

**MESILLA VALLEY BOSQUE  
STATE PARK  
DOÑA ANA COUNTY, NEW MEXICO**

**VEGETATION SURVEY**

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**OVERVIEW**

The proposed Mesilla Valley Bosque State Park consists of west bank Rio Grande floodplain roughly between the Mesilla Dam and the State Road 538 Bridge. Several hundred acres of desert uplands occur to the east of the southern half of this river park. Substrates are mostly recent alluvial and colluvial deposits and generally consist of alkaline, sandy soils. Some of the lowest areas in the floodplain have alkaline silt and fine sand soils, and there are a few clayey outcrops in the desert uplands.

The vegetation in this park area has been heavily impacted by river channelization, irrigation ditches, drains, roads and off-road vehicles, alien weeds (especially saltcedar), and centuries of livestock grazing. Nevertheless, there are some interesting remnants of the original Rio Grande floodplain in this area. The saltgrass/sacaton flat between the levee and irrigation ditch is especially noteworthy. Despite a few vague irrigation or drainage furrows, I believe this alkaline grassland (with a few scattered stands of cottonwood trees) is a small remnant piece of the natural vegetation community that dominated much of the middle Rio Grande floodplain prior to channelization and conversion to agriculture. This grassland is not especially diverse in species, but is the most interesting part of the park in terms of its historical significance.

Plant association changes in composition and density occur frequently and gradually throughout the park and cannot be mapped with any accuracy. Therefore, the vegetation map of this survey only recognizes three major plant communities: floodplain grassland, mixed riparian (woody plants), and Chihuahuan Desert scrub (also woody plants).



Figure 1. Rio Grande valley in Mesilla, NM looking north. Floodplain grasslands are visible at the top-left of the photo. Mixed riparian woodlands are adjacent to the west bank of the river and west of the grasslands. Upland vegetation west of the riparian woodland is Chihuahuan Desert scrub.

## DOMINANT PLANT COMMUNITIES

### Floodplain Grassland

The alkaline floodplain grassland can be roughly broken into four segments based upon species composition or management.

**Floodplain-Saltgrass:** This area has subirrigated or saturated surface soils and is dominated by saltgrass (*Distichlis spicata*), (*Cressa truxiliensis*) with scattered woody or suffruticose shrubs such as Jimmyweed (*Isocoma pluriflora*), seepweed (*Suaeda nigra*), Torrey's wolfberry (*Lycium torreyi*) and willow baccharis (*Baccharis salicifolia*)(Fig. 2). The saltgrass floodplain can become seriously infested with saltcedar (*Tamarix chinensis*) in locations where the soils are sandier, but are generally free of saltcedar on fine soils. Saltcedar removal has been attempted on a small area north of the ponds (Fig. 3).



Figure 2. Saltgrass floodplain.



Figure 3. Saltcedar removal from saltgrass floodplain.

*Floodplain Wetland:* Small portions of the saltgrass floodplain are wet enough at or near the surface to support a great variety of wetland plants such as bulrush (*Schoenoplectus americanus*), spikerush (*Eleocharis* sp.), scratchgrass (*Muhlenbergia asperifolia*), Baltic rush (*Juncus arcticus* var. *balticus*), yerba manza (*Anemopsis californica*) and sea-purslane (*Sesuvium verrucosum*) (Fig 4.).



Figure 4. Floodplain wetland.

Small ponds have been excavated from the saltgrass floodplain to create aquatic habitat. These ponds support emergent plants such as cattails (*Typha latifolia*), hardstem bulrush (*Schoenoplectus acutus*) and common reed (*Phragmites australis*) (Fig 5).



Figure 5. Pond with emergent vegetation.

*Floodplain-Alkali Sacaton:* A large stand of alkali sacaton (*Sporobolus airoides*) occurs west of the levee and similar to saltgrass floodplain in some subdominant species, such as Jimmyweed and seepweed (Fig. 6). The subirrigated sacaton grassland has drier surface

soils and is, therefore, more susceptible to infestations of kochia (*Kochia scoparia*), an exotic annual.



Figure 6. Alkali sacaton floodplain.

*Floodplain-Mowed:* The area between the west bank of the river and the levee is similar in soils and plant species to the alkali sacaton and saltgrass grasslands. This area is regularly mowed to maintain a channel for flood flows.



Figure 7. Mowed floodplain with scattered planted trees.

The constant disturbance of mowing this portion of the floodplain has made it suitable habitat for many annual plants and exotic weeds. A few scattered pole-plantings of Rio Grande cottonwood (*Populus deltoides* var. *wislizeni*) and Gooodding's willow (*Salix gooddingii*) were planted several years ago and are becoming established in the mowed floodway (Fig. 7). A narrow strip (often less than 10 feet) of coyote willow (*Salix exigua*) and saltcedar separate the mowed floodway from the actual river channel.

### **Mixed Riparian Woodland**

This is the woody vegetation community that occurs on very sandy soils between the river and the upland. It is high in species diversity because it contains some floristic elements from the floodplain grasslands and desert scrub. Nearly all of this area is infested with exotic saltcedar and kochia.



Figure 8. Mixed riparian woodland near river. Broad-leaved trees are Rio Grande cottonwoods.

Near the river or floodplain grasslands, the dominant native shrub species are coyote willow, arrow-weed (*Pluchea sericea*), willow baccharis, three-leaf sumac (*Rhus trilobata*), Torrey's wolfberry (*Lycium torreyi*) and screwbean mesquite (*Prosopis pubescens*) (Fig. 8). Near the upland side of this woodland are large plants of honey mesquite (*Prosopis glandulosa*) and four-wing saltbush (*Atriplex canescens*) (Fig 9).

A few trees of Rio Grande cottonwood and Gooodding's willow are scattered throughout the mixed riparian woodland, but they are not abundant. These trees may have made a denser riparian gallery forest (bosque) prior to flood control projects on the Rio Grande

and subsequent infestation by saltcedar. The natural spring-flood habitats of these native trees have disappeared. It will now take a great deal of effort to re-establish and maintain a cottonwood bosque at this location.



Figure 9. Mixed riparian woodland near desert upland.

### **Chihuahuan Desert Scrub**

The upland breaks west of the Rio Grande are arid shrublands on sandy-gravelly soils. Dominant species include creosote bush (*Larrea tridentata*), honey mesquite, pricklypear (*Opuntia* sp.) and longleaf ephedra (*Ephedra trifurca*) (Fig. 10.). Broom dalea (*Psorothamnus scoparius*) is abundant in some sandy arroyo bottoms.



Figure 10. Chihuahuan Desert Scrub.

## RARE OR SENSITIVE PLANT SPECIES

Three species of rare or endangered plants could potentially occur in the Mesilla Bosque Park:

Dune pricklypear (*Opuntia arenaria*) is endemic to deep, sandy soils in the Mesilla valley near Anthony and on the U.S./Mexico border area east of Columbus. This plant has been severely impacted by agricultural and urban development in its Rio Grande valley habitats and is listed as endangered by the State of New Mexico. A few sandy areas of Chihuahuan Desert scrub in the proposed park appeared to be suitable habitat for this species, but it was not located during the field survey.

Night-blooming cereus (*Peniocereus greggii*) has an historic range throughout southwestern New Mexico, west Texas and northern Chihuahua, but is no-where abundant. This slender cactus is highly prized by succulent collectors and is frequently dug-up when found. It is listed as endangered by the state to discourage unauthorized collection. *Peniocereus greggii* was not located during the field survey of the proposed park, however, it is a very cryptic plant and difficult to see.

Pecos sunflower (*Helianthus paradoxus*) is a wetland species that occurs on alkaline springs and seeps in the Rio Pecos and Rio Grande basins. The nearest known location is at La Joya State Wildlife Refuge in Socorro County. There are a few small pieces of wet alkaline grassland on the proposed park that may be suitable habitat for this species, but they are not presently occupied by the Pecos sunflower.

The rare cactus, Scheer's beehive cactus (*Coryphantha scheeri*) had two varieties (var. *scheeri* and var. *uncinata*) that are listed as endangered by the State of New Mexico. Variety *scheeri* was thought to be endemic to the Rio Pecos basin. Variety *uncinata* was originally thought to be locally endemic to the Rio Grande valley near the NM/TX/Mexico border, but has recently been recognized to be synonymous with the more widely ranging variety *valida* of southwestern New Mexico. It is, therefore, no longer recognized as a narrow endemic by cactus specialists, even though it is still listed as endangered under state law. To make matters more confusing, the most recent taxonomic treatment of this genus (Flora of North America, Vol. 23, 2004) reduced *C. scheeri* and all its varieties into synonymy with *Coryphantha robustispina*, which has a range from west Texas to southeastern Arizona. Therefore, this cactus is likely to be dropped from the list of New Mexico endangered plant species the next time there is rule change for that list.

One plant of *Coryphantha robustispina* was located during this field survey of the park area in desert scrub habitat at N32°14'XXX" W106°48'XXX". This was the only plant of this species seen on the proposed park and is very close to deeply eroded ORV track. *Coryphantha robustispina* populations are usually very small, however, the extremely low density on the park may be the result of ORV impacts and cactus poaching. This single plant should be protected from ORV traffic when the park is established, and all collectible cacti, such as this plant, scarlet hedgehog (*Echinocereus coccineus*) and barrel cactus (*Ferocactus wislizeni*) should be protected from cactus poachers.



Figure 11. *Coryphantha robustispina*. Single plant located during field survey.

## NOXIOUS WEEDS

Like all places on the middle Rio Grande, the proposed park area is infested with fully naturalized exotic plants, such as saltcedar, kochia (*Kochia scoparia*), and Russian thistle (*Salsola tragus*). Saltcedar density varies throughout the park area, but is especially problematic in the mixed riparian community and the saltgrass floodplain vegetation near this community. Other non-native trees, such as Russian olive (*Elaeagnus angustifolia*) and Siberian elm (*Ulmus pumila*) are presently at low densities and can be easily eliminated or controlled.

The non-native Swainsonpea (*Sphaerophysa salsula*) is well established in all floodplain areas, but especially in the wetter portions of the saltgrass and mowed floodplain. This rhizomatous legume may not presently be causing any ecological problems, but it is an exotic species that should be monitored.



Figure 12. Swainsonpea on mowed floodplain.

## MESILLA VALLEY BOSQUE PARK

### Plant species list

Species	Common Name	Habitat	Floodplain Saltgrass/Cressa	Floodplain Alkali Sacaton	Floodplain Mowed	Mixed Riparian	Desert Scrub
<b>Agavaceae – Agave Family</b> <i>Yucca elata</i> Engelm.	Soaptree yucca	D					X
<b>Aizoaceae – Mesembryanthemum Family</b> <i>Sesuvium verrucosum</i> Raf.	Western sea-purslane	W, R	X	X			
<b>Anacardiaceae – Sumac Family</b> <i>Rhus microphylla</i> Engelm. <i>Rhus trilobata</i> Nutt.	Little-leaf sumac Three-leaf sumac	D R				X	
<b>Asclepiadaceae – Milkweed Family</b> <i>Asclepias verticillata</i> L <i>Sarcostemma cynanchoides</i> Decaisne	Whorled milkweed Milkvine	W, R R	X		X	X	
<b>Asteraceae – Aster Family</b> <i>Ambrosia acanthicarpa</i> Hook. <i>Artemisia campestris</i> L. <i>Baccharis salicifolia</i> (Ruiz & Pavon) Pers. <i>Bahia absinthifolia</i> Benth. var. <i>dealbata</i> A. Gray <i>Baileya multiradiata</i> Harvey & Gray <i>Chloracantha spinosa</i> (Benth.) Nesom <i>Conyza canadensis</i> (L.) Cronq. <i>Dieteria canescens</i> (Pursh) Nutt. <i>Gutierrezia microcephala</i> (DC.) A. Gray <i>Helianthus annuus</i> L. <i>Helianthus ciliaris</i> DC. <i>Helianthus petiolaris</i> ssp. <i>fallax</i> Heiser <i>Heterotheca villosa</i> (Pursh) Shinners <i>Hymenopappus flavescens</i> A. Gray <i>Isocoma pluriflora</i> (Torr. & Gray) Greene * <i>Lactuca seriola</i> L. <i>Machaeranthera tanacetifolia</i> (H.B.K.) Nees <i>Malacothrix fendleri</i> A. Gray <i>Pectis papposa</i> Harvey & Gray	Bur ragweed Field wormwood Willow baccharis Hairy-seed bahia Desert marigold Mexican devilweed Western horseweed Sand daisy Thread-leaf snakeweed Common sunflower Texas blueweed Plains sunflower Hairy golden-aster Yellow woolywhite Southern Jimmyweed Prickly lettuce Tahoka daisy Fendler's desert-dandelion Dissected chinchweed	D D W, R D, R D D, R D, R D D, R D D D, R D D D D D D		X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X

Species	Common Name	Habitat	Floodplain	Floodplain	Floodplain	Mixed	Desert
			Saltgrass/Cressa	Alkali Sacaton	Mowed	Riparian	Scrub
<i>Pluchea sericea</i> (Nutt.) Cav.	Arrow-weed	W, R				X	
<i>Pyrrhopappus grandiflorus</i> Nutt.	False dandelion	W, R	X				
<i>Rafinesquia neomexicana</i> A. Gray	Desert chicory	D					X
<i>Senecio flaccidus</i> Lessing var. <i>douglasii</i> (DC.) Turner & Barkley	Thread-leaf groundsel	D			X		X
* <i>Sonchus asper</i> (L.) Hill	Spiny sow-thistle	D, R			X		
<i>Sympphyotrichum divaricatum</i> (Nutt.) Nesom	New Mexico aster	W, R	X				
<i>Stephanomeria exigua</i> Nutt.	Twiggy wire-lettuce	D			X		X
<i>Thelesperma megapotamicum</i> (Spren.) Kuntze	Cota	R				X	
<i>Verbesina encelioides</i> (Cav.) Benth. & Hook. var. <i>exauriculata</i> B.L. Robinson	Cowpen daisy	D			X	X	
<i>Xanthisma spinulosum</i> (Pursh) Morgan & Hartman	Lacy sleep-daisy	D			X	X	X
<i>Zinnia acerosa</i> (DC.) A. Gray	Desert zinnia	D					X
<b>Boraginaceae – Borage Family</b>							
<i>Cryptantha angustifolia</i> (Torr.) Greene	Narrow-leaf cryptantha	D				X	X
<i>Cryptantha crassisepala</i> (Torr. & Gray) Greene var. <i>elechantha</i> I.M. Johnst.	Thick-sepal cryptantha	D				X	X
<i>Cryptantha micrantha</i> (Torr.) I.M. Johnst.	Red-root cryptantha	D				X	X
<i>Heliotropium curassavicum</i> (L.)	Seaside heliotrope	W, R	X				
<b>Brassicaceae – Mustard Family</b>							
<i>Descurainia pinnata</i> (Walter) Britt. var. <i>halictorum</i> (Cockerell) Detling	Western tansy-mustard	D			X	X	X
<i>Dimorphocarpa wislizeni</i> (Engelm.) Rollins	Spectacle-pod	D			X	X	X
<i>Lepidium montanum</i> Nutt.	Mountain pepperweed	D					X
* <i>Raphanus sativus</i> L.	Radish	D, R			X		
<b>Cactaceae – Cactus Family</b>							
<i>Coryphantha robustispina</i> (Schott & Engel.) Britt. & Rose	Beehive cactus	D					X
<i>Cylindropuntia imbricata</i> (Harworth) Kunth	Cane cholla	D					X
<i>Cylindropuntia leptocaulis</i> (DC.) Kunth	Christmas cholla	D					X
<i>Echinocereus coccineus</i> Engelm.	Scarlet hedgehog	D					X
<i>Ferocactus wislizeni</i> (Engelm.) Robins.	Fish-hook barrel-cactus	D					X
<i>Opuntia engelmannii</i> Salm-Dyck var. <i>engelmannii</i>	Engelmann's pricklypear	D					X

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			Saltgrass/Cressa	Alkali Sacaton	Mowed	Riparian	Scrub
<i>*Opuntia engelmannii</i>						X	
var. <i>lindheimeri</i> (Engelm.) Parfitt	Texas pricklypear	D					
<i>Opuntia macrocentra</i> Engelm.	Purple pricklypear	D					X
<i>Opuntia phaeacantha</i> Engelm.	Plains pricklypear	D		X		X	X
<b>Chenopodiaceae – Goosefoot Family</b>							
<i>Atriplex argentea</i> Nutt.	Silverscale	R	X				
<i>Atriplex canescens</i> (Pursh) Nutt.	Four-wing saltbush	D			X	X	X
<i>Atriplex elegans</i> (Moquin & Tandon) Dietrich	Wheel-scale	R			X	X	
* <i>Atriplex semibaccata</i> R. Brown	Australian saltbush	D			X		
<i>Atriplex wrightii</i> S. Wats.	Wright's saltbush	R	X	X	X	X	
<i>Chenopodium dessicatum</i> A. Nels.	Thickleaf goosefoot	D			X		
<i>Chenopodium incanum</i> (S. Wats.) Heller	Mealy goosefoot	D				X	
* <i>Kochia scoparia</i> (L.) Roth	Kochia	D, R	X	X	X	X	X
* <i>Salsola tragus</i> L.	Prickly Russian thistle	D, R			X	X	X
<i>Suaeda nigra</i> (Raf.) Macbr.	Shrubby seepweed	R, W	X	X			
<b>Convolvulaceae – Morning Glory Family</b>							
* <i>Convolvulus arvensis</i> L.	Field bindweed	D, R			X		
<i>Cressa truxillensis</i> H.B.K.	Alkali-weed	R	X	X	X		
<b>Cucurbitaceae – Gourd Family</b>							
<i>Cucurbita foetidissima</i> H.B.K.	Buffalo gourd	D			X		
<b>Cyperaceae – Sedge Family</b>							
<i>Carex emoryi</i> Dewey	Emory's sedge	W				X	
<i>Eleocharis</i> sp.	Spikesedge	W	X			X	
<i>Eleocharis macrostachya</i> Britt.	Pale spikesedge	W	X			X	
<i>Schoenoplectus acutus</i>	Hardstem bulrush	W, A	X			X	
<i>Schoenoplectus americanus</i> (Persoon) Volk.	Chairmaker's bulrush	W, A	X		X	X	
<b>Elaeagnaceae – Oleaster Family</b>							
* <i>Elaeagnus angustifolia</i> L.	Russian olive	R				X	
<b>Ephedraceae – Jointfir Family</b>							
<i>Ephedra trifurca</i> Torr.	Longleaf ephedra	D					X

Species	Common Name	Habitat	Floodplain	Floodplain	Floodplain	Mixed	Desert
			Saltgrass/Cressa	Alkali Sacaton	Mowed	Riparian	Scrub
<b>Equisetaceae – Horsetail Family</b>							
<i>Equisetum laevigatum</i> A. Braun	Smooth horsetail	W				X	
<b>Euphorbiaceae – Spurge Family</b>							
<i>Croton pottsii</i> (Klotz.) Muller	Leatherweed	D					X
<b>Fabaceae – Bean Family</b>							
* <i>Caesalpinia gilliesii</i> (Hook.) Wallich	Bird-of-paradise	D, R				X	
<i>Dalea lanata</i> Spreng.	Wooly prairie-clover	D					X
<i>Glycyrrhiza lepidota</i> Nutt.	American licorice	R	X		X		
<i>Hoffmannseggia glauca</i> (Ortega) Eifert	Waxy rushpea	D, R	X	X	X		
* <i>Melilotus officinalis</i> (L.) Pallas	Yellow sweet-clover	D, R			X	X	
<i>Prosopis glandulosa</i> Torr.	Honey mesquite	D, R		X	X	X	X
<i>Prosopis pubescens</i> Benth.	Screwbean mesquite	R			X	X	
<i>Psorothamnus scoparius</i> (A. Gray) Rydb.	Broom dalea	D					X
<i>Senna bauhinoides</i> (Gray) Irwin & Barneby	Two-leaf senna	D					X
* <i>Sphaerophysa salsula</i> (Pallas) DC.	Swainsonpea	R	X	X	X		
<b>Hydrophyllaceae – Waterleaf Family</b>							
<i>Nama hispidum</i> A. Gray	Sandbells	D				X	X
<i>Phacelia caerulea</i> Greene	Sky-blue scorpion-weed	D				X	X
<i>Phacelia integrifolia</i> Torr.	Scorpion-weed	D				X	X
<b>Juncaceae – Rush Family</b>							
<i>Juncus arcticus</i> Willd.							
var. <i>balticus</i> (Willd.) Traut.	Baltic rush	R, W	X	X	X		
<b>Liliaceae – Lily Family</b>							
* <i>Asparagus officinalis</i> L.	Asparagus	R				X	
<b>Linaceae – Flax Family</b>							
<i>Linum puberulum</i> (Engelm.) Heller	Plains flax	D					X
<b>Loasaceae – Blazingstar Family</b>							
<i>Mentzelia multiflora</i> (Nutt.) A. Gray	Adonis blazingstar	D				X	X

Species	Common Name	Habitat	Floodplain	Floodplain	Floodplain	Mixed	Desert
			Saltgrass/Cressa	Alkali Sacaton	Mowed	Riparian	Scrub
<b>Malvaceae – Mallow Family</b>							
<i>Malvella leprosa</i> (Ortega) Krapovickas	Alkali mallow	R	X	X			
<i>Sphaeralcea angustifolia</i> (Cav.) G. Don	Copper globemallow	D, R			X	X	
<i>Sphaeralcea coccinea</i> (Nutt.) Rydb.	Scarlet globemallow	D					X
<b>Nyctaginaceae – Four-o’clock Family</b>							
<i>Abronia fragrans</i> Nutt.	Fragrant sand-verbena	D			X	X	
<i>Acleisanthes chenopodioides</i> (Gray) Levin	Goosefoot moonpod	D					X
<i>Allionia incarnata</i> L.	Trailing windmills	D					X
<i>Mirabilis multiflora</i> (Torr.) A. Gray	Colorado four-o’clock	D				X	
<b>Onagraceae – Evening Primrose Family</b>							
<i>Gaura mollis</i> James	Velvet-weed	D, R			X		
<i>Oenothera pallida</i> Lindley	Pale evening-primrose	D			X	X	X
<b>Pedaliaceae – Unicorn Plant Family</b>							
<i>Proboscidea althaeifolia</i> (Benth.) Decaisne	Hollyhock devil’s-claw	D					X
<i>Proboscidea parviflora</i> (Woot.) Woot.	Wooton’s devil’s-claw	D				X	
<b>Plantaginaceae – Plantain Family</b>							
* <i>Plantago lanceolata</i> L.	English plantain	R			X	X	
<i>Plantago patagonica</i> Jacq.	Wooly plantain	D					X
<b>Poaceae – Grass Family</b>							
* <i>Arundo donax</i> L.	Giant reed	R			X		X
* <i>Cynodon dactylon</i> (L.) Pers.	Bermudagrass	R			X		
<i>Distichlis spicata</i> (L.) Greene							
var. <i>stricta</i> (Torr.) Beetle	Inland saltgrass	W, R	X	X	X		
<i>Elymus canadensis</i> L.	Canada wildrye	R			X		
<i>Hordeum jubatum</i> L.	Foxtail barley	D, R	X	X	X		X
<i>Leptochloa fusca</i> (L.) Kunth							
var. <i>fascicularis</i> (Lam.) Snow	Bearded sprangletop	W, A	X				
<i>Muhlenbergia asperifolia</i> (Nees & Meyer) Parodi	Scratchgrass	W	X		X	X	
<i>Muhlenbergia porteri</i> Scribn.	Bush muhly	D					X
<i>Phragmites australis</i> (Cav.) Trinius							
var. <i>commutatum</i> (Gaudin) Richter	Common reed	W, R				X	
* <i>Polypogon monspeliensis</i> (L.) Desf.	Rabbitfootgrass	W	X			X	

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			Saltgrass/Cressa	Alkali Sacaton	Mowed	Riparian	Scrub
<i>*Polypogon viridis</i> (Gouan) Breistroffer	Water polypogon	W			X		
<i>*Puccinellia distans</i> (Jacq.) Parlatoare	Weeping alkaligrass	W	X				
<i>*Schizmuss barbatus</i> (Loefling) Thellung	Bearded Mediterraneangrass	D				X	X
<i>Seteria macrostachya</i> Kunth	Plains bristlegrass	R				X	
<i>*Sorghum halepense</i> (L.) Pers.	Johnsongrass	R			X		
<i>Sporobolus airoides</i> (Torr.) Torr.	Alkali sacaton	R	X	X	X		X
<i>Sporobolus cryptandrus</i> (Torr.) A. Gray	Sand dropseed	D			X		
<i>Sporobolus giganteus</i> Nash	Giant dropseed	D			X		
<i>Sporobolus flexuosus</i> (Thurb.) Rydb.	Mesa dropseed	D					X
<b>Polemoniaceae – Phlox Family</b>							
<i>Eriastrum diffusum</i> (A. Gray) Mason	Woolystar	D					X
<i>Ipomopsis pumila</i> (Nutt.) V. Grant	Low skyrocket	D				X	X
<b>Polygonaceae – Knotweed Family</b>							
<i>Eriogonum rotundifolium</i> Benth.	Saucerleaf wild buckwheat	D				X	X
<i>*Rumex obtusifolius</i> L.	Bitter dock	R	X				
<i>*Rumex crispus</i> L.	Curly dock	W, R			X		X
<i>Rumex hymenosepalus</i> Torr.	Sand dock	D			X		X
<b>Ranuculaceae – Buttercup Family</b>							
<i>Ranunculus cymbalaria</i> Pursh	Alkali buttercup	W	X				
<b>Rhamnaceae – Buckthorn Family</b>							
<i>Ziziphus obtusifolia</i> (Hook.) A. Gray	Lotebush	D				X	
<b>Salicaceae – Willow Family</b>							
<i>Populus deltoides</i> Bartram							
var. <i>wislizenii</i> (S. Wats.) Echenw.	Rio Grande cottonwood	R		X	X		X
<i>Salix exigua</i> Nutt.	Coyote willow	R	X	X	X		X
<i>Salix gooddingii</i> Ball	Goodding's willow	R			X		X
<b>Sauruaceae – Lizard's-tail Family</b>							
<i>Anemopsis californica</i> (Nutt.) Hook. & Arnott	Yerba mansa	W, R	X	X	X		
<b>Scrophulariaceae – Figwort Family</b>							
<i>Maurandya wislizeni</i> Engelm.	Viny snapdragon	R				X	

Species	Common Name	Habitat	Floodplain Saltgrass/Cressa	Floodplain Alkali Sacaton	Floodplain Mowed	Mixed Riparian	Desert Scrub
<b>Solanaceae – Nightshade Family</b>							
<i>Datura wrightii</i> Regel	Sacred thorn-apple	D, R				X	
<i>Lycium andersonii</i> A. Gray	Anderson's wolfberry	D					X
<i>Lycium torreyi</i> A. Gray	Torrey's wolfberry	R	X	X	X	X	
<i>Solanum elaeagnifolium</i> Cav.	Silverleaf nightshade	D, R		X	X	X	
<b>Tamaricaceae – Tamarisk Family</b>							
* <i>Tamarix chinensis</i> Loureiro	Saltcedar	R	X	X	X	X	
<b>Typhaceae – Cattail Family</b>							
<i>Typha latifolia</i> L.	Broadleaf cattail	W, A	X				
<b>Ulmaceae – Elm Family</b>							
* <i>Ulmus pumila</i> L.	Siberian elm	R			X		
<b>Viscaceae – Mistletoe Family</b>							
<i>Phoradendron macrophyllum</i> (Engelm.) Cockll.	Colorado mistletoe	P				X	
<b>Zygophyllaceae – Caltrop Family</b>							
<i>Larrea tridentata</i> (Sesse & Moc.) Cov.	Creasote bush	D					X

\* = Non-native

A = Aquatic

W = Wetland (saturated soils)

R = Riparian (subirrigated)

D = Dryland

P = Parasite