulents. Grasses are understory or occur in small patches and typically provide insufficient fuels to carry fire. Scrub Desert occurs on toeslopes, hills, and cliffs adjacent to the river floodplains and above the reservoir high-water line.

Project area vegetation distribution is influenced by several factors (ecologic drivers) that include hydrology, elevation, slope, aspect/slope exposure, precipitation patterns, temperature extremes, topographic position, geology, and soils. The environmental drivers have resulted in a unique assemblage of plant species and plant communities. The environmental drivers are discussed in detail and used to prepare bio-physical unit maps in support of field crews in the companion study (Task 2.0: Gradsect and Field Sampling Plan for AMIS).

The Rio Grande annual flows and sediment delivery/removal have been controlled by Amistad Dam and upstream dams and groundwater pumping for many decades resulting in diminished overbank flooding and allowing bank-armoring vegetation including salt-cedar, giant reed or carrizo, Johnson grass (*Sorghum halepense*), buffelgrass (*Cenchrus ciliaris*), and Bermuda grass

(*Cynodon dactylon*) to become established on riverbanks, point bars, and islands. These invasive, nonnative species have become a management concern and the assignment of AMIS resources to monitor populations and attempt focused control and eradication methods has occurred. Nonnative vegetation types are routinely sampled for classification and mapping purposes under the NVIP.

Legacy Data

Legacy data are existing qualitative and quantitative vegetation information collected in support of a variety of AMIS research projects over the years. Please refer to the companion study (Task 1.0: Legacy Data Evaluation for AMIS [2010]) and the AMIS Study Plan (2010) for an in-depth summary of this project task.

Plant species list development for AMIS was critical to this project task, and three principle legacy studies were undertaken to prepare a comprehensive floristic inventory. In the first, TPWD (1995) botanists in the Texas Natural Heritage Program identified 162 vascular plant species within AMIS, then managed by the U.S. Air force on 107 acres. Secondly, Dr. Richard Worthington (2002) submitted a working draft of plant species known to occur in AMIS. The tabular data were divided into families and each taxa was described by scientific name and author, common name, and known location within the NRA. Listed were 618 species of vascular plants (including club mosses, ferns, and fern allies). The third and most complete species list was prepared by Poole (2004) and totaled 829 taxa. Of these, 706 species were collected in and/or represented by herbarium specimens from AMIS and an additional 123 species had a high likelihood of occurring. Forty-nine plant species collected within AMIS are nonnative and an additional 13 nonnative plant species are expected to occur. Previously unknown AMIS plant species determined from this study were added to the species list provided in Appendix 1.

Also described in Poole (2004) are 76 plant communities (woodland, shrubland, herbaceous, and sparse) determined in the field using a visual estimate of species frequency. The dominant species comprising these communities were used in part to develop the potential list of AMIS vegetation alliances and plant associations (Tables 1, 2, and 3).

Results

The results of this research study are presented in Table 1; a list of 82 vegetation alliances and 102 plant associations was prepared to inform field crew classification plot sampling and guide CHDN-AMIS planning decisions in terms of timing and costs. Additionally, 52 plant communities described by Poole (2004) and not currently present in the NVC were included in the provisional list of vegetation alliances and plant communities to ensure that field crews are aware of potentially new types to sample. A field oversight trip by Cogan Technology, Inc. (CTI) ecologists on December 9, 2009, confirmed the presence of several of the upland and riparian/wetland plant communities included on the list. The final project classification list will appear in the final project report and will be based primarily on new plot data likely collected during 2011; it is unlikely that supplemental legacy data will be available. Additionally, an updated species list will be appended to the project final report and will be available in the project geodatabase.

The preliminary vegetation classification list presented herein supports two AMIS Study Plan assumptions relative to field data collection: (1) sufficient vegetation data occurs for this area that a relatively accurate preliminary list of ecological systems, vegetation alliances, and plant associations was created; and (2) new plant associations and possibly vegetation alliances will be classified from the plot database following field sampling for plots and accuracy assessment points. Vegetation alliances and plant associations listed in Tables 1, 2, and 3 and having an element code (A. or CEGl, respectively) have been previously classified and described on the NatureServe Explorer Web site: (www.natureserve.org/explorer/servlet/NatureServe?init=Ecol). The Poole (2004) provisional plant communities not presently recognized in the NVC are designated with CEGl00xxxx.

For the state of Texas, the NVC currently includes 118 environmental systems, 248 vegetation alliances, and 525 plant associations (NatureServe 2010). When vetted with the AMIS species list of more than 800 taxa, the habitats known for the Trans-Pecos Region and acquired from more than 15 legacy studies, and an oversight field trip, this task resulted in identification of 23 ecological systems, 82 vegetation alliances, and 154 plant associations and provisional communities as possibly occurring within AMIS. The AMIS vegetation inventory area consists of approximately 15,000 upland and shallow water acres and an adequate level of sampling determined in the AMIS Study Plan (2010) was estimated to be between 200 to 350 classification plots; no legacy plots are considered to be potentially useful, instead all new sampling is recommended.

Because vegetation alliances and plant associations can occur across more than one ecological system, that breakdown (featured in the AMIS Study Plan [2010]) is not used in this task to avoid confusion and repetition. Rather, the list of plant communities presented herein is alphabetized and separated by physiognomic or structural types to be easily and efficiently accessed by field crews. Table 1 includes the forest and woodland types that number 15 vegetation alliances and 24 plant associations (plus eight Poole [2004] plant communities); Table 2 includes the shrubland, dwarf-shrubland, and shrub herbaceous types that number 33 vegetation alliances and 53 plant associations (plus 32 Poole [2004] plant communities); and

Table 3 includes the herbaceous and sparse types that number 34 vegetation alliances and 25 plant associations (plus 12 Poole [2004] plant communities).

Two important uses of the AMIS classification list by field crews are readily identified. The first important use includes documenting vegetation classification plot and observation point collection on a daily and field trip basis to avoid wasteful oversampling, but also to guide representative sampling across the project area so each type is represented by its diversity NRA-wide. Rare types may be sampled as little as one time, while common types may receive 10 to 15 classification plots to document regional diversity. The second important use is to apply the correct provisional plant community name sampled on the vegetation classification plot field form or in the electronic data logger.

Table 1. NVC Forest and Woodland Vegetation Alliances and Plant Associations Identified as Potentially Occurring within the AMIS Vegetation Inventory Project Area

NVC Alliance and/or Association	Common Name	Element Code
Acacia farnesiana - Parkinsonia aculeata Temporarily Flooded Forest Alliance - Acacia farnesiana - Parkinsonia aculeata Temporarily Flooded Forest	Huisache - Retama Temporarily Flooded Forest Alliance - Huisache - Retama Temporarily Flooded Forest	A.1908 CEGL007755
Acacia farnesiana Woodland Alliance - Acacia farnesiana / Mixed Grasses Wooded Herbaceous Vegetation - Acacia farnesiana - (Prosopis glandulosa) Woodland - Acacia farnesiana – Prosopis glandulosa / Aloysia gratissima Woodland	Huisache Woodland Alliance - Huisache / Mixed Grasses Wooded Herbaceous Vegetation - Huisache - (Honey Mesquite) Woodland - Huisache – Honey Mesquite / Whitebrush Woodland	A.660 CEGL00xxxx CEGL002131 CEGL00xxxx
Carya illinoensis – (Celtis laevigata) Temporarily Flooded Forest Alliance - Carya illinoensis - Celtis laevigata Forest	Pecan – (Sugarberry) Temporarily Flooded Forest Alliance - Pecan - Sugarberry Forest	A.282 CEGL002087
- Celtis pallida – Prosopis glandulosa Woodland	- Granjeno – Honey Mesquite Woodland	CEGL00xxxx
Juniperus ashei Woodland Alliance	Ashe's Juniper Woodland Alliance	A.501
Juniperus pinchotii Woodland Alliance - Juniperus pinchotii / Bouteloua curtipendula - Bouteloua hirsuta Woodland - Juniperus pinchotii / Bouteloua gracilis Woodland	Pinchot's Juniper Woodland Alliance - Pinchot's Juniper / Sideoats Grama - Hairy Grama Woodland - Pinchot's Juniper / Blue Grama Woodland	A.505 CEGL004940 CEGL002122
Pinus cembroides – Quercus gravesii Forest Alliance	Mexican Pinyon Pine – Chisos Red Oak Forest Alliance	A.392
Populus deltoides Temporarily Flooded Forest Alliance - Populus deltoides - Celtis laevigata / Sapindus saponaria Woodland - Populus deltoides / Panicum virgatum – Schizachyrium scoparium Woodland - Populus deltoides – (Salix amygdaloides) / Salix (exigua, interior) Woodland - Populus deltoides - Salix nigra Woodland - Populus deltoides ssp. wislizeni / Schizachyrium scoparium Woodland - Populus deltoides (ssp. wislizeni, ssp. monilifera) / Salix exigua Woodland	Eastern Cottonwood Temporarily Flooded Forest Alliance - Eastern Cottonwood - Sugarberry / Wingleaf Soapberry Woodland - Eastern Cottonwood Switchgrass – Little Bluestem Woodland - Eastern Cottonwood – (Peachleaf Willow) / (Coyote, Sandbar Willow) Woodland - Eastern Cottonwood / Black Willow Woodland - Rio Grande Cottonwood / Little Bluestem Woodland - (Rio Grande Cottonwood, Plains Cottonwood) / Coyote Willow Woodland	A.290 CEGL005025 CEGL001454 CEGL000659 CEGL004919 CEGL005973 CEGL002685
Prosopis glandulosa Temporarily Flooded Woodland Alliance - Prosopis glandulosa Temporarily Flooded Woodland Prosopis glandulosa Woodland Alliance - Prosopis glandulosa Woodland - Prosopis glandulosa – Acacia farnesiana Woodland - Prosopis glandulosa / Bouteloua curtipendula – Nassella leucothricha Woodland - Prosopis glandulosa - Celtis pallida Woodland - Prosopis glandulosa / Leucophyllum frutescens Woodland - Prosopis glandulosa var. glandulosa - Acacia greggii - Celtis pallida / Paspalum setaceum - Urochloa ciliatissima Woodland	Honey Mesquite Temporarily Flooded Woodland Alliance - Honey Mesquite Temporarily Flooded Woodland Honey Mesquite Woodland Alliance - Honey Mesquite Woodland - Honey Mesquite – Huisache Woodland - Honey Mesquite / Sideoats Grama – Texas Needlegrass Woodland - Honey Mesquite - Granjeno Woodland - Honey Mesquite / Cenizo Woodland - Honey Mesquite - Catclaw Acacia - Granjeno / Slender Crowngrass - Fringed Signalgrass Woodland	A.637 CEGL004934 A.611 CEGL00xxxx CEGL00xxxx CEGL002133 CEGL00xxxx CEGL00xxxx CEGL007786

Table 1. NVC Forest and Woodland Vegetation Alliances and Plant Associations Identified as Potentially Occurring within the AMIS Vegetation Inventory Project Area

NVC Alliance and/or Association	Common Name	Element Code
- Prosopis glandulosa var. glandulosa - Celtis pallida / Opuntia spp. - Xylothamia palmeri Woodland	- Honey Mesquite - Granjeno / Prickly-pear species - South Texas Ericameria Woodland	CEGL007787
- Prosopis glandulosa var. glandulosa / (Celtis pallida, Phaulothamnus spinescens, Ziziphus obtusifolia var. obtusifolia) Woodland	- Honey Mesquite / (Granjeno, Snake Eyes, Lotebush) Woodland	CEGL002132
- Quercus gravesii – Pistacia mexicana Woodland	- Chisos Red Oak – Mexican Pistachio Woodland	CEGL00xxxx
Quercus fusiformis Woodland Alliance	Plateau Oak Woodland Alliance	A.477
- Quercus fusiformis / Hilaria belangeri Woodland	- Plateau Oak / Curly-mesquite Woodland	CEGL002116
- Quercus fusiformis / Schizachyrium scoparium Woodland	- Plateau Oak / Little Bluestem Woodland	CEGL002115
Quercus fusiformis – Celtis laevigata var. reticulata Woodland Alliance	Plateau Oak – Netleaf Hackberry Woodland Alliance	A.663
- Quercus fusiformis - (Celtis laevigata var. reticulata, Ulmus crassifolia) Woodland	- Plateau Oak - (Netleaf Hackberry, Cedar Elm) Woodland	CEGL002153
Salix exigua Seasonally Flooded Woodland Alliance	Coyote Willow Seasonally Flooded Woodland Alliance	A.649
- Salix exigua / Baccharis salicifolia – Baccharis neglecta / Schoenoplectus spp. Woodland	- Coyote Willow / Mule's Fat – Rooseveltweed / Clubrush species Woodland	CEGL004587
Salix gooddingii Temporarily Flooded Woodland Alliance	Goodding's Willow Temporarily Flooded Woodland Alliance	A.640
- Salix gooddingii Woodland	- Goodding's Willow Woodland	CEGL002743
- Salix gooddingii - Fraxinus velutina Temporarily Flooded Woodland	- Goodding's Willow - Velvet Ash Temporarily Flooded Woodland	CEGL003729
Salix nigra Seasonally Flooded Forest Alliance	Black Willow Seasonally Flooded Forest Alliance	A.334
- Salix nigra / (Cephalanthus occidentalis) Forest	- Black Willow / (Common Buttonbush) Forest	CEGL004773
Salix nigra Temporarily Flooded Forest Alliance	Black Willow Temporarily Flooded Forest Alliance	A.297
- Salix nigra – Celtis laevigata var. laevigata / Baccharis neglecta Forest	- Black Willow – Sugarberry / Rooseveltweed Forest	CEGL007754
- Salix nigra Forest	- Black Willow Forest	CEGL002103
Sapindus saponaria Woodland Alliance	Wingleaf Soapberry Woodland Alliance	A.627
- Sapindus saponaria var. drummondii Woodland	- Western Soapberry Woodland	CEGL004535

Table 2. NVC Shrubland, Dwarf-shrubland, and Shrub Herbaceous Vegetation Alliances and Plant Associations Identified as Potentially Occurring within the AMIS Vegetation Inventory Project Area

NVC Alliance and/or Association	Common Name	Element Code
<i>Acacia rigidula</i> – <i>Leucophyllum frutescens</i> – <i>Acacia berlandieri</i> Shrubland Alliance - <i>Acacia berlandieri</i> Shrubland - <i>Acacia berlandieri</i> South Texas Plains Shrubland - <i>Acacia berlandieri</i> – <i>Acacia rigidula</i> Shrubland - <i>Acacia berlandieri</i> - <i>Calliandra conferta</i> - <i>Castela texana</i> - <i>Forestiera angustifolia</i> Shrubland - <i>Acacia berlandieri</i> - <i>Diospyros texana</i> - <i>Sophora secundiflora</i> Shrubland - <i>Acacia berlandieri</i> - <i>Krameria ramosissima</i> Shrubland - <i>Acacia berlandieri</i> – <i>Leucophyllum frutescens</i> Shrubland - <i>Acacia berlandieri</i> - <i>Quercus pungens</i> var. <i>vaseyana</i> - <i>Quercus fusiformis</i> - <i>Porophyllum scoparium</i> - <i>Perityle lindheimeri</i> Open Cliff Sparse Shrubland	Chaparro-Prieto – Cenizo – Guajillo Shrubland Alliance - Guajillo Shrubland - Guajillo South Texas Plains Shrubland - Guajillo- Chaparro–Prieto Shrubland - Guajillo – Rio Grande Stickpea – Goatbush – Texas Swampprivet Shrubland - Guajillo – Texas Persimmon – Mescal Bean Shrubland - Guajillo – Manystem Ratany Shrubland - Guajillo – Cenizo Shrubland - Guajillo – Vasey Sandpaper Oak – Plateau Oak – Trans-Pecos Poreleaf – Lindheimer's Rockdaisy Open Cliff Sparse Shrubland	A.1909 CEGL00xxxx CEGL002181 CEGL00xxxx CEGL00xxxx CEGL00xxxx CEGL00xxxx CEGL00xxxx CEGL00xxxx
<i>Acacia farnesiana</i> Shrubland Alliance - <i>Acacia farnesiana</i> – <i>Baccharis neglecta</i> Shrubland	Huisache Shrubland Alliance - Huisache – Rooseveltweed Shrubland	A.1029 CEGL00xxxx
<i>Acacia greggii</i> Shrubland Alliance	Catclaw Acacia Shrubland Alliance	A.1036
<i>Acacia neovernicosa</i> Shrubland Alliance - <i>Acacia neovernicosa</i> / <i>Bouteloua hirsuta</i> - <i>Bouteloua gracilis</i> - <i>Bouteloua eriopoda</i> Shrub Herbaceous Vegetation - <i>Acacia neovernicosa</i> / <i>Muhlenbergia porteri</i> Shrubland	Viscid Acacia Shrubland Alliance - Viscid Acacia / Hairy Grama - Blue Grama - Black Grama Shrub Herbaceous Vegetation - Viscid Acacia / Bush Muhly Shrubland	A.1037 CEGL004244 CEGL001342
<i>Acacia rigidula</i> - <i>Leucophyllum frutescens</i> - <i>Acacia berlandieri</i> Shrubland Alliance - <i>Acacia rigidula</i> Shrubland - <i>Acacia rigidula</i> – <i>Acacia berlandieri</i> Shrubland - <i>Acacia rigidula</i> - <i>Leucophyllum frutescens</i> Shrubland - <i>Acacia rigidula</i> - <i>Leucophyllum frutescens</i> - <i>Acacia berlandieri</i> Shrubland - <i>Acacia rigidula</i> - <i>Leucophyllum frutescens</i> - <i>Hechtia glomerata</i> Shrubland - <i>Acacia rigidula</i> - <i>Acacia berlandieri</i> - <i>Jatropha dioica</i> / <i>Selaginella wrightii</i> Shrubland - <i>Acacia rigidula</i> - <i>Acacia berlandieri</i> - <i>Leucophyllum frutescens</i> Shrubland - <i>Acacia rigidula</i> - <i>Aloysia gratissima</i> Shrubland - <i>Acacia rigidula</i> - <i>Baccharis neglecta</i> Shrubland - <i>Acacia rigidula</i> - <i>Calliandra conferta</i> Shrubland - <i>Acacia rigidula</i> - <i>Diospyros texana</i> / <i>Bothriochloa ischaemum</i> var. <i>songarica</i> Shrubland - <i>Acacia rigidula</i> - <i>Krameria ramosissima</i> Shrubland	Chaparro-Prieto - Cenizo - Guajillo Shrubland Alliance - Chaparro-Prieto Shrubland - Chaparro-Prieto – Guajillo Shrubland - Chaparro-Prieto – Cenizo Shrubland - Chaparro-Prieto – Cenizo – Guajillo Shrubland - Chaparro-Prieto - Cenizo - Guapilla Shrubland - Chaparro-Prieto – Guajillo – Leatherstem / Wright's Spikemoss Shrubland - Chaparro-Prieto – Guajillo - Cenizo Shrubland - Chaparro-Prieto - Whitebrush Shrubland - Chaparro-Prieto – Rooseveltweed Shrubland - Chaparro-Prieto – Rio Grande Stickpea Shrubland - Chaparro-Prieto – Texas Persimmon / Yellow (King Ranch) Beardgrass Shrubland - Chaparro-Prieto – Manystem Ratany Shrubland	A.1909 CEGL003874 CEGL00xxxx CEGL00xxxx CEGL007759 CEGL007760 CEGL00xxxx CEGL00xxxx CEGL00xxxx CEGL00xxxx CEGL00xxxx CEGL00xxxx
<i>Arundinaria gigantea</i> Temporarily Flooded Shrubland Alliance - <i>Arundinaria gigantea</i> ssp. <i>gigantea</i> Shrubland	Giant Cane Temporarily Flooded Shrubland Alliance - Giant Cane Shrubland	A.795 CEGL003836
<i>Atriplex canescens</i> Shrubland Alliance - <i>Atriplex canescens</i> / <i>Bouteloua gracilis</i> Shrubland	Fourwing Saltbush Shrubland Alliance - Fourwing Saltbush / Blue Grama Shrubland	A.869 CEGL001283
<i>Baccharis salicifolia</i> Intermittently Flooded Shrubland Alliance	Mule's-fat Intermittently Flooded Shrubland Alliance	A.933

Table 2. NVC Shrubland, Dwarf-shrubland, and Shrub Herbaceous Vegetation Alliances and Plant Associations Identified as Potentially Occurring within the AMIS Vegetation Inventory Project Area

NVC Alliance and/or Association	Common Name	Element Code
<i>Baccharis salicifolia</i> – <i>Baccharis neglecta</i> Seasonally Flooded Shrubland Alliance	Mule's-fat – Rooseveltweed Seasonally Flooded Shrubland Alliance	A.987
<i>Bouteloua hirsuta</i> – <i>Bouteloua gracilis</i> – <i>Bouteloua eriopoda</i> Shrub Herbaceous Alliance	Hairy Grama – Blue Grama – Black Grama Shrub Herbaceous Alliance	A.1548
<i>Brickellia laciniata</i> Intermittently Flooded Shrubland Alliance	Splitleaf Brickelbush Intermittently Flooded Shrubland Alliance	A.940
- <i>Calliandra conferta</i> – <i>Acacia berlandieri</i> Shrubland	Rio Grande Stickpea - Guajillo Shrubland	CEGL00xxxx
- <i>Calliandra conferta</i> – <i>Krameria ramosissima</i> Shrubland	Rio Grande Stickpea – Manystem Ratany Shrubland	CEGL00xxxx
<i>Juglans microcarpa</i> Temporarily Flooded Shrubland Alliance	Little Walnut Temporarily Flooded Shrubland Alliance	A.945
- <i>Celtis laevigata</i> var. <i>reticulata</i> - <i>Juglans microcarpa</i> / <i>Leptochloa dubia</i> Shrubland	- Netleaf Hackberry - Little Walnut / Green Sprangletop Shrubland	CEGL002166
- <i>Celtis pallida</i> – <i>Prosopis glandulosa</i> Shrubland	- Granjeno – Honey Mesquite Shrubland	CEGL00xxxx
<i>Cephalanthus occidentalis</i> Semipermanently Flooded Shrubland Alliance	Common Buttonbush Semipermanently Flooded Shrubland Alliance	A.1011
- <i>Cephalanthus occidentalis</i> / <i>Carex</i> spp. - <i>Lemna</i> spp. Southern Shrubland	- Common Buttonbush / Sedge species - Duckweed species Southern Shrubland	CEGL002191
<i>Chilopsis linearis</i> Intermittently Flooded Shrubland Alliance	Desert-willow Intermittently Flooded Shrubland Alliance	A.1044
- <i>Chilopsis linearis</i> / <i>Brickellia laciniata</i> Shrubland	- Desert-willow / Splitleaf Brickellbush Shrubland	CEGL004933
<i>Dalea formosa</i> – <i>Mimosa borealis</i> Dwarf-shrubland Alliance	Featherplume – Pink Mimosa Dwarf-shrubland Alliance	A.3568
- <i>Dalea formosa</i> - <i>Mimosa borealis</i> Dwarf-shrubland	- Featherplume - Pink Mimosa Dwarf-shrubland	CEGL005009
<i>Dasyllirion leiophyllum</i> - (<i>Agave lechuguilla</i> , <i>Viguiera stenoloba</i>) Shrubland Alliance	Green Sotol - (<i>Lechuguilla</i> , <i>Skeletonleaf Goldeneye</i>) Shrubland Alliance	A.850
- <i>Dasyllirion leiophyllum</i> - <i>Agave lechuguilla</i> / <i>Bouteloua hirsuta</i> - <i>Bouteloua gracilis</i> - <i>Bouteloua eriopoda</i> Shrubland	- Green Sotol - <i>Lechuguilla</i> / Hairy Grama - Blue Grama - Black Grama Shrubland	CEGL004245
- <i>Dasyllirion leiophyllum</i> - <i>Viguiera stenoloba</i> - <i>Agave lechuguilla</i> / <i>Bouteloua ramosa</i> Shrubland	- Green Sotol - <i>Skeletonleaf Goldeneye</i> - <i>Lechuguilla</i> / Chino Grama Shrubland	CEGL004604
<i>Fallugia paradoxa</i> Intermittently Flooded Shrubland Alliance	Apache Plume Intermittently Flooded Shrubland Alliance	A.934
- <i>Fallugia paradoxa</i> Shrubland	- Apache Plume Shrubland	CEGL003875
<i>Flourensia cernua</i> Shrubland Alliance	Tarbush Shrubland Alliance	A.861
- <i>Flourensia cernua</i> / <i>Bouteloua curtipendula</i> Shrubland	- Tarbush / Sideoats Grama Shrubland	CEGL001336
- <i>Flourensia cernua</i> / <i>Pleuraphis mutica</i> Shrubland	- Tarbush / Tobosa Grass Shrubland	CEGL001541
<i>Fouquieria splendens</i> Shrubland Alliance	Ocotillo Shrubland Alliance	A.863
- <i>Fouquieria splendens</i> / <i>Bouteloua curtipendula</i> Shrubland	- Ocotillo / Sideoats Grama Shrubland	CEGL001376
- <i>Fouquieria splendens</i> / <i>Bouteloua hirsuta</i> Shrubland	- Ocotillo / Hairy Grama Shrubland	CEGL001377
- <i>Fouquieria splendens</i> / <i>Parthenium incanum</i> Shrubland	- Ocotillo / Mariola Shrubland	CEGL001378
- <i>Fouquieria splendens</i> Shrubland	- Ocotillo Shrubland	CEGL004452
<i>Gutierrezia sarothrae</i> Dwarf-shrubland Alliance	Broom Snakeweed Dwarf-shrubland Alliance	A.2528
- <i>Indigofera lindheimeri</i> – <i>Senna lindheimeri</i> Shrubland	- Lindheimer's Indigo – Lindheimer's Senna Shrubland	CEGL00xxxx
<i>Juglans microcarpa</i> Temporarily Flooded Shrubland Alliance	Little Walnut Temporarily Flooded Shrubland Alliance	A.945
- <i>Juglans microcarpa</i> - <i>Brickellia laciniata</i> / <i>Indigofera lindheimeriana</i> Edwards Plateau Shrubland	- Little Walnut - Splitleaf Brickellbush / Creek Indigo Edwards Plateau Shrubland	CEGL004932
- <i>Juglans microcarpa</i> / <i>Cladium mariscus</i> ssp. <i>jamaicense</i> Shrubland	- Little Walnut / Jamaica Swamp Sawgrass Shrubland	CEGL004593
- <i>Juglans microcarpa</i> Shrubland	- Little Walnut Shrubland	CEGL001103
<i>Larrea tridentata</i> Shrubland Alliance	Creosotebush Shrubland Alliance	A.851
- <i>Larrea tridentata</i> - <i>Agave lechuguilla</i> Shrubland	- Creosotebush - <i>Lechuguilla</i> Shrubland	CEGL004562

Table 2. NVC Shrubland, Dwarf-shrubland, and Shrub Herbaceous Vegetation Alliances and Plant Associations Identified as Potentially Occurring within the AMIS Vegetation Inventory Project Area

NVC Alliance and/or Association	Common Name	Element Code
- <i>Larrea tridentata</i> / <i>Dasychloa pulchella</i> Shrubland - <i>Larrea tridentata</i> - <i>Euphorbia antisiphilitica</i> Shrubland - <i>Larrea tridentata</i> - <i>Flourensia cernua</i> Shrubland - <i>Larrea tridentata</i> - <i>Jatropha dioica</i> var. <i>graminea</i> Shrubland - <i>Larrea tridentata</i> / <i>Muhlenbergia porteri</i> Shrubland - <i>Larrea tridentata</i> - <i>Opuntia schottii</i> Shrubland - <i>Larrea tridentata</i> - <i>Parthenium incanum</i> Shrubland - <i>Larrea tridentata</i> - <i>Prosopis glandulosa</i> Shrubland - <i>Larrea tridentata</i> / Sparse Understory Shrubland - <i>Larrea tridentata</i> / <i>Tiquilia canescens</i> Shrubland	- Creosotebush / Low Woolly Grass Shrubland - Creosotebush - Candelilla Shrubland - Creosotebush - Tarbush Shrubland - Creosotebush - Leatherstem Shrubland - Creosotebush / Bush Muhly Shrubland - Creosotebush - Dog Cholla Shrubland - Creosotebush - Mariola Shrubland - Creosotebush - Honey Mesquite Shrubland - Creosotebush / Sparse Understory Shrubland - Creosotebush / Gray Tiquilia Shrubland	CEGL001269 CEGL004564 CEGL001270 CEGL004566 CEGL001272 CEGL004567 CEGL001274 CEGL001275 CEGL001276 CEGL004569
<i>Acacia rigidula</i> – <i>Leucophyllum frutescens</i> – <i>Acacia berlandieri</i> Shrubland Alliance - <i>Leucophyllum frutescens</i> Shrubland - <i>Leucophyllum frutescens</i> – <i>Acacia berlandieri</i> Shrubland - <i>Leucophyllum frutescens</i> - <i>Salvia ballotiflora</i> - <i>Lippia graveolens</i> Shrubland	Chaparro-Prieto – Cenizo – Guajillo Shrubland Alliance - Cenizo Shrubland - Cenizo – Guajillo Shrubland - Cenizo - Mejorana - Redbrush Lippia Shrubland	A.1909 CEGL002168 CEGL00xxxx CEGL007789
- <i>Lippia graveolens</i> – <i>Acacia berlandieri</i> Shrubland - <i>Lippia graveolens</i> – <i>Acacia rigidula</i> Shrubland - <i>Lippia graveolens</i> – <i>Aristida purpurea</i> Shrubland	- Mexican Oregano – Guajillo Shrubland - Mexican Oregano – Chaparro-Prieto Shrubland - Mexican Oregano – Purple Three-awn Shrubland	CEGL00xxxx CEGL00xxxx CEGL00xxxx
- <i>Opuntia engelmannii</i> var. <i>lindheimeri</i> - <i>Salvia farinacea</i> Shrubland	- Texas Pricklypear – Mealy Cup Sage Shrubland	CEGL00xxxx
- <i>Parkinsonia aculeata</i> / <i>Cynodon dactylon</i> Shrubland	- Retama / Bermudagrass Shrubland	CEGL00xxxx
- <i>Parkinsonia texana</i> – <i>Castela texana</i> – <i>Forestiera angustifolia</i> Shrubland	- Texas Paloverde - Goatbush – Texas Swampprivet Shrubland	CEGL00xxxx
<i>Pleuraphis mutica</i> Shrub Herbaceous Alliance	Tobosa Grass Shrub Herbaceous Alliance	A.1551
- <i>Porophyllum scoparium</i> Rock Outcrop Sparse Shrubland - <i>Porophyllum scoparium</i> / <i>Heterotheca fulcrata</i> – <i>Penstemon baccharifolius</i> Rock Outcrop Sparse Shrubland - <i>Porophyllum scoparium</i> - <i>Perityle lindheimeri</i> Open Cliff Sparse Shrubland	- Trans-Pecos Poreleaf Rock Outcrop Sparse Shrubland - Trans-Pecos Poreleaf / Rockyscree False Goldenaster – <i>Baccharis</i>leaf Beardtongue Rock Outcrop Sparse Shrubland - Trans-Pecos Poreleaf - Lindheimer's Rockdaisy Open Cliff Sparse Shrubland	CEGL00xxxx CEGL00xxxx CEGL00xxxx
<i>Prosopis glandulosa</i> Shrubland Alliance - <i>Prosopis glandulosa</i> / <i>Atriplex canescens</i> Shrubland - <i>Prosopis glandulosa</i> / <i>Bouteloua curtipendula</i> Shrubland - <i>Prosopis glandulosa</i> / <i>Bouteloua gracilis</i> Shrubland - <i>Prosopis glandulosa</i> / <i>Cynodon dactylon</i> Shrubland - <i>Prosopis glandulosa</i> / <i>Muhlenbergia porteri</i> Shrubland - <i>Prosopis glandulosa</i> / <i>Pleuraphis mutica</i> Shrub Herbaceous Vegetation - <i>Prosopis glandulosa</i> - <i>Ziziphus obtusifolia</i> Shrubland - <i>Prosopis glandulosa</i> var. <i>glandulosa</i> - <i>Opuntia engelmannii</i> var. <i>lindheimeri</i> - <i>Borrchia frutescens</i> Shrubland - <i>Prosopis glandulosa</i> var. <i>glandulosa</i> - <i>Parkinsonia texana</i> var. <i>macra</i> - (<i>Cordia boissieri</i>, <i>Koeberlinia spinosa</i>) Shrubland - <i>Prosopis glandulosa</i> var. <i>torreyana</i> Shrubland	Honey Mesquite Shrubland Alliance - Honey Mesquite / Fourwing Saltbush Shrubland - Honey Mesquite / Sideoats Grama Shrubland - Honey Mesquite / Blue Grama Shrubland - Honey Mesquite / Bermudagrass Shrubland - Honey Mesquite / Bush Muhly Shrubland - Honey Mesquite / Tobosa Grass Shrub Herbaceous Vegetation - Honey Mesquite - Lotebush Shrubland - Honey Mesquite - Texas Prickly-pear - Bushy Seaside-tansy Shrubland - Honey Mesquite - Texas Paloverde - (Anacahuita, Allthorn) Shrubland - Western Honey Mesquite Shrubland	A.1031 CEGL001382 CEGL002194 CEGL001383 CEGL00xxxx CEGL001511 CEGL001641 CEGL004939 CEGL007790 CEGL007762 CEGL001381
<i>Quercus mohriana</i> Shrubland Alliance	Mohr Oak Shrubland Alliance	A.782

Table 2. NVC Shrubland, Dwarf-shrubland, and Shrub Herbaceous Vegetation Alliances and Plant Associations Identified as Potentially Occurring within the AMIS Vegetation Inventory Project Area

NVC Alliance and/or Association	Common Name	Element Code
- <i>Quercus mohriana</i> - <i>Juniperus pinchotii</i> / <i>Bouteloua curtipendula</i> Shrubland	- Mohr Oak - Pinchot's Juniper / Sideoats Grama Shrubland	CEGL002173
<i>Rhus trilobata</i> Shrubland Alliance - <i>Rhus trilobata</i> / <i>Bouteloua curtipendula</i> - <i>Schizachyrium scoparium</i> Shrubland	Skunkbush Sumac Shrubland Alliance - Skunkbush Sumac / Sideoats Grama - Little Bluestem Shrubland	A.3569 CEGL005026
<i>Rhus virens</i> var. <i>choriophylla</i> Shrubland Alliance	Evergreen Sumac Shrubland Alliance	A.922
<i>Salix (exigua, interior)</i> Temporarily Flooded Shrubland Alliance - <i>Salix exigua</i> Temporarily Flooded Shrubland - <i>Salix interior</i> / <i>Phragmites australis</i> Temporarily Flooded Shrubland	(Coyote Willow, Sandbar Willow) Temporarily Flooded Shrubland Alliance - Coyote Willow Temporarily Flooded Shrubland - Sandbar Willow / Common Reed Temporarily Flooded Shrubland	A.947 CEGL001197 CEGL007753
<i>Salix nigra</i> Temporarily Flooded Shrubland Alliance - <i>Salix nigra</i> Temporarily Flooded Shrubland	Black Willow Temporarily Flooded Shrubland Alliance - Black Willow Temporarily Flooded Shrubland	A.948 CEGL003901
- <i>Salvia ballotiflora</i> – <i>Rhus virens</i> – <i>Diospyros texana</i> Shrubland	- Meiorana – Evergreen Sumac - Texas Persimmon Shrubland	CEGL00xxxx
<i>Sophora secundiflora</i> - <i>Diospyros texana</i> Shrubland Alliance	Mescal Bean - Texas Persimmon Shrubland Alliance	A.751
<i>Tamarix</i> spp. Semi-natural Temporarily Flooded Shrubland Alliance	Salt-cedar species Semi-natural Temporarily Flooded Shrubland Alliance	A.842
<i>Varilla texana</i> - <i>Castela erecta</i> Shrubland Alliance	Saladillo - Amargosa Shrubland Alliance	A.1910
- <i>Viguiera stenoloba</i> - <i>Bernardia obovata</i> / <i>Chamaesyce</i> sp. Shrubland	- Skeletonleaf Goldeneye - Desert Myrtle-croton / Sandmat species Shrubland	CEGL004603
- <i>Zanthoxylum fagara</i> - <i>Forestiera angustifolia</i> - <i>Diospyros texana</i> Shrubland	- Lime Prickly-ash - Texas Swamp-privet - Texas Persimmon Shrubland	CEGL004615

Table 3. NVC Herbaceous and Sparse Vegetation Alliances and Plant Associations Identified as Potentially Occurring within the AMIS Vegetation Inventory Project Area

NVC Alliance and/or Association	Common Name	Element Code
<i>Adiantum capillus-veneris</i> Saturated Herbaceous Alliance	Southern Maidenhair Saturated Herbaceous Alliance	A.1683
<i>Aristida purpurea</i> Herbaceous Alliance	Purple Threeawn Herbaceous Alliance	A.2570
<i>Arundo donax</i> Temporarily Flooded Herbaceous Alliance - <i>Arundo donax</i> Break Herbaceous Vegetation	Giant Reed Temporarily Flooded Herbaceous Alliance - Giant Reed Break Herbaceous Vegetation	A.1339 CEGL00xxxx
<i>Bothriochloa barbinodis</i> Herbaceous Alliance - <i>Bothriochloa barbinodis</i> Herbaceous Vegetation	Cane Beardgrass Herbaceous Alliance - Cane Beardgrass Herbaceous Vegetation	A.1209 CEGL005323
<i>Bouteloua curtipendula</i> Herbaceous Alliance - <i>Bouteloua curtipendula</i> - <i>Bouteloua (eriopoda, gracilis)</i> Herbaceous Vegetation	Sideoats Grama Herbaceous Alliance - Sideoats Grama – (Black Grama, Blue Grama) Herbaceous Vegetation	A.1244 CEGL002250
<i>Bouteloua gracilis</i> Herbaceous Alliance - <i>Bouteloua gracilis</i> - <i>Bouteloua curtipendula</i> Herbaceous Vegetation - <i>Bouteloua gracilis</i> - <i>Bouteloua hirsuta</i> Herbaceous Vegetation - <i>Bouteloua gracilis</i> – <i>Buchloe dactyloides</i> Herbaceous Vegetation	Blue Grama Herbaceous Alliance - Blue Grama – Sideoats Grama Herbaceous Vegetation - Blue Grama – Hairy Grama Herbaceous Vegetation - Blue Grama – Buffalograss Herbaceous Vegetation	A.1282 CEGL001754 CEGL001755 CEGL001756
<i>Bouteloua hirsuta</i> Herbaceous Alliance - <i>Bouteloua hirsuta</i> - <i>Bouteloua curtipendula</i> Herbaceous Vegetation	Hairy Grama Herbaceous Alliance - Hairy Grama – Sideoats Grama Herbaceous Vegetation	A.1285 CEGL001764
<i>Cenchrus (Pennisetum) ciliaris(e)</i> Herbaceous Alliance - <i>Cenchrus ciliaris</i> Semi-natural Herbaceous Vegetation	Buffelgrass Herbaceous Alliance - Buffelgrass Semi-natural Herbaceous Vegetation	A.1211 CEGL00xxxx
<i>Cladium mariscus</i> ssp. <i>jamaicense</i> Seasonally Flooded Temperate Herbaceous Alliance	Jamaica Swamp Sawgrass Seasonally Flooded Temperate Herbaceous Alliance	A.1369
<i>Cynodon dactylon</i> Herbaceous Alliance	Bermudagrass Herbaceous Alliance	A.1279
<i>Eleocharis palustris</i> Temporarily Flooded Herbaceous Alliance - <i>Eleocharis</i> spp. Herbaceous Vegetation	Common Spikerush Temporarily Flooded Herbaceous Alliance - Spikerush Species Herbaceous Vegetation	A.1342 CEGL00xxxx
<i>Eragrostis lehmanniana</i> Semi-natural Herbaceous Alliance	Lehmann's Lovegrass Semi-natural Herbaceous Alliance	A.2687
<i>Hilaria belangeri</i> – <i>Bouteloua curtipendula</i> Herbaceous Alliance - <i>Hilaria belangeri</i> – <i>Bouteloua curtipendula</i> Herbaceous Vegetation	Curly Mesquite – Sideoats Grama Herbaceous Alliance - Curly Mesquite – Sideoats Grama Herbaceous Vegetation	A.1214 CEGL002238
<i>Hydrilla verticillata</i> Permanently Flooded Herbaceous Alliance - <i>Hydrilla verticillata</i> Submerged Aquatic Vegetation	Water-Thyme Permanently Flooded Herbaceous Alliance - Water-Thyme Submerged Aquatic Vegetation	A.1745 CEGL00xxxx
<i>Lemna</i> spp. Permanently Flooded Herbaceous Alliance	Duckweed Species Permanently Flooded Herbaceous Alliance	A.1747
<i>Lesquerella (gordonii, ovalifolia)</i> Herbaceous Alliance - <i>Lesquerella (gordonii, ovalifolia)</i> - <i>Schizachyrium scoparium</i> Herbaceous Vegetation	Gordon's Bladderpod, Oval-leaf Bladderpod) Herbaceous Alliance - (Gordon's Bladderpod, Oval-leaf Bladderpod) - Little Bluestem Herbaceous Vegetation	A.1619 CEGL004917
<i>Justicia americana</i> Temporarily Flooded Herbaceous Alliance - <i>Justicia americana</i> Herbaceous Vegetation - <i>Justicia americana</i> - <i>Bacopa monnieri</i> Edwards Plateau Herbaceous Vegetation - <i>Marrubium vulgare</i> Semi-natural Herbaceous Vegetation	American Water-willow Temporarily Flooded Herbaceous Alliance - American Water-willow Herbaceous Vegetation - American Water-willow - Coastal Water-hyssop Edwards Plateau Herbaceous Vegetation - Horehound Semi-natural Herbaceous Vegetation	A.1657 CEGL004286 CEGL004926 CEGL00xxxx
Open Cliff Sparsely Vegetated Alliance	Open Cliff Sparsely Vegetated Alliance	A.1836
<i>Panicum obtusum</i> Herbaceous Alliance	Vine-mesquite Herbaceous Alliance	A.1238

Table 3. NVC Herbaceous and Sparse Vegetation Alliances and Plant Associations Identified as Potentially Occurring within the AMIS Vegetation Inventory Project Area

NVC Alliance and/or Association	Common Name	Element Code
- <i>Panicum obtusum</i> – <i>Buchloe dactyloides</i> Herbaceous Vegetation - <i>Panicum obtusum</i> - <i>Panicum hallii</i> Herbaceous Vegetation - <i>Panicum obtusum</i> Herbaceous Vegetation	- Vine-mesquite – Buffalograss Herbaceous Vegetation - Vine-mesquite - Hall's Panicgrass Herbaceous Vegetation - Vine-mesquite Herbaceous Vegetation	CEGL001573 CEGL001575 CEGL002708
<i>Panicum virgatum</i> Temporarily Flooded Herbaceous Alliance - <i>Panicum virgatum</i> - <i>Andropogon glomeratus</i> – <i>Cladium mariscus</i> ssp. <i>jamaicense</i> Herbaceous Vegetation	Switchgrass Temporarily Flooded Herbaceous Alliance - Switchgrass - Bushy Bluestem – Jamaica Swamp Sawgrass Herbaceous Vegetation	A.1343 CEGL004928
<i>Phragmites australis</i> Herbaceous Alliance - <i>Phragmites australis</i> Western North America Temperate Semi-natural Herbaceous Vegetation <i>Phragmites australis</i> Semipermanently Flooded Herbaceous Alliance <i>Phragmites australis</i> Temporarily Flooded Herbaceous Alliance - <i>Phragmites australis</i> Riverbank Herbaceous Vegetation - <i>Phragmites australis</i> - <i>Arundo donax</i> Riparian Corridor Herbaceous Vegetation - <i>Phragmites australis</i> - <i>Panicum virgatum</i> Herbaceous Vegetation	Common Reed Herbaceous Alliance - Common Reed Western North America Temperate Semi-natural Herbaceous Vegetation Common Reed Semipermanently Flooded Herbaceous Alliance Common Reed Temporarily Flooded Herbaceous Alliance - Common Reed Riverbank Herbaceous Vegetation - Common Reed – Giant Reed Riparian Corridor Herbaceous Vegetation - Common Reed – Switchgrass Herbaceous Vegetation	A.1196 CEGL001475 A.1431 A.1345 CEGL004115 CEGL00xxxx CEGL00xxxx
- <i>Phyla nodiflora</i> – <i>Cynodon dactylon</i> – <i>Bacopa monnieri</i> Herbaceous Vegetation - <i>Phyla nodiflora</i> / <i>Nicotiana glauca</i> – <i>Vitex agnus-castus</i> Rock Outcrop Sparse Vegetation	- Turkey Tangle Fogfruit – Bermudagrass – Water Hyssop Herbaceous Vegetation - Turkey Tangle Fogfruit / Tree Tobacco – Lilac Chastetree Rock Outcrop Sparse Wooded Herbaceous Vegetation	CEGL00xxxx CEGL00xxxx
<i>Pleuraphis mutica</i> Herbaceous Alliance - <i>Pleuraphis mutica</i> – <i>Buchloe dactyloides</i> Herbaceous Vegetation <i>Pleuraphis mutica</i> Intermittently Flooded Herbaceous Alliance - <i>Pleuraphis mutica</i> - <i>Panicum obtusum</i> Herbaceous Vegetation	Tobosa Grass Herbaceous Alliance - Tobosa Grass – Buffalograss Herbaceous Vegetation Tobosa Grass Intermittently Flooded Herbaceous Alliance - Tobosa Grass – Vine-mesquite Herbaceous Vegetation	A.1249 CEGL002272 A.1330 CEGL001639
<i>Polygonum</i> spp. (section <i>Persicaria</i>) Seasonally Flooded Herbaceous Alliance - <i>Salsola kali</i> Semi-natural Herbaceous Vegetation	Smartweed species Seasonally Flooded Herbaceous Alliance - Russian-thistle Herbaceous Vegetation	A.1881 CEGL00xxxx
<i>Schizachyrium scoparium</i> - <i>Bouteloua curtipendula</i> Herbaceous Alliance - <i>Schizachyrium scoparium</i> - <i>Bouteloua curtipendula</i> – <i>Nassella leucotricha</i> Herbaceous Vegetation - <i>Schizachyrium scoparium</i> - <i>Bouteloua curtipendula</i> Western Great Plains Herbaceous Vegetation	Little Bluestem – Sideoats Grama Herbaceous Alliance - Little Bluestem – Sideoats Grama – Texas Wintergrass Herbaceous Vegetation - Little Bluestem – Sideoats Grama Western Great Plains Herbaceous Vegetation	A.1225 CEGL004070 CEGL001594
<i>Schoenoplectus americanus</i> Semipermanently Flooded Herbaceous Alliance	Chairmaker's Bulrush Semipermanently Flooded Herbaceous Alliance	A.1432
<i>Schoenoplectus californicus</i> Semipermanently Flooded Herbaceous Alliance - <i>Schoenoplectus californicus</i> Gulf Coast Herbaceous Vegetation - <i>Schoenoplectus californicus</i> Herbaceous Vegetation	Giant Bulrush Semipermanently Flooded Herbaceous Alliance - Giant Bulrush Gulf Coast Herbaceous Vegetation - Giant Bulrush Herbaceous Vegetation	A.1171 CEGL008464 CEGL00xxxx
<i>Schoenoplectus pungens</i> Semipermanently Flooded Herbaceous Alliance	Common Threesquare Semipermanently Flooded Herbaceous Alliance	A.1433
<i>Sorghum halepense</i> Semi-natural Herbaceous Alliance - <i>Sorghum halepense</i> - (<i>Amaranthus palmeri</i>) Semi-natural Herbaceous Vegetation	Johnson Grass Semi-natural Herbaceous Alliance - Johnson Grass - (Palmer's Amaranth) Semi-natural Herbaceous Vegetation	A.2020 CEGL005324

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NVC Alliance and/or Association	Common Name	Element Code
<i>Sporobolus cryptandrus</i> Herbaceous Alliance - <i>Sporobolus cryptandrus</i> - <i>Schizachyrium scoparium</i> - <i>Bouteloua curtipendula</i> Herbaceous Vegetation	Sand Dropseed Herbaceous Alliance - Sand Dropseed - Little Bluestem - Sideoats Grama Herbaceous Vegetation	A.1252 CEGL005031
<i>Sporobolus wrightii</i> Saturated Herbaceous Alliance - <i>Sporobolus wrightii</i> Herbaceous Vegetation - <i>Sporobolus wrightii</i> - <i>Panicum obtusum</i> Herbaceous Vegetation	Big Alkali Sacaton Saturated Herbaceous Vegetation - Big Alkali Sacaton Herbaceous Vegetation - Big Alkali Sacaton - Vine-mesquite Herbaceous Vegetation	A.1435 CEGL002232 CEGL001486
<i>Typha domingensis</i> Semipermanently Flooded Tropical Herbaceous Alliance - <i>Typha domingensis</i> – <i>Colacasia esculenta</i> Semipermanently Flooded Herbaceous Vegetation	Southern Cattail Semipermanently Flooded Tropical Herbaceous Alliance - Southern Cattail – Asian Taro Semipermanently Flooded Herbaceous Vegetation	A.1175 CEGL00xxxx

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Appendix 1: Plant Species List for AMIS

Comprehensive list of plant species observed at AMIS, organized alphabetically by family, and based on field surveys from 1993 to 2004.

(Sources: (1) Poole, J. M. 2004. An inventory of the vascular plants at Amistad National Recreation Area. Texas Natural Heritage Program. (2) 1995. Biological survey of Lake Amistad Recreational Site: Final Report. Texas Natural Heritage Program. Resource Protection Division. Texas Parks and Wildlife Department. 3000 South Interstate 35, Suite 100, Austin, TX 78704.)

<i>Scientific Name</i>	<i>Common Name</i>
<i>Acanthaceae</i>	<i>Acanthaceae</i>
Carlowrightia texana	Texas wrightwort
Carlowrightia torreyana	Torrey's wrightwort
Dyschoriste linearis	narrowleaf dyschoriste
Justicia americana	American waterwillow
Justicia wrightii	Wright's justicia
Nomaphila stricta	temple plant
Ruellia corzoi	Corzo's wild petunia
Ruellia davisiorum	Rio Grande wild petunia
Ruellia humilis	fringeleaf wild petunia
Ruellia metziae	Metz's wild petunia
Ruellia nudiflora var. nudiflora	violet wild petunia
Ruellia nudiflora var. runyonii	Runyon's wild petunia
Ruellia occidentalis	western wild petunia
Ruellia parryi	Parry's wild petunia
Siphonoglossa pilosella	hairy tubetongue
Yeatesia platystegia	Montell bractspike
<i>Agavaceae</i>	<i>Agavaceae</i>
Agave americana	century plant
Agave lechuguilla	lechuguilla
Hesperaloe parviflora	red yucca
Yucca constricta	Buckley yucca
Yucca reverchonii	San Angelo yucca
Yucca rostrata	Thompson yucca
Yucca rupicola	Texas yucca
Yucca thompsoniana	Thompson yucca
Yucca torreyi	Torrey yucca
Yucca treculeana	Don Quixote's lace
<i>Amaranthaceae</i>	<i>Amaranthaceae</i>
Alternanthera caracasana	mat chaff-flower
Amaranthus blitoides	prostrate pigweed
Amaranthus crassipes	spreading amaranth
Amaranthus hybridus	green amaranth
Amaranthus palmeri	Palmer's amaranth
Amaranthus scleropoides	bonebract amaranth
Froelichia arizonica	Arizona snakecotton
Froelichia gracilis	slender snakecotton
Gossypianthus lanuginosus var. lanuginosus	woolly cottonflower
<i>Anacardiaceae</i>	<i>Anacardiaceae</i>
Pistacia mexicana	Texas pistachio
Rhus microphylla	littleleaf sumac
Rhus trilobata var. trilobata	skunkbush sumac
Rhus virens	evergreen sumac
Rhus virens var. choriophylla	evergreen sumac

Rhus virens var. virens		evergreen sumac	
Toxicodendron radicans		poison ivy	
<i>Anemiaceae</i>		<i>Anemiaceae</i>	
Anemia mexicana		Mexican fern	
<i>Apiaceae</i>		<i>Apiaceae</i>	
Ammoselinum butleri		Butler's sand parsley	
Ammoselinum popei		Pope's sand parsley	
Bifora americana		American bifora	
Bowlesia incana		hoary bowlesia	
Chaerophyllum tainturieri		chervil	
Ciclospermum leptophyllum		slimlobe celery	
Cicuta maculata		spotted water hemlock	
Daucus pusillus		southwestern carrot	
Eryngium diffusum		bushy eryngo	
Eryngium leavenworthii		Leavenworth's eryngo	
Hydrocotyle verticillata		whorled pennywort	
Spermolepis inermis		smooth scaleseed	
Torilis arvensis		sockbane	
<i>Apocynaceae</i>		<i>Apocynaceae</i>	
Amsonia longiflora var. salpignantha		trumpet slimpod	
Macrosiphonia lanuginosa var. macrosiphon		plateau rocktrumpet	
<i>Aristolochiaceae</i>		<i>Aristolochiaceae</i>	
Aristolochia coryi		Cory's pipevine	
<i>Asclepiadaceae</i>		<i>Asclepiadaceae</i>	
Asclepias asperula		spider antelopehorn	
Asclepias incarnata		swamp milkweed	
Asclepias oenotheroides		longhorn milkweed	
Cynanchum barbigerum		bearded swallowwort	
Cynanchum maccartii		MacCart's swallowwort	
Cynanchum racemosum var. unifarium		talayote	
Funastrum crispum		wavyleaf twinevine	
Matelea reticulata		pearl milkvine	
Matelea sagittifolia		arrowleaf milkvine	
Sarcostemma cynanchoides ssp. cynanchoides		twinevine	
<i>Asteraceae</i>		<i>Asteraceae</i>	
Acourtia runcinata		peonia	
Ageratina havanensis		shrubby boneset	
Amblyolepis setigera		huisache daisy	
Ambrosia artemisiifolia		common ragweed	
Ambrosia confertiflora		field ragweed	
Ambrosia psilostachya		western ragweed	
Aphanostephus ramosissimus var. ramosissimus		lazy daisy	
Aphanostephus riddellii		Riddell's lazy daisy	
Artemisia dracunculus		false tarragon sagewort	
Baccharis neglecta		Roosevelt weed	
Baccharis salicifolia		seepwillow	
Bahia absinthifolia		hairyseed bahia	
Baileya multiradiata		desert marigold	
Brickellia dentata		gravelbar brickellbush	
Brickellia eupatorioides var. chlorolepis		false boneset	
Brickellia laciniata		splitleaf brickellbush	
Calyptocarpus vialis		straggler daisy	
Carduus tenuiflorus		slender bristlethistle	
Centaurea americana		American basketflower	
Centaurea melitensis		yellow star-thistle	
		hairy leastdaisy	

Chaetopappa bellidifolia		manyflower leastdaisy	
Chaetopappa bellioides		silverpuff	
Chaptalia texana		spiny aster	
Chloracantha spinosa		damianita	
Chrysactinia mexicana		Texas thistle	
Cirsium texanum		Turner's cliff thistle	
Cirsium turneri		Gregg's eupatorium	
Conoclinium greggii		Canadian horseweed	
Conyza canadensis		false daisy	
Eclipta prostrata		running fleabane	
Erigeron colomexicanus		Plains fleabane	
Erigeron modestus		white boneset	
Eupatorium serotinum		flathead rabbit tobacco	
Evax prolifera		roundhead rabbit tobacco	
Evax verna		sticky palafoxia	
Florestina tripteris		tarbush	
Flourensia cernua		Shinner's brickelbush	
Flyriella parryi		Coahuila Indian blanket	
Gaillardia coahuilensis		slender gaillardia	
Gaillardia pinnatifida		Indian blanket	
Gaillardia pulchella var. pulchella		rayless gaillardia	
Gaillardia suavis		narrowleaf purple everlasting	
Gamochaeta falcata		chomonque	
Gochnatia hypoleuca		manyray gumweed	
Grindelia grandiflora		threadleaf snakeweed	
Gutierrezia microcephala		broom snakeweed	
Gutierrezia sarothrae		roundleaf snakeweed	
Gutierrezia sphaerocephala		tatalencho	
Gymnosperma glutinosum		false broomweed	
Haploesthes greggii var. texana		pretty sneezeweed	
Helenium elegans var. elegans		smallhead sneezeweed	
Helenium microcephalum		smallhead sneezeweed	
Helenium microcephalum var. microcephalum		smallhead sneezeweed	
Helenium microcephalum var. ooclinium		common sunflower	
Helianthus annuus		rocky goldaster	
Heterotheca fulcrata		camphorweed	
Heterotheca subaxillaris		fragrant bitterweed	
Hymenoxys odorata		wild lettuce	
Lactuca serriola		Coulter's conyza	
Laennecia coulteri		dotted gayfeather	
Liatris punctata		Texas star	
Lindheimera texana		lacy tansyaster	
Machaeranthera pinnatifida var. pinnatifida		blackfoot daisy	
Melampodium cinereum var. hirtellum		plains blackfoot daisy	
Melampodium leucanthum		small palafox	
Palafoxia callosa		Texas palafoxia	
Palafoxia texana var. texana		lyreleaf parthenium	
Parthenium confertum		ragweed parthenium	
Parthenium hysterophorus		mariola	
Parthenium incanum		crownseed pectis	
Pectis angustifolia		narrowleaf rockdaisy	
Perityle angustifolia		Lindheimer rockdaisy	
Perityle lindheimeri		rock lettuce	
Pinaropappus roseus		purple pluchea	
Pluchea carolinensis		poreleaf	

Porophyllum scoparium		Jersey cudweed	
Pseudognaphalium luteoalbum		cudweed paperflower	
Psilostrophe gnaphalioides		hairy paperflower	
Psilostrophe tagetina var. cerifera		manystem false dandelion	
Pyrrhopappus pauciflorus		Mexican hat	
Ratibida columnifera		threadleaf groundsel	
Senecio flaccidus var. flaccidus		bush sunflower	
Simsia calva		Julia's goldenrod	
Solidago juliae		common sowthistle	
Sonchus oleraceus		hierba del marrano	
Symphytotrichum divaricatum		southwestern annual saltmarsh aster	
Symphytotrichum expansum		Plateau nerveray	
Tetragonotheca texana		clustered bitterweed	
Tetrameuris scaposa var. argyrocaulon		slender greenthread	
Thelesperma filifolium		bighead greenthread	
Thelesperma megapotamicum		slender greenthread	
Thelesperma simplicifolium		needle dogweed	
Thymophylla acerosa		woolly dogweed	
Thymophylla micropoides		five needle pricklyleaf	
Thymophylla pentachaeta		parralena	
Thymophylla pentachaeta var. pentachaeta		Texas pricklyleaf	
Thymophylla setifolia var. radiata		bristleleaf dogweed	
Thymophylla tenuiloba var. tenuiloba		Trecul's bristleleaf dogweed	
Thymophylla tenuiloba var. treculii		cowpen daisy	
Verbesina encelioides		plateau golden-eye	
Viguiera dentata		skeletonleaf goldeneye	
Viguiera stenoloba		hairy wedelia	
Wedelia texana		cocklebur	
Xanthium strumarium			
<i>Berberidaceae</i>		<i>Berberidaceae</i>	
Mahonia trifoliolata		agarita	
<i>Bignoniaceae</i>		<i>Bignoniaceae</i>	
Chilopsis linearis		desert willow	
Tecoma stans		yellow bells	
<i>Bixaceae</i>		<i>Bixaceae</i>	
Amoreuxia wrightii		yellow show	
<i>Boraginaceae</i>		<i>Boraginaceae</i>	
Antiphytum heliotropioides		Mexican saucerflower	
Cordia podocephala		cluster cordia	
Cryptantha mexicana		Mexican cryptantha	
Cryptantha micrantha		redroot cryptantha	
Cryptantha palmeri		Palmer's cryptantha	
Heliotropium confertifolium		leafy heliotrope	
Heliotropium curassavicum var. curassavicum		seaside heliotrope	
Heliotropium curassavicum var. curassavicum		salt heliotrope	
Heliotropium procumbens		fourspike heliotrope	
Heliotropium torreyi		Torrey heliotrope	
Lappula occidentalis		flatspine stickseed	
Lappula redowskii		flatspine stickseed	
Lithospermum incisum		narrowleaf gromwell	
Lithospermum matamorensense		Mexican navelseed	
Lithospermum mirabile		San Antonio stoneseed	
Lithospermum parksii		Parks' gromwell	
Omphalodes aliena		Mexican navelseed	
Tiquilia canescens		woody crinkle mat	
Tiquilia canescens var. canescens		gray coldenia	
Tiquilia mexicana		Mexican coldenia	

<i>Brassicaceae</i>		<i>Brassicaceae</i>	
Brassica juncea		India mustard	
Descurainia pinnata		tansy mustard	
Draba cuneifolia		wedgeleaf draba	
Draba platycarpa		broadpod whitlowwort	
Eruca vesicaria ssp. sativa		rocketsalad	
Lepidium austrinum		hairy peppergrass	
Lepidium lasiocarpum var. wrightii		hairypod peppergrass	
Lepidium virginicum		smooth pepperweed	
Lesquerella argyraea		silver bladderpod	
Lesquerella fendleri		Fendler's bladderpod	
Lesquerella gordonii		Gordon bladderpod	
Lesquerella gracilis		white bladderpod	
Lesquerella purpurea		rose bladderpod	
Lesquerella recurvata		slender bladderpod	
Nerisyrenia camporum		mesa greggia	
Rorippa nasturtium-aquaticum		watercress	
Rorippa teres		southern marsh yellowcress	
Sisymbrium irio		London rocket	
Streptanthus platycarpus		broadpod twistflower	
<i>Bromeliaceae</i>		<i>Bromeliaceae</i>	
Tillandsia recurvata		ballmoss	
<i>Cactaceae</i>		<i>Cactaceae</i>	
Ancistrocactus brevihamatus		short-spined fishhook cactus	
Ancistrocactus tobuschii		Tobusch fishhook cactus	
Ariocarpus fissuratus		living rock cactus	
Coryphantha echinus var. echinus		sea-urchin cactus	
Coryphantha pottsiana		Runyon's pincushion cactus	
Coryphantha sulcata		grooved nipple cactus	
Coryphantha tuberculosa		cob cactus	
Echinocactus horzonthalonius		eagle claw cactus	
Echinocactus texensis		horse-crippler	
Echinocereus coccineus var. paucispinus		Texas claret-cup cactus	
Echinocereus enneacanthus var. enneacanthus		strawberry cactus	
Echinocereus pectinatus var. wenigeri		Langtry rainbow cactus	
Echinocereus stramineus		strawberry cactus	
Epithelantha micromeris		common button cactus	
Ferocactus hamatacanthus var. hamatacanthus		giant fishhook-cactus	
Glandulicactus uncinatus var. wrightii		eagle-claw cactus	
Hamatocactus bicolor		twisted-rib cactus	
Mammillaria heyderi var. heyderi		Heyder's pincushion cactus	
Mammillaria lasiacantha		golf ball cactus	
Mammillaria prolifera var. texana		hair-covered cactus	
Neolloydia conoidea		Texas cone cactus	
Opuntia atrispina		black-and-yellow spined prickly pear	
Opuntia engelmannii var. lindheimeri		Texas prickly pear	
Opuntia leptocaulis		Christmas cholla	
Opuntia macrocentra var. macrocentra		long-spined purplish prickly pear	
Opuntia phaeacantha		brown-spined prickly pear	
Opuntia schottii var. schottii		Schott's dog cholla	
Opuntia X subarmata		prickly pear	
<i>Campanulaceae</i>		<i>Campanulaceae</i>	
Lobelia berlandieri var. brachypoda		blue lobelia	
Lobelia cardinalis		cardinal flower	

Triodanis coloradoensis	Colorado Venus' looking-glass
Triodanis leptocarpa	slimpod Venus' looking-glass
Triodanis perfoliata	Venus' looking-glass
<i>Capparaceae</i>	<i>Capparaceae</i>
Koeberlinia spinosa	allthorn
Polanisia dodecandra ssp. trachysperma	clammyweed
<i>Caryophyllaceae</i>	<i>Caryophyllaceae</i>
Arenaria benthamii	Bentham sandwort
Paronychia jamesii	James nailwort
Silene antirrhina	sleepy catchfly
<i>Celastraceae</i>	<i>Celastraceae</i>
Mortonia sempervirens	rough mortonia
Schaefferia cuneifolia	desert yaupon
<i>Chenopodiaceae</i>	<i>Chenopodiaceae</i>
Atriplex canescens	fourwing saltbush
Chenopodium berlandieri var. berlandieri	pitseed goosefoot
Chenopodium incanum	mealy goosefoot
Chenopodium pratericola	thickleaf goosefoot
Kochia scoparia	Mexican fireweed
Salsola tragus	Russian thistle
Suaeda moquinii	quelite salad
<i>Commelinaceae</i>	<i>Commelinaceae</i>
Commelina erecta	erect dayflower
Tinantia anomala	false dayflower
Tradescantia brevifolia	Trans-Pecos spiderwort
Tradescantia occidentalis	prairie spiderwort
<i>Convolvulaceae</i>	<i>Convolvulaceae</i>
Bonamia repens	creeping petrogenia
Convolvulus arvensis	field bindweed
Convolvulus equitans	hoary bindweed
Dichondra micrantha	Asian ponysfoot
Evolvulus alsinoides var. angustifolius	ojo de vibora
Evolvulus nuttallianus	hairy evolvulus
Evolvulus sericeus	silky evolvulus
Ipomoea cordatotriloba	tievine
Ipomoea cordatotriloba var. cordatotriloba	tievine
Ipomoea costellata	crestrub morning glory
Ipomoea lindheimeri	Lindheimer morning glory
Ipomoea rupicola	cliff morning glory
Ipomoea sagittata	saltmarsh morning glory
Merremia dissecta	Alamovine
<i>Crassulaceae</i>	<i>Crassulaceae</i>
<i>Sedum wrightii</i>	<i>Wright's stonecrop</i>
<i>Cucurbitaceae</i>	<i>Cucurbitaceae</i>
Apodanthera undulata	chile coyote
Cucurbita foetidissima	buffalo gourd
Ibervillea lindheimeri	Lindheimer globeberry
Ibervillea tenuisecta	slimlobe globeberry
Melothria pendula	creeping cucumber
<i>Cupressaceae</i>	<i>Cupressaceae</i>
Juniperus ashei	Ashe juniper
Juniperus pinchotii	redberry juniper
<i>Cuscutaceae</i>	<i>Cuscutaceae</i>
Cuscuta exaltata	oak dodder
Cuscuta indecora	bigseed alfalfa dodder

Cuscuta indecora var. indecora	bigseed alfalfa dodder
Cuscuta indecora var. neuropetala	bigseed dodder
Cuscuta pentagona var. glabrior	bushclover dodder
Cuscuta pentagona var. pubescens	bushclover dodder
<i>Cyperaceae</i>	<i>Cyperaceae</i>
Carex microdonta	littletooth sedge
Carex planostachys	cedar sedge
Cladium mariscus ssp. jamaicense	Jamaica sawgrass
Cyperus acuminatus	taperleaf flatsedge
Cyperus elegans	sticky flatsedge
Cyperus ochraceus	pond flatsedge
Cyperus odoratus	fragrant flatsedge
Cyperus squarrosus	bearded flatsedge
Eleocharis cellulosa	Gulf Coast spikesedge
Eleocharis geniculata	annual spikesedge
Eleocharis interstincta	knotted spikerush
Eleocharis montevidensis	sand spikesedge
Eleocharis palmeri	sand spikerush
Eleocharis palustris	large spikesedge
Eleocharis rostellata	tussock spikesedge
Fimbristylis vahlII	Vahl's fimbry
Fuirena simplex	porcupine sedge
Rhynchospora colorata	whitetop sedge
Rhynchospora nivea	showy whitetop
Schoenoplectus americanus	chairmaker's bulrush
Schoenoplectus californicus	California bulrush
Schoenoplectus pungens	American bulrush
Schoenoplectus tabernaemontani	softstem bulrush
<i>Ebenaceae</i>	<i>Ebenaceae</i>
Diospyros texana	Texas persimmon
<i>Ephedraceae</i>	<i>Ephedraceae</i>
Ephedra antisyphilitica	clap-weed, popote
Ephedra aspera	boundary ephedra
Ephedra pedunculata	vine joint-for
<i>Equisetaceae</i>	<i>Equisetaceae</i>
Equisetum hyemale var. affine	scouring-rush horsetail
Equisetum laevigatum	smooth scouring-rush
<i>Euphorbiaceae</i>	<i>Euphorbiaceae</i>
Acalypha monostachya	creeping copperleaf
Acalypha phleoides	Lindheimer copperleaf
Argythamnia neomexicana	New Mexico wildmercury
Bernardia myricifolia	brush myrtlecroton
Bernardia obovata	desert myrtlecroton
Chamaesyce acuta	pointed spurge
Chamaesyce albomarginata	whitemargin spurge
Chamaesyce angusta	narrowleaf spurge
Chamaesyce cinerascens	shy spurge
Chamaesyce glyptosperma	ridgeseed spurge
Chamaesyce hyssopifolia	hyssop-leaf spurge
Chamaesyce maculata	spotted sandmat
Chamaesyce prostrata	prostrate spurge
Chamaesyce serpens	smooth matspurge
Croton capitatus var. lindheimeri	Lindheimer's hogwort
Croton dioicus	grassland croton

Croton fruticosus		bush croton	
Croton incanus		vara blanca	
Croton lindheimerianus var. lindheimerianus		Tharp croton	
Croton monanthogynus		oneseed croton	
Croton pottsii		leatherweed croton	
Croton pottsii var. pottsii			
Euphorbia antisiphilitica		candelilla	
Euphorbia cyathophora		wild poinsettia	
Euphorbia davidii		toothed spurge	
Euphorbia longicuris		longhorn spurge	
Euphorbia peplidion		low euphorbia	
Euphorbia spathulata		warty spurge	
Jatropha dioica var. dioica		leatherstem	
Leptopus phyllanthoides		maidenbush	
Phyllanthus polygonoides		knotweed leafflower	
Ricinus communis		castorbean	
Stillingia treculiana		Trecul stillingia	
Tragia amblyodonta		dogtooth noseburn	
Tragia ramosa		catnip noseburn	
Triadica sebifera		Chinese tallow tree	
<i>Fabaceae</i>		<i>Fabaceae</i>	
Acacia angustissima var. chisosiana		Chisos prairie acacia	
Acacia angustissima var. hirta		prairie acacia	
Acacia berlandieri		guajillo	
Acacia constricta		white thorn acacia	
Acacia farnesiana		huisache	
Acacia greggii		catclaw acacia	
Acacia neovernicosa		stickleaf acacia	
Acacia rigidula		blackbrush	
Acacia roemeriana		Roemer acacia	
Acacia wrightii		Wright acacia	
Amorpha fruticosa		bastard indigo	
Astragalus nuttallianus var. austrinus		small flowered milkvetch	
Astragalus wrightii		Wright locoweed	
Bauhinia lunarioides		Texas bauhinia	
Calliandra conferta		fairy duster	
Cercis canadensis		eastern redbud	
Cercis canadensis var. texensis		redbud	
Dalea aurea		golden dalea	
Dalea bicolor var. argyrea		silver dalea	
Dalea compacta var. pubescens		showy prairie clover	
Dalea formosa		feather dalea	
Dalea frutescens		black dalea	
Dalea nana		dwarf dalea	
Dalea neomexicana		New Mexico dalea	
Dalea pogonathera var. pogonathera		bearded dalea	
Dalea pogonathera var. walkerae		Walker's bearded dalea	
Desmanthus glandulosus		glandular bundleflower	
Desmanthus illinoensis		Illinois bundleflower	
Desmanthus obtusus		bundleflower	
Desmanthus velutinus		hairy bundleflower	
Desmanthus virgatus		wild tantan	
Eysenhardtia texana		Texas kidneywood	
Galactia texana		Texas milkpea	
Glottidium vesicarium		bagpod	
Hoffmannseggia glauca		sicklepod rushpea	
Hoffmannseggia oxycarpa		sharppod rushpea	
Indigofera lindheimeriana		creek indigo	

Leucaena retusa	golden ball leadtree
Lupinus texensis	Texas bluebonnet
Medicago arabica	spotted bur-clover
Melilotus indicus	annual yellow sourclover
Mimosa aculeaticarpa var. biuncifera	catclaw mimosa
Mimosa borealis	fragrant mimosa
Mimosa texana	Texas mimosa
Neptunia pubescens var. microcarpa	tropical puff
Parkinsonia aculeata	retama
Parkinsonia texana var. texana	Texas paloverde
Pediomelum humile	Rydberg scurfpea
Prosopis glandulosa	honey mesquite
Prosopis glandulosa var. glandulosa	mesquite
Prosopis glandulosa var. torreyana	western honey mesquite
Rhynchosia senna var. texana	Texas snoutbean
Senna bauhinioides	shrubby senna
Senna lindheimeriana	Lindheimer senna
Senna pumilio	dwarf senna
Senna roemeriana	twoleaf senna
Sophora secundiflora	Texas mountain laurel
Vicia leavenworthii	Leavenworth's vetch
<i>Fagaceae</i>	<i>Fagaceae</i>
Quercus fusiformis	Plateau liveoak
Quercus gravesii	Graves oak
Quercus mohriana	Mohrs shin oak
Quercus polymorpha	Mexican white oak
Quercus vaseyana	Vasey oak
<i>Fouquieriaceae</i>	<i>Fouquieriaceae</i>
Fouquieria splendens	ocotillo
<i>Fumariaceae</i>	<i>Fumariaceae</i>
Corydalis curvisiliqua ssp. curvisiliqua	scrambled eggs
Corydalis micrantha ssp. texensis	Texan fumewort
<i>Gentianaceae</i>	<i>Gentianaceae</i>
Centaurium beyrichii	mountain pink
Centaurium calycosum	rosita
Eustoma exaltatum	prairie gentian
Sabatia campestris	Texas star
<i>Geraniaceae</i>	<i>Geraniaceae</i>
Erodium cicutarium	alfilaria
Erodium texanum	Texas stork's bill
<i>Hydrangeaceae</i>	<i>Hydrangeaceae</i>
Fendlera wrightii	cliff Fendlerbush
<i>Hydrocharitaceae</i>	<i>Hydrocharitaceae</i>
Hydrilla verticillata	hydrilla
<i>Hydrophyllaceae</i>	<i>Hydrophyllaceae</i>
Nama havardii	Havard's fiddleleaf
Nama hispidum	rough nama
Nama jamaicense	fiddleleaf nama
Nama parvifolium	small leaf fiddlehead
Phacelia congesta	bluecurls
Phacelia patuliflora var. teucrifolia	sand phacelia
<i>Iridaceae</i>	<i>Iridaceae</i>
Sisyrinchium biforme	wiry blue-eyed grass
Sisyrinchium chilense	swordleaf blue-eyed grass
<i>Juglandaceae</i>	<i>Juglandaceae</i>
Carya illinoensis	pecan

Juglans microcarpa	little walnut
<i>Juncaceae</i>	<i>Juncaceae</i>
Juncus bufonius	toad rush
Juncus interior	inland rush
Juncus nodosus	jointed rush
Juncus torreyi	Torrey rush
<i>Krameriaceae</i>	<i>Krameriaceae</i>
Krameria erecta	littleleaf ratany
Krameria grayi	white ratany
Krameria lanceolata	trailing ratany
Krameria ramosissima	calderona
<i>Lamiaceae</i>	<i>Lamiaceae</i>
Hedeoma acinoides	annual pennyroyal
Hedeoma drummondii	lemoncillo
Hedeoma nana	dwarf hedeoma
Hedeoma serpyllifolia	false pennyroyal
Marrubium vulgare	horehound
Monarda citriodora	lemon beebalm
Monarda punctata	spotted beebalm
Physostegia correllii	Correll's false dragonhead
Salvia ballotiflora	shrubby blue sage
Salvia dolichantha	cluster sage
Salvia farinacea var. farinacea	mealy sage
Salvia reflexa	lanceleaf sage
Salvia roemeriana	cedar sage
Salvia texana	Texas sage
Scutellaria drummondii	Drummond's skullcap
Scutellaria drummondii var. edwardsiana	Drummond's skullcap
Scutellaria texana	Texas skullcap
Teucrium canadense	American germander
<i>Lemnaceae</i>	<i>Lemnaceae</i>
Lemna valdiviana	pale duckweed
<i>Lentibulariaceae</i>	<i>Lentibulariaceae</i>
Utricularia gibba	conespur bladderwort
<i>Liliaceae</i>	<i>Liliaceae</i>
Allium drummondii	Drummond wild onion
Allium perdulce var. sperryi	Sperry's onion
Cooperia drummondii	cebolleta
Cooperia pedunculata	giant rainlily
Dasyliion texanum	sotol
Echeandia flavescens	yellow crag-lily
Nolina texana	beargrass
Nothoscordum bivalve	crow-poison
Schoenocaulon texanum	green lily
<i>Linaceae</i>	<i>Linaceae</i>
Linum berlandieri var. filifolium	Berlandier's yellow flax
Linum rigidum	stiffstem flax
Linum rupestre	rock flax
Linum usitatissimum	common flax
Linum vernale	spring flax
<i>Loasaceae</i>	<i>Loasaceae</i>
Cevallia sinuata	stinging cevallia
Eucnide bartonioides	rock nettle
Mentzelia albescens	wavyleaf mentzelia
Mentzelia multiflora	Adonis blazing star
Mentzelia oligosperma	stickleaf, chicken-thief

<i>Loganiaceae</i> Mitreola petiolata	<i>Loganiaceae</i> hornpod
<i>Lythraceae</i>	<i>Lythraceae</i>
Ammannia coccinea	valley redstem
Lythrum californicum	California loosestrife
Nesaea longipes	stalkflower
<i>Malpighiaceae</i>	<i>Malpighiaceae</i>
Aspicarpa hyssopifolia	hyssophead aspleaf
Galphimia angustifolia	narrowleaf thryallis
Janusia gracilis	slender janusia
<i>Malvaceae</i>	<i>Malvaceae</i>
Abutilon fruticosum	Texas indianmallow
Abutilon incanum	pelotazo
Abutilon parvulum	little leaf abutilon
Abutilon wrightii	Wright's Indianmallow
Allowissadula holosericea	velvet leaf mallow
Callirhoe involucrata	purple poppymallow
Callirhoe leiocarpa	tall poppymallow
Herissantia crispa	netvein herissantia
Hibiscus coulteri	yellow desert-mallow
Hibiscus martianus	heartleaf hibiscus
Malva parviflora	cheeseweed mallow
Malvastrum coromandelianum	threelobe falsemallow
Meximalva filipes	violet sida
Sida abutifolia	creeping yellow sida
Sida longipes	stalkflower sida
Sphaeralcea angustifolia	narrowleaf globe mallow
Sphaeralcea hastulata	spear globemallow
<i>Marsileaceae</i>	<i>Marsileaceae</i>
Marsilea vestita	narrowleaf pepperwort
Marsilea vestita ssp. vestita	narrowleaf pepperwort
<i>Meliaceae</i>	<i>Meliaceae</i>
Melia azedarach	Chinaberry
<i>Menispermeaceae</i>	<i>Menispermeaceae</i>
Cocculus carolinus	Carolina snailseed
<i>Moraceae</i>	<i>Moraceae</i>
Morus alba	white mulberry
<i>Najadaceae</i>	<i>Najadaceae</i>
Najas guadalupensis	Guadalupe water nymph
Najas marina	spiny water nymph
<i>Nyctaginaceae</i>	<i>Nyctaginaceae</i>
Acleisanthes anisophylla	oblique-leaf trumpets
Acleisanthes crassifolia	Texas trumpets
Acleisanthes longiflora	angel trumpets
Acleisanthes wrightii	Wright's trumpets
Allionia incarnata	trailing four-o'clock
Boerhavia coccinea	scarlet spiderling
Boerhavia linearifolia	narrowleaf spiderling
Cyphomeris gypsophiloides	red cyphomeris
Mirabilis albida	white four-o'clock
Nyctaginia capitata	scarlet muskflower
<i>Nymphaeaceae</i>	<i>Nymphaeaceae</i>
Nuphar lutea	yellow pond-lily
<i>Oleaceae</i>	<i>Oleaceae</i>
Forestiera angustifolia	narrowleaf elbowbush
Forestiera reticulata	netleaf elbowbush

Fraxinus berlandieriana	Berlandier ash
Fraxinus greggii	Gregg ash
Fraxinus texensis	Texas ash
Fraxinus velutina	velvet ash
Menodora heterophylla	redbud menodora
Menodora longiflora	showy menodora
Menodora scabra	rough menodora
<i>Onagraceae</i>	<i>Onagraceae</i>
Calylophus berlandieri ssp. berlandieri	halfshrub sundrops
Calylophus berlandieri ssp. pinifolius	Berlandier's sundrops
Calylophus hartwegii ssp. hartwegii	Hartweg evening primrose
Calylophus hartwegii ssp. maccartii	MacCart's sundrops
Calylophus hartwegii ssp. pubescens	Hartweg's sundrops
Calylophus tubicula	bush evening primrose
Gaura calicicola	Texas beeblossom
Gaura coccinea	scarlet gaura
Gaura drummondii	Drummond's beeblossom
Gaura mollis	lizardtail gaura
Gaura suffulta	wild honeysuckle
Ludwigia octovalvis	shrubby water primrose
Ludwigia palustris	creeping waterprimrose
Oenothera falfurriae	royal evening primrose
Oenothera kunthiana	Kunth sundrops
Oenothera laciniata	cutleaf evening primrose
Oenothera primiveris	desert evening primrose
Oenothera pubescens	South American evening primrose
Oenothera rosea	rose sundrops
Oenothera speciosa	showy evening primrose
Oenothera triloba	stemless evening primrose
<i>Orchidaceae</i>	<i>Orchidaceae</i>
Epipactis gigantea	chatterbox orchid
<i>Orobanchaceae</i>	<i>Orobanchaceae</i>
Orobanche ludoviciana	Louisiana broomrape
Orobanche multicaulis	spiked broomrape
<i>Oxalidaceae</i>	<i>Oxalidaceae</i>
Oxalis dichondrifolia	ponyfoot woodsorrell
Oxalis drummondii	Drummond woodsorrell
Oxalis stricta	yellow woodsorrell
Oxalis violacea	violet woodsorrell
<i>Papaveraceae</i>	<i>Papaveraceae</i>
Argemone aenea	golden pricklypoppy
Argemone chisosensis	Chisos pricklypoppy
Argemone mexicana	yellow pricklypoppy
<i>Passifloraceae</i>	<i>Passifloraceae</i>
Passiflora affinis	yellow passionflower
Passiflora tenuiloba	slenderlobe passionflower
<i>Pedaliaceae</i>	<i>Pedaliaceae</i>
Proboscidea louisianica	Devil's claw
<i>Phytolaccaceae</i>	<i>Phytolaccaceae</i>
Rivina humilis	pigeonberry
<i>Plantaginaceae</i>	<i>Plantaginaceae</i>
Plantago helleri	Heller plantain
Plantago hookeriana	Hooker's plantain

Plantago major	common plantain
Plantago rhodosperma	redseed plantain
<i>Platanaceae</i>	<i>Platanaceae</i>
Platanus occidentalis	sycamore
<i>Poaceae</i>	<i>Poaceae</i>
Andropogon glomeratus	bushy bluestem
Aristida adscensionis	sixweeks threeawn
Aristida purpurea var. longiseta	red threeawn
Aristida purpurea var. nealleyi	Nealley threeawn
Aristida purpurea var. purpurea	purple threeawn
Aristida purpurea var. wrightii	Wright's threeawn
Arundo donax	giant cane
Avena fatua	wild oat
Bothriochloa barbinodis	cane bluestem
Bothriochloa hybrida	hybrid bluestem
Bothriochloa ischaemum var. songarica	yellow bluestem
Bothriochloa laguroides ssp. torreyana	silver beardgrass
Bouteloua aristidoides	needle grama
Bouteloua barbata	sixweeks grama
Bouteloua curtipendula	sideoats grama
Bouteloua gracilis	blue grama
Bouteloua hirsuta	hairy grama
Bouteloua rigidiseta	Texas grama
Bouteloua trifida	red grama
Bromus catharticus	rescue grass
Bromus rubens	red brome
Buchloe dactyloides	buffalograss
Cenchrus ciliaris	buffelgrass
Cenchrus echinatus	southern sandbur
Cenchrus myosuroides	big sandbur
Cenchrus spinifex	common sandbur
Chloris crinita	false Rhodesgrass
Chloris cucullata	hooded windmill grass
Chloris pluriflora	multiflower false Rhodes grass
Chloris verticillata	tumble windmill grass
Chloris X subdolichostachya	shortspike windmill grass
Cynodon dactylon	Bermuda grass
Dasyochloa pulchella	fluffgrass
Dichanthelium acuminatum var. acuminatum	woolly panicgrass
Dichanthelium pedicellatum	cedar panicgrass
Dichanthium annulatum	Kleberg bluestem
Digitaria californica	Arizona cottontop
Digitaria cognata	fall witchgrass
Digitaria hitchcockii	shortleaf cottontop
Echinochloa colona	jungle-rice
Echinochloa muricata	rough barnyard grass
Echinochloa walteri	coast cockspur grass
Eleusine indica	Indian goosegrass
Elymus canadensis	Canada wildrye
Elymus virginicus	Virginia wildrye
Enneapogon desvauxii	feather pappusgrass
Eragrostis barrelieri	Mediterranean lovegrass
Eragrostis cilianensis	stinkgrass
Eragrostis curtipedicellata	gummy lovegrass
Eragrostis intermedia	Plains lovegrass
Eragrostis lehmanniana	Lehmann's lovegrass
Eragrostis palmeri	Rio Grande lovegrass

Eragrostis pectinacea	spreading lovegrass
Eriochloa sericea	silky cupgrass
Erioneuron pilosum	hairy tridens
Hemarthria altissima	limpograss
Heteropogon contortus	tanglehead
Hilaria belangeri	curlymesquite
Leersia oryzoides	rice cutgrass
Leptochloa dubia	green sprangletop
Leptochloa fascicularis	salt sprangletop
Leptochloa mucronata	red sprangletop
Leptochloa uninervia	Mexican sprangletop
Leptoloma cognatum	fall witchgrass
Limnodea arkansana	Ozarkgrass
Lolium perenne	perennial ryegrass
Melica montezumae	Montezuma melic
Melica nitens	threeflower melic
Muhlenbergia lindheimeri	Lindheimer muhly
Muhlenbergia parviglumis	longawn muhly
Muhlenbergia porteri	bush muhly
Nassella leucotricha	Texas wintergrass
Panicum antidotale	blue panicum
Panicum hallii var. filipes	filly panicum
Panicum hallii var. hallii	Hall's panicum
Panicum obtusum	vine mesquite
Panicum virgatum	switchgrass
Pappophorum bicolor	pink pappusgrass
Paspalum dilatatum	Dallisgrass
Paspalum distichum	knotgrass
Paspalum pubiflorum	hairyseed paspalum
Paspalum urvillei	Vaseygrass
Phalaris caroliniana	Carolina canarygrass
Phragmites australis	giant reed
Pleuraphis mutica	tobosagrass
Poa annua	annual bluegrass
Poa bigelovii	Bigelow bluegrass
Polypogon monspeliensis	rabbit-foot grass
Polypogon viridis	water bentgrass
Schizachyrium scoparium	little bluestem
Setaria grisebachii	Grisebach bristlegrass
Setaria leucopila	Plains bristlegrass
Setaria parviflora	knotroot bristlegrass
Setaria pumila	yellow bristlegrass
Setaria ramiseta	Rio Grande bristlegrass
Setaria reverchonii	Reverchon bristlegrass
Setaria scheelei	southwestern bristlegrass
Setaria texana	Texas bristlegrass
Setaria verticillata	hooked bristlegrass
Setaria viridis	green bristlegrass
Sorghum halepense	Johnsongrass
Sphenopholis obtusata	prairie wedgescale
Sporobolus compositus	tall dropseed
Sporobolus coromandelianus	whorled dropseed
Sporobolus cryptandrus	sand dropseed
Sporobolus wrightii	big sacaton
Stenotaphrum secundatum	St. Augustine grass
Trichoneura elegans	Silveus' grass
Tridens albescens	white tridens
Tridens eragrostoides	lovegrass tridens
Tridens muticus var. muticus	slim tridens
Tridens texanus	Texas tridens
Trisetum interruptum	prairie trisetum
	browntop panicum

Urochloa fasciculata		common sixweeksgrass	
Vulpia octoflora		coast agropogon	
X Agropogon littoralis			
<i>Polemoniaceae</i>		<i>Polemoniaceae</i>	
Gilia incisa		cutleaf gilia	
Gilia insignis		marked gilia	
Gilia rigidula		blue gilia	
Gilia rigidula ssp. acerosa		blue gilia	
Gilia rigidula ssp. rigidula		blue gilia	
<i>Polygalaceae</i>		<i>Polygalaceae</i>	
Polygala alba		white milkwort	
Polygala lindheimeri var. lindheimeri		purple milkwort	
Polygala lindheimeri var. parvifolia		rock milkwort	
Polygala macradenia		glandleaf milkwort	
Polygala ovatifolia		eggleaf milkwort	
Polygala palmeri		Palmer's milkwort	
Polygala scoparioides		broom milkwort	
<i>Polygonaceae</i>		<i>Polygonaceae</i>	
Eriogonum havardii		Havard's wild buckwheat	
Eriogonum longifolium		longleaf buckwheat	
Eriogonum multiflorum		heartsepal buckwheat	
Polygonum hydropiperoides		swamp smartweed	
Polygonum pensylvanicum		Pennsylvania smartweed	
Polygonum persicaria		lady's thumb	
Polygonum punctatum		water smartweed	
Rumex altissimus		pale dock	
Rumex crispus		curly dock	
Rumex maritimus		golden dock	
Rumex stenophyllus		narrowleaf dock	
Rumex violascens		violet dock	
<i>Portulacaceae</i>		<i>Portulacaceae</i>	
Portulaca oleracea		common purslane	
Portulaca pilosa		shaggy portulaca	
Talinum aurantiacum		orange flameflower	
<i>Potamogetonaceae</i>		<i>Potamogetonaceae</i>	
Potamogeton illinoensis		Illinois pondweed	
Stuckenia pectinata		fennel-leaf pondweed	
<i>Primulaceae</i>		<i>Primulaceae</i>	
Anagallis arvensis		scarlet pimpernel	
Samolus ebracteatus ssp. cuneatus		largeflower brookweed	
Samolus valerandi ssp. parviflorus		smallflower brookweed	
<i>Pteridaceae</i>		<i>Pteridaceae</i>	
Adiantum capillus-veneris		southern maidenhair	
Argyrochosma microphylla		littleleaf cliffbrake	
Astrolepis cochisensis		Cochise scaly cloakfern	
Astrolepis integerrima		wavyleaf cloakfern	
Astrolepis sinuata ssp. sinuata		bulb lipfern	
Astrolepis windhamii		Windham's scaly cloakfern	
Cheilanthes aemula		Texas lipfern	
Cheilanthes alabamensis		Alabama lipfern	
Cheilanthes horridula		prickly lipfern	
Cheilanthes sinuata		wavy scaly cloakfern	
Notholaena copelandii		Copeland cloakfern	
Notholaena nealleyi		Neally's cloakfern	

Notholaena neglecta	Maxon's cloakfern
Notholaena standleyi	star cloakfern
Pellaea ovata	zigzag cliffbrake
<i>Rafflesiaceae</i>	<i>Rafflesiaceae</i>
Pilostyles thurberi	Thurber's stemsucker
<i>Ranunculaceae</i>	<i>Ranunculaceae</i>
Anemone edwardsiana	twoflower anemone
Anemone tuberosa var. texana	tuber anemone
Clematis drummondii	old man's beard
Clematis pitcheri	leatherflower
Delphinium carolinianum ssp. virescens	Carolina larkspur
Delphinium madrense	Sierra Madre larkspur
Delphinium wootonii	Organ Mountain larkspur
Ranunculus sceleratus	blister buttercup
<i>Resedaceae</i>	<i>Resedaceae</i>
Oligomeris linifolia	lineleaf whitepuff
<i>Rhamnaceae</i>	<i>Rhamnaceae</i>
Colubrina texensis	hog-plum
Condalia ericoides	javelina bush
Condalia hookeri var. hookeri	brasil
Condalia spathulata	narrowleaf squawbush
Condalia viridis	green squawbush
Condalia warnockii	Warnock's squawbush
Karwinskia humboldtiana	coyotillo
Ziziphus obtusifolia	lotebush
<i>Rosaceae</i>	<i>Rosaceae</i>
Prunus minutiflora	Texas almond
Rubus riograndis	Rio Grande dewberry
<i>Rubiaceae</i>	<i>Rubiaceae</i>
Cephalanthus occidentalis	buttonbush
Galium aparine	cling-on bedstraw
Galium correllii	Correll's bedstraw
Galium microphyllum	bracted bedstraw
Galium proliferum	spreading bedstraw
Galium uncinulatum	sprawling bedstraw
Galium virgatum	wand bedstraw
Hedyotis nigricans	diamondflowers
Houstonia acerosa	needleleaf bluets
<i>Rutaceae</i>	<i>Rutaceae</i>
Ptelea trifoliata	skunkbush, wafer ash
Thamnosma texana	Dutchman's breeches
Zanthoxylum hirsutum	tickle-tongue
<i>Salicaceae</i>	<i>Salicaceae</i>
Populus deltoides	eastern cottonwood
Salix exigua	coyote willow
Salix gooddingii	Goodding willow
Salix nigra	black willow
<i>Sapindaceae</i>	<i>Sapindaceae</i>
Sapindus saponaria var. drummondii	western soapberry
Serjania brachycarpa	littlefruit slipperyjack
Ungnadia speciosa	Mexican buckeye
<i>Sapotaceae</i>	<i>Sapotaceae</i>
Sideroxylon lanuginosum ssp. rigidum	coma, gum elastic
<i>Scrophulariaceae</i>	<i>Scrophulariaceae</i>
Bacopa monnieri	water hyssop

Buchnera americana	Florida bluehearts
Castilleja lanata	woolly Indian paintbrush
Castilleja rigida	rigid Indian paintbrush
Castilleja sessiliflora	downy Indian paintbrush
Leucophyllum frutescens	cenizo
Leucophyllum minus	Big Bend barometer bush
Leucospora multifida	narrowleaf conobea
Maurandella antirrhiniflora	snapdragon vine
Mecardonia procumbens	baby jump-up
Mimulus glabratus	yellow monkeyflower
Penstemon baccharifolius	baccharisleaf penstemon
Penstemon triflorus	Heller Penstemon
Seymeria texana	Texas seymeria
Stemodia schottii	Schott's stemodia
Verbascum thapsus	common mullein
Veronica peregrina	wandering veronica
<i>Sellaginaceae</i>	<i>Sellaginaceae</i>
Selaginella lepidophylla	resurrection plant
Selaginella underwoodii	Underwood's spikemoss
Selaginella wrightii	Wright's spikemoss
<i>Simaroubaceae</i>	<i>Simaroubaceae</i>
Castela erecta ssp. texana	goatbush
<i>Smilacaceae</i>	<i>Smilacaceae</i>
Smilax bona-nox	common greenbriar
<i>Solanaceae</i>	<i>Solanaceae</i>
Calibrachoa parviflora	mudflat petunia
Chamaesaracha coniodes	gray five eyes
Chamaesaracha pallida	pale false nightshade
Chamaesaracha sordida	hairy false nightshade
Chamaesaracha villosa	Trans-Pecos five-eyes
Datura inoxia	Indian apple
Datura wrightii	Wright's jimsonweed
Hunzikeria texana	Texas cupflower
Lycium berlandieri	Berlandier wolfberry
Nicotiana glauca	tree tobacco
Nicotiana repanda	fiddleleaf tobacco
Nicotiana trigonophylla	desert tobacco
Physalis cinerascens var. cinerascens	beach groundcherry
Quincula lobata	purple groundcherry
Solanum elaeagnifolium	silverleaf nightshade
Solanum ptychanthum	American nightshade
Solanum rostratum	buffalobur
Solanum triquetrum	Texas nightshade
<i>Sterculiaceae</i>	<i>Sterculiaceae</i>
Ayenia pilosa	dwarf ayenia
Hermannia texana	Texas hermannia
Melochia pyramidata	angelpod melochia
<i>Tamaricaceae</i>	<i>Tamaricaceae</i>
Tamarix aphylla	athel
Tamarix ramosissima	salt cedar
<i>Thelypteridaceae</i>	<i>Thelypteridaceae</i>
Thelypteris ovata var. lindheimeri	Lindheimer's Maiden Fern
<i>Typhaceae</i>	<i>Typhaceae</i>
Typha domingensis	tule

<i>Ulmaceae</i>	
Celtis laevigata var. laevigata	
Celtis laevigata var. reticulata	
Celtis pallida	
Ulmus pumila	
<i>Urticaceae</i>	
Boehmeria cylindrica	
Parietaria pensylvanica	
Urtica chamaedryoides	
<i>Verbenaceae</i>	
Aloysia gratissima	
Bouchea linifolia	
Glandularia bipinnatifida	
Glandularia bipinnatifida var. bipinnatifida	
Glandularia pumila	
Glandularia quadrangulata	
Glandularia tumidula	
Lantana achyranthifolia	
Lantana urticoides	
Lantana velutina	
Lippia graveolens	
Phyla nodiflora	
Tetraclea coulteri	
Verbena bipinnatifida	
Verbena canescens	
Verbena halei	
Verbena neomexicana	
Verbena perennis	
Verbena plicata	
Verbena scabra	
Vitex agnus-castus	
<i>Violaceae</i>	
Hybanthus verticillatus	
<i>Viscaceae</i>	
Phoradendron tomentosum	
<i>Vitaceae</i>	
Cissus trifoliata	
Parthenocissus heptaphylla	
Parthenocissus quinquefolia	
Vitis cinerea var. helleri	
Vitis monticola	
Vitis rupestris	
<i>Zannichelliaceae</i>	
Zannichellia palustris	
<i>Zygophyllaceae</i>	
Guaiaacum angustifolium	
Kallstroemia hirsutissima	
Kallstroemia parviflora	
Larrea tridentata	

<i>Ulmaceae</i>	
sugar hackberry	
netleaf hackberry	
granjeno	
Chinese elm	
<i>Urticaceae</i>	
false nettle	
Pennsylvania pellitory	
stinging nettle	
<i>Verbenaceae</i>	
beebrush	
groovestem bouchea	
Dakota mock vervain	
Dakota vervain	
low pink vervain	
beaked vervain	
Plains vervain	
brushland lantana	
calico bush	
velvet lantana	
scented lippia	
frogfruit	
Coulter's wrinklefruit	
Dakota mock vervain	
gray vervain	
slender vervain	
New Mexico vervain	
perennial vervain	
whitevein vervain	
sandpaper vervain	
chastetree	
<i>Violaceae</i>	
green violet	
<i>Viscaceae</i>	
mistletoe	
<i>Vitaceae</i>	
cow itch, ivy treebine	
sevenleaf creeper	
Virginia creeper	
Heller's grape	
mountain grape	
sand grape	
<i>Zannichelliaceae</i>	
common poolmat	
<i>Zygophyllaceae</i>	
guayacan	
carpetweed	
warty caltrop	
creosotebush	

The Department of the Interior protects and manages the nation's natural resources and cultural heritage; provides scientific and other information about those resources; and honors its special responsibilities to American Indians, Alaska Natives, and affiliated Island Communities.

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