

SOUTHEASTERN GREAT PLAINS FLOODPLAIN FOREST

Nature Serve ID: CES303.651

Geology: This system generally occupies Quaternary alluvium.

Landform: This floodplain forest occupies relatively broad flats at low topographic positions, along large streams where alluvial deposition dominates. Rivers such as the Sulphur, (and tributaries such as White Oak and Cuthand Creeks), Sabine (and Lake Fork), Trinity (and its major tributaries), Navasota, and portions of the Lower and Middle Brazos (and its major tributaries), Colorado, Guadalupe, Lavaca, Navidad, and San Antonio Rivers may support this system.

Soils: Bottomland Ecological Sites (including Loamy, Sandy, and Clayey) characterize this system.

Description: Dominant communities within this system range from floodplain forests to wet meadows to gravel/sand flats; however, they are linked by underlying soils and the flooding regime. Canopy dominants may include *Carya illinoensis* (pecan), *Fraxinus americana* (white ash), *Quercus nigra* (water oak), *Ulmus crassifolia* (cedar elm), *Celtis laevigata* (sugar hackberry), *Ulmus americana* (American elm), *Quercus fusiformis* or *Q. virginiana* (plateau or coastal live oak), *Platanus occidentalis* (American sycamore), *Acer negundo* (boxelder), *Gleditsia triacanthos* (common honeylocust), *Quercus macrocarpa* (bur oak), *Morus rubra* (red mulberry), *Fraxinus pennsylvanica* (green ash), and *Sapindus saponaria* var. *drummondii* (western soapberry). Especially along river margins, species such as *Platanus occidentalis* (American sycamore), *Populus deltoides* (eastern cottonwood), and *Salix nigra* (black willow) may dominate. In this eastern part of the range of the system, *Liquidambar styraciflua* (sweetgum), *Quercus phellos* (willow oak), and *Betula nigra* (river birch) may also be commonly encountered. Seasonally flooded sites, especially within the Trinity River basin, may have *Quercus lyrata* (overcup oak) as an overstory component. Overgrazing and/or overbrowsing may influence recruitment of overstory species and composition of the understory and herbaceous layers. Shrub species may include *Callicarpa americana* (American beautyberry), *Cephalanthus occidentalis* (common buttonbush), *Ilex decidua* (possumhaw), *Ilex vomitoria* (yaupon), *Sideroxylon lanuginosum* (gum bumelia), *Diospyros virginiana* (common persimmon), *Vaccinium arboreum* (farkleberry), *Juniperus virginiana* (eastern redcedar), *Cornus drummondii* (roughleaf dogwood), and *Viburnum rufidulum* (rusty blackhaw), which may occur as dense patches following disturbance, but are otherwise generally fairly sparse. In the southern expressions of the system, other shrubs such as *Prosopis glandulosa* (honey mesquite), *Acacia farnesiana* (huisache), *Diospyros texana* (Texas persimmon), and *Condalia hookeri* (brasil) may be commonly encountered. Vines such as *Berchemia scandens* (Alabama supplejack), *Campsis radicans* (common trumpet creeper), *Vitis* spp. (grape), *Parthenocissus quinquefolia* (Virginia creeper), *Toxicodendron radicans* (poison ivy), *Smilax bona-nox* (saw greenbrier), and *Ampelopsis arborea* (peppervine) may be conspicuous. Herbaceous cover includes *Elymus virginicus* (Virginia wildrye), *Verbesina virginica* (frostweed), *Chasmanthium latifolium* (creek oats), *Chasmanthium sessiliflorum* (narrowleaf woodoats), *Carex cherokeensis* (Cherokee sedge), *Tripsacum dactyloides* (eastern gamagrass), *Symphotrichum drummondii* var. *texanum* (Drummond's aster), *Calyptocarpus vialis* (straggler daisy), *Geum canadense* (white avens), *Sanicula canadensis* (Canada snakeroot), *Ambrosia trifida* (giant ragweed), *Panicum virgatum* (switchgrass), *Galium* spp. (bedstraw), *Teucrium canadense* (American germander), and *Carex* spp. (caric sedges). Wetter sites may contain species such as *Zizaniopsis miliacea* (marshmillet), *Rhynchospora* spp. (beaksedges), *Eleocharis* spp. (spikerushes),

Nymphaea odorata (American waterlily), and *Peltandra virginica* (Virginia peltandra). Non-native grasses that may dominate these sites include *Cynodon dactylon* (bermudagrass), *Bothriochloa ischaemum* var. *songarica* (King Ranch bluestem), and *Sorghum halepense* (Johnsongrass). Herbaceous cover may be quite high, especially in situations where shrub cover is low. The non-native trees *Triadica sebifera* (Chinese tallow) and *Melia azedarach* (chinaberry) may be present.

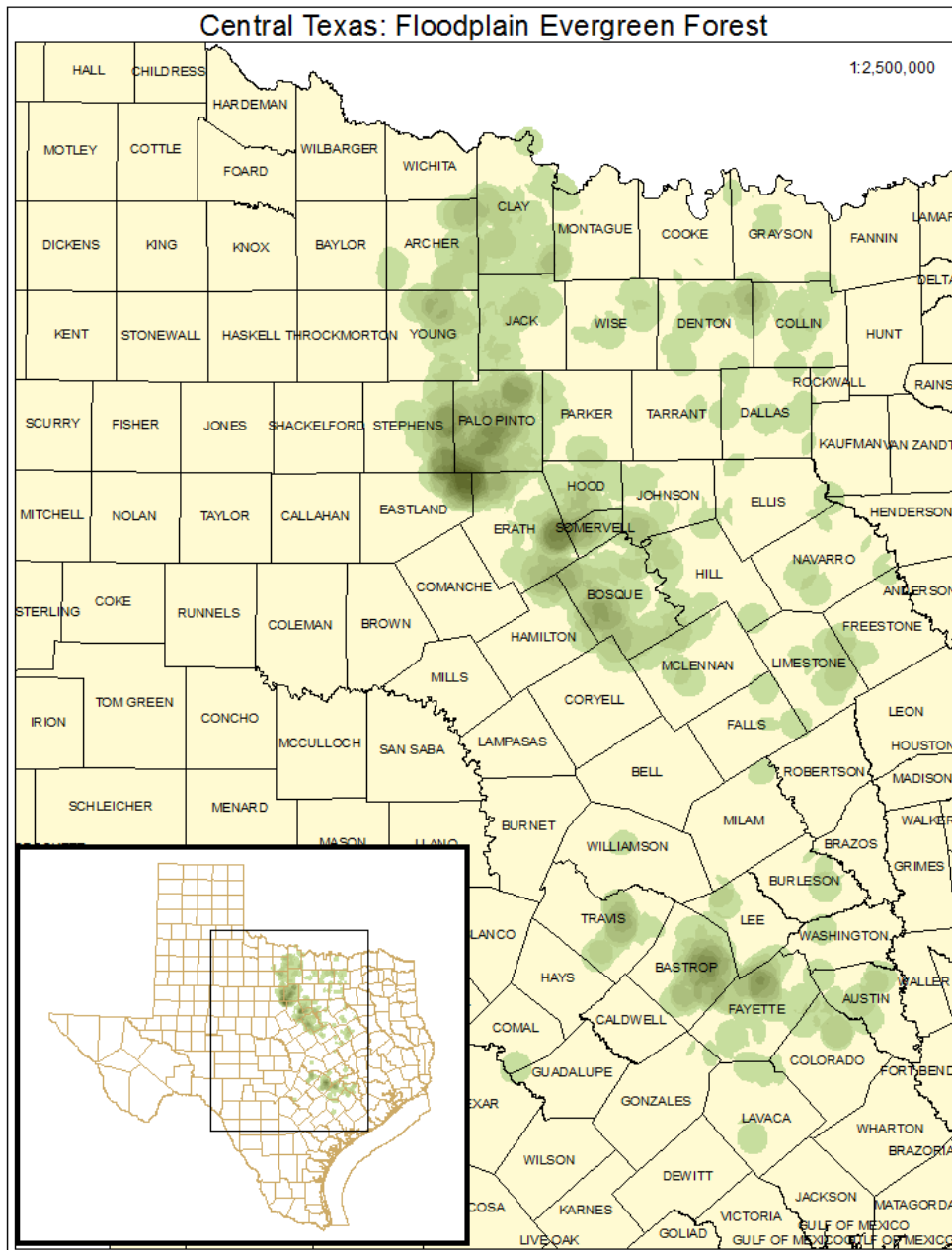
ECOLOGICAL MAPPING SYSTEMS:

CENTRAL TEXAS: FLOODPLAIN EVERGREEN FOREST

Mapping System ID: 1801

EMS Description: As described for the system, but the canopy is dominated by *Juniperus virginiana* (eastern redcedar). In some cases, this mapped type may have *Pinus taeda* (loblolly pine) as the canopy dominant.

Distribution Map:



Example:



Public Land Occurrence:

Bastrop State Park: Texas Parks & Wildlife Department

Lake Whitney Recreation Area: US Army Corps of Engineers

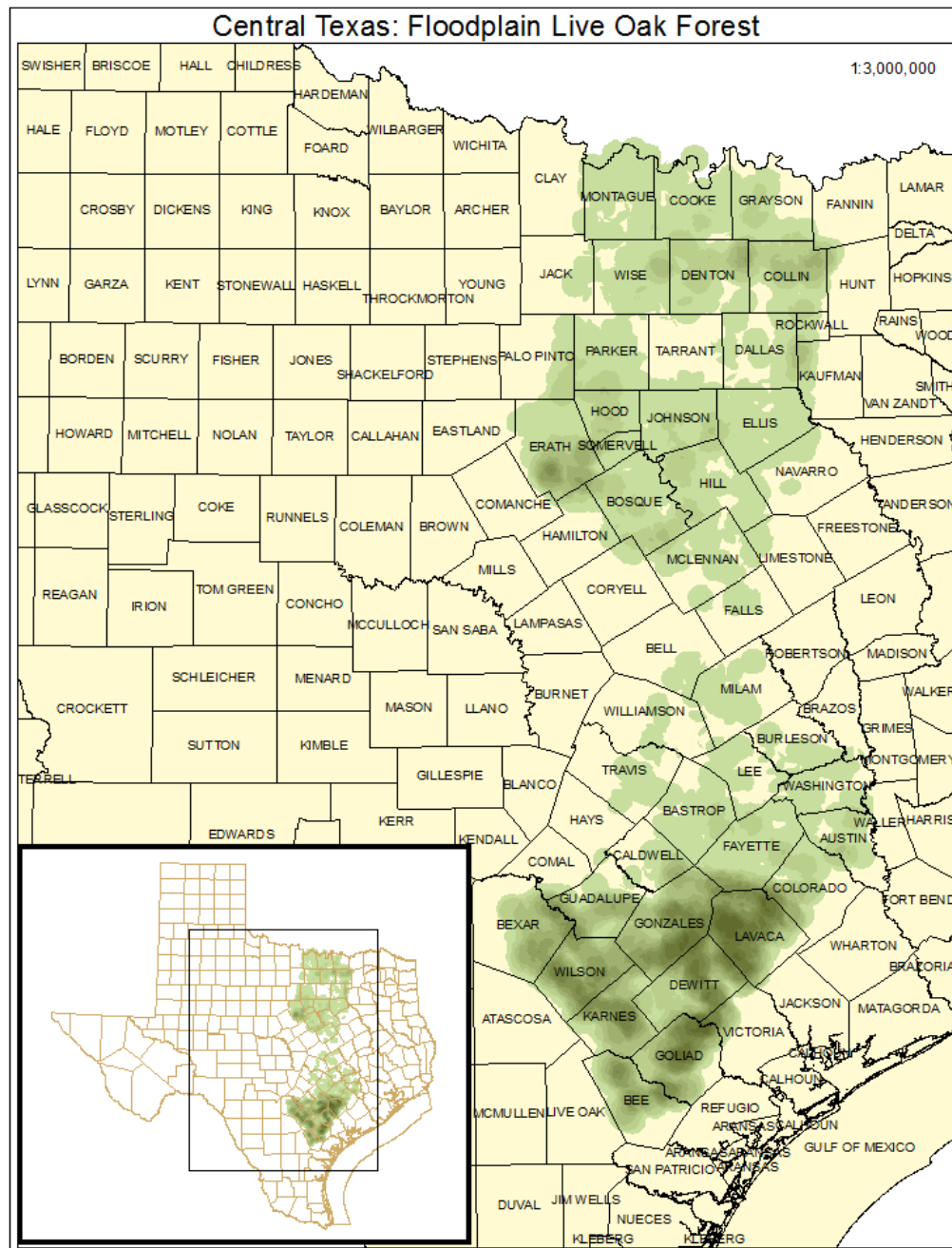
South Shores Park: Lower Colorado River Authority

CENTRAL TEXAS: FLOODPLAIN LIVE OAK FOREST

Mapping System ID: 1802

EMS Description: As described for the system, but dominated by *Quercus fusiformis* (plateau live oak) or *Quercus virginiana* (coastal live oak). Deciduous species can be, and frequently are, common in the canopy, but *Quercus fusiformis* (plateau live oak) or *Quercus virginiana* (coastal live oak) clearly dominates. *Juniperus virginiana* (eastern redcedar) may also be present.

Distribution Map:



Example:



Public Land Occurrence:

Hagerman National Wildlife Refuge: US Fish and Wildlife Service

Ham Creek Park: City of Blum

Lake Lewisville Recreation Area: US Army Corps of Engineers

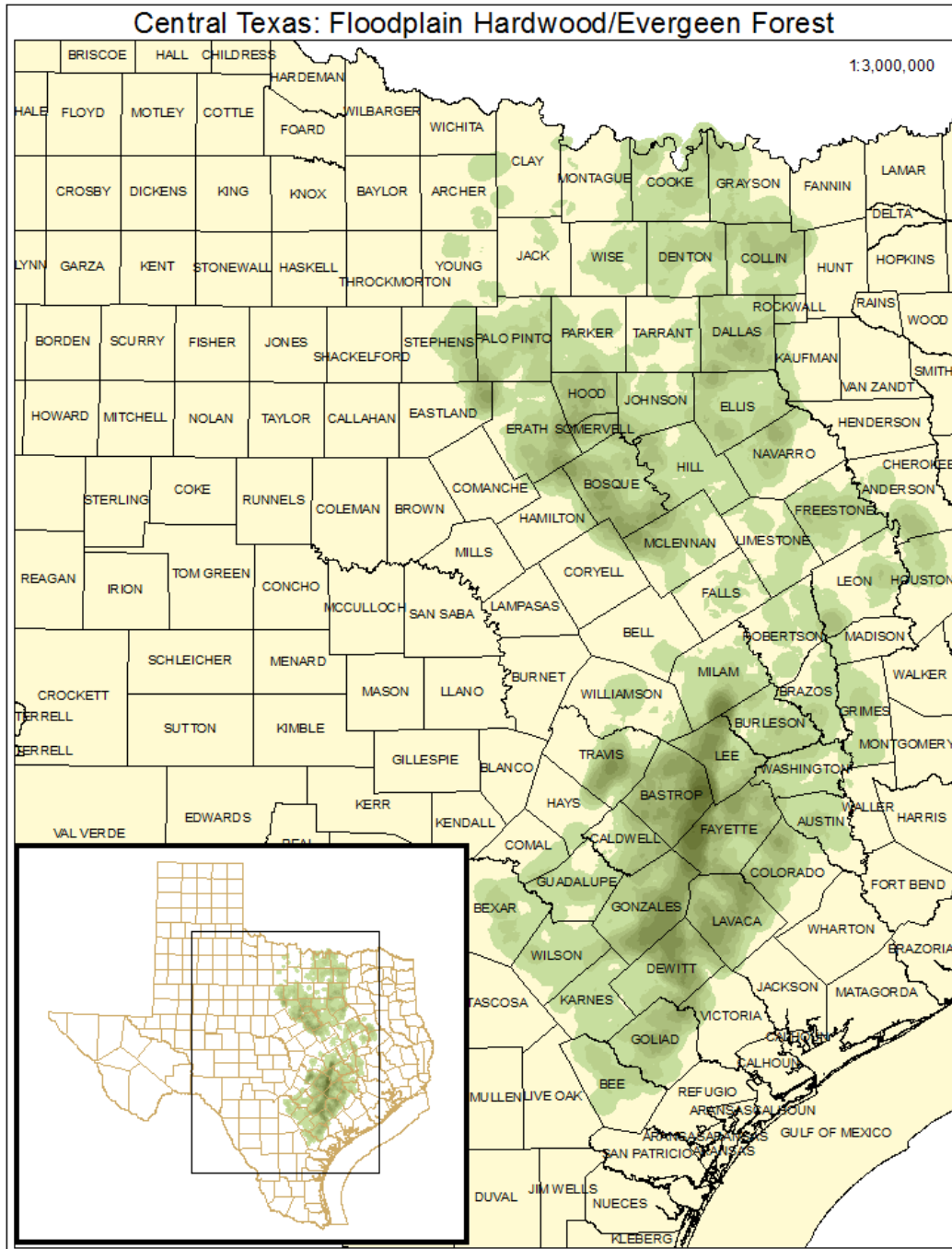
Lavon Lake Recreation Area: US Army Corps of Engineers

CENTRAL TEXAS: FLOODPLAIN HARDWOOD / EVERGREEN FOREST

Mapping System ID: 1803

EMS Description: As described for the system with a mix of evergreen and deciduous species in the canopy, with *Quercus fusiformis* (plateau live oak) representing the most common evergreen component.

Distribution Map:



Example:



Public Land Occurrence:

Bastrop State Park: Texas Parks & Wildlife Department

Caddo National Grassland – Lake Fannin: US Forest Service

Hagerman NWR: US Fish and Wildlife Service

Ham Creek Park: City of Blum

Lavon Lake Recreation Area: US Army Corps of Engineers

Mountain Creek Lake Park: Grand Prairie Parks & Recreation Department

Palmetto State Park: Texas Parks & Wildlife Department

Ray Roberts Lake Wildlife Management Area: Texas Parks & Wildlife Department

Rochester Park: City of Dallas

Somerville Lake Recreation Area: US Army Corps of Engineers

Example:



Public Land Occurrence:

- Aquilla Lake: Texas Parks & Wildlife Department
- Big Lake Bottom Wildlife Management Area: Texas Parks & Wildlife Department
- Calaveras Lake: Texas Parks & Wildlife Department
- Fort Boggy State Park: Texas Parks & Wildlife Department
- Fort Richardson State Park and Historical Site: Texas Parks & Wildlife Department
- Fort Worth Nature Center: Tarrant County
- Goliad State Park & Historic Site: Texas Parks & Wildlife Department
- Granger Wildlife Management Area: Texas Parks & Wildlife Department
- Gus Engeling Wildlife Management Area: Texas Parks & Wildlife Department
- Hagerman NWR: US Fish and Wildlife Service
- Keechi Creek Wildlife Management Area: Texas Parks & Wildlife Department
- Lake Arrowhead State Park: Texas Parks & Wildlife Department
- Lake Lewisville Recreation Area: US Army Corps of Engineers
- Lake Whitney Recreation Area: US Army Corps of Engineers
- Lavon Lake Recreation Area: US Army Corps of Engineers
- McAllister Park: City of San Antonio
- Mitchell Lake Audubon Center: National Audubon Society
- Mountain Creek Lake Park: City of Duncanville



Navarro Mills Lake Recreation Area: US Army Corps of Engineers
Nolte Island Recreation Area: Guadalupe-Blanco River Authority
Olmos Basin Park: City of San Antonio
Possum Kingdom State Park: Texas Parks & Wildlife Department
Ray Roberts Lake Wildlife Management Area: Texas Parks & Wildlife Department
Richland Creek Wildlife Management Area: Texas Parks & Wildlife Department
Rochester Park: City of Dallas
San Antonio Missions National Historic Park: National Park Service
Somerville Lake Recreation Area: US Army Corps of Engineers
South Side Lions Park East: City of San Antonio
Stephen F. Austin State Park: Texas Parks & Wildlife Department



Example:



Public Land Occurrence:

- Caddo National Grassland – Lake Fannin: US Forest Service
- Dinosaur Valley State Park: Texas Parks & Wildlife Department
- Fort Richardson State Park and Historical Site: Texas Parks & Wildlife Department
- Granger Wildlife Management Area: Texas Parks & Wildlife Department
- Lakes of Springfield Park: City of Rowlett
- Lake Whitney Recreation Area: US Army Corps of Engineers
- Meridian State Park: Texas Parks & Wildlife Department
- Possum Kingdom State Park: Texas Parks & Wildlife Department

Example:



Public Land Occurrence:

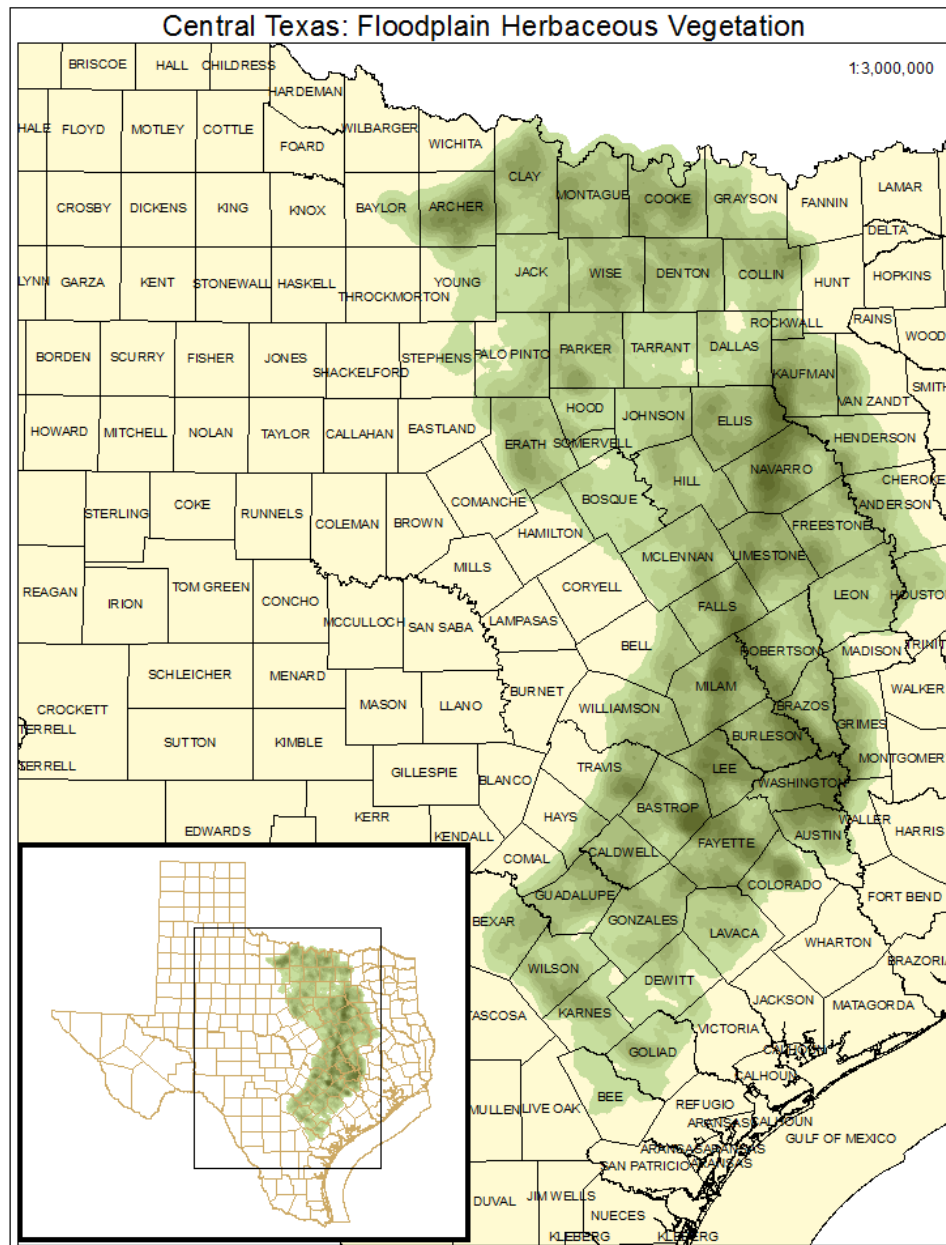
- Aquilla Wildlife Management Area: Texas Parks & Wildlife Department
- Benbrook Lake Recreation Area: US Army Corps of Engineers
- Big Lake Bottom Wildlife Management Area: Texas Parks & Wildlife Department
- Dinosaur Valley State Park: Texas Parks & Wildlife Department
- Fort Richardson State Park and Historical Site: Texas Parks & Wildlife Department
- Granger Wildlife Management Area: Texas Parks & Wildlife Department
- Lake Arrowhead State Park: Texas Parks & Wildlife Department
- Lake Lewisville Recreation Area: US Army Corps of Engineers
- Lake Whitney Recreation Area: US Army Corps of Engineers
- Navarro Mills Lake Recreation Area: US Army Corps of Engineers
- Palmetto State Park: Texas Parks & Wildlife Department
- Richland Creek Wildlife Management Area: Texas Parks & Wildlife Department
- Somerville Lake Recreation Area: US Army Corps of Engineers

CENTRAL TEXAS: FLOODPLAIN HERBACEOUS VEGETATION

Mapping System ID: 1807

EMS Description: Floodplains of the region that lack a significant overstory or shrub canopy, but retain cover in the herbaceous layer. Non-native grass species such as *Cynodon dactylon* (bermudagrass), *Bothriochloa ischaemum* var. *songarica* (King Ranch bluestem), and *Sorghum halepense* (Johnsongrass) may frequently dominate this vegetation type. *Tripsacum dactyloides* (eastern gamagrass) – *Panicum virgatum* (switchgrass) dominated prairies on lowlands, like those that occur at Knight Prairie and Mill Creek Bottom, may also be mapped as this vegetation type.

Distribution Map:



Example:



Public Land Occurrence:

Aquilla Wildlife Management Area: Texas Parks & Wildlife Department

Attwater Prairie Chicken National Wildlife Refuge: US Fish and Wildlife Service

Big Lake Bottom Wildlife Management Area: Texas Parks & Wildlife Department

Dinosaur Valley State Park: Texas Parks & Wildlife Department

Granger Wildlife Management Area: Texas Parks & Wildlife Department

Hagerman NWR: US Fish and Wildlife Service

Ham Creek Park: City of Blum

Lake Arrowhead State Park: Texas Parks & Wildlife Department

Lake Lewisville Recreation Area: US Army Corps of Engineers

Lakes of Springfield Park: City of Rowlett

Lake Whitney Recreation Area: US Army Corps of Engineers

Lavon Lake Recreation Area: US Army Corps of Engineers

Navarro Mills Lake Recreation Area: US Army Corps of Engineers

Ray Roberts Lake Wildlife Management Area: Texas Parks & Wildlife Department

Richland Creek Wildlife Management Area: Texas Parks & Wildlife Department

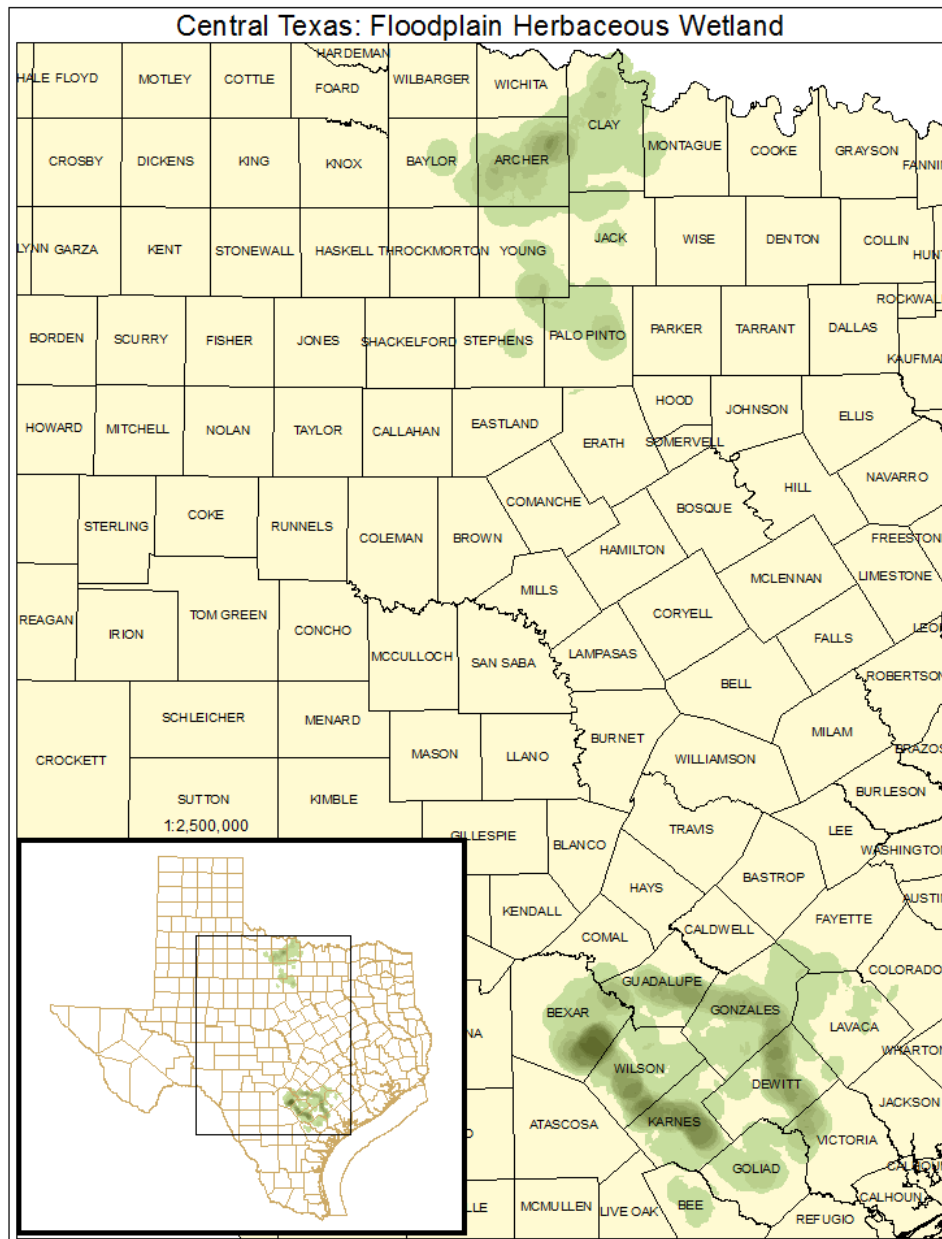
Somerville Lake Recreation Area: US Army Corps of Engineers

CENTRAL TEXAS: FLOODPLAIN HERBACEOUS WETLAND

Mapping System ID: 1817

EMS Description: These wetlands are dominated by numerous sedge species, including *Carex* spp. (sedges), *Eleocharis* spp. (spikerushes), *Cyperus* spp. (flatsedges), and *Schoenoplectus pungens* (common threesquare). Various grasses and *Juncus* spp. (rushes) are also common. Forbs that may be encountered include species such as *Hydrocotyle verticillata* (whorled water-pennywort), *Polygonum* spp. (smartweeds), *Pluchea odorata* (purple marsh-camphor), and *Ambrosia trifida* (giant ragweed).

Distribution Map:



Example:

Not available at this time.

Public Land Occurrence:

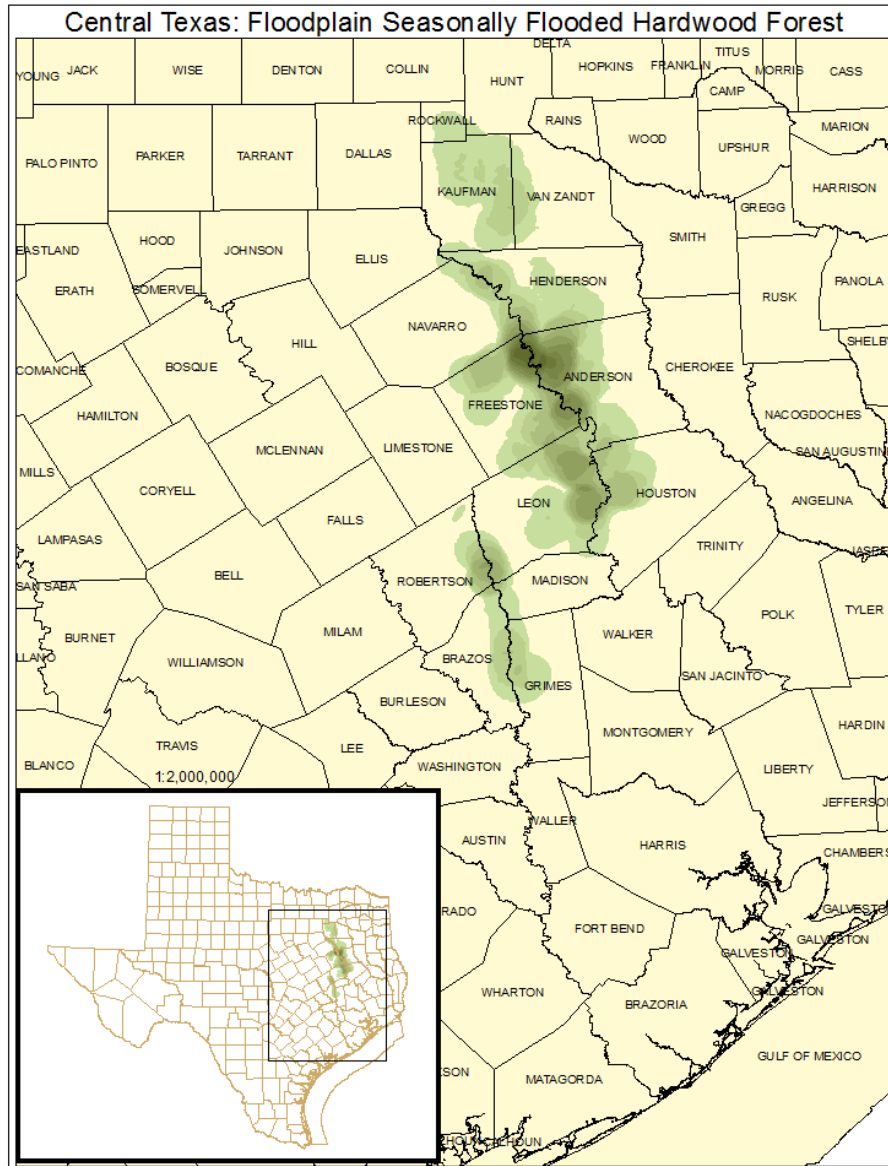
Mitchell Lake Audubon Center: National Audubon Society

CENTRAL TEXAS: FLOODPLAIN SEASONALLY FLOODED HARDWOOD FOREST

Mapping System ID: 1814

EMS Description: In this eastern portion of the range of the system, the occurrence of bottomlands that are seasonally flooded becomes more common. These sites may be dominated by species that may be more commonly encountered to the east, such as *Quercus lyrata* (overcup oak) and *Quercus phellos* (willow oak). *Salix nigra* (black willow) may also be commonly encountered within the mapped type. Herbaceous cover is very limited due to the frequency of flooding. Shrubs that can withstand frequent inundation, such as *Cephalanthus occidentalis* (common buttonbush), *Planera aquatica* (water elm), and *Forestiera acuminata* (swamp privet), may be present to dominant.

Distribution Map:



Example:



Public Land Occurrence:

Big Lake Bottom Wildlife Management Area: Texas Parks & Wildlife Department

Gus Engeling Wildlife Management Area: Texas Parks & Wildlife Department

Keechi Creek Wildlife Management Area: Texas Parks & Wildlife Department

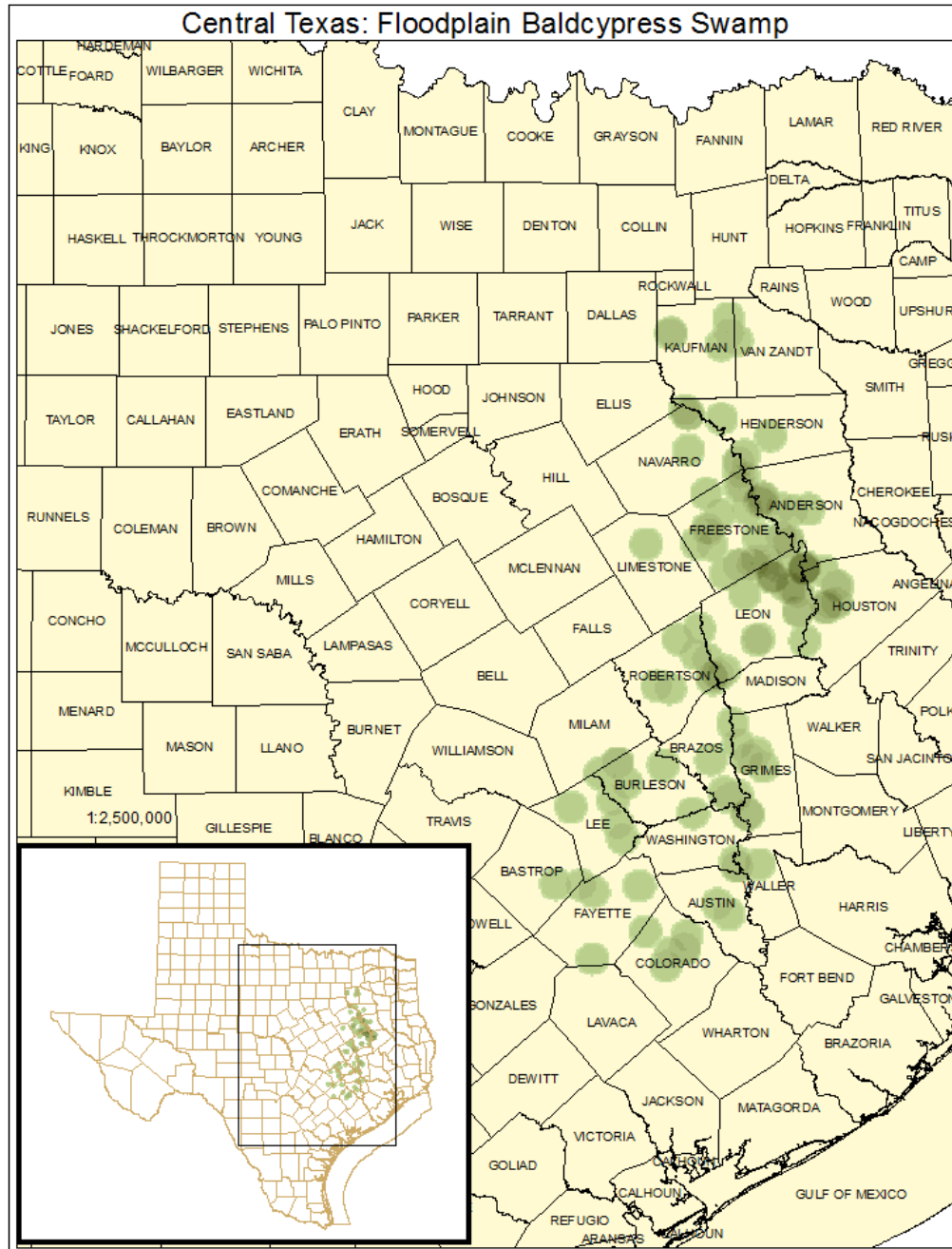
Richland Creek Wildlife Management Area: Texas Parks & Wildlife Department

CENTRAL TEXAS: FLOODPLAIN BALDCYPRESS SWAMP

Mapping System ID: 1824

EMS Description: In the eastern portion of the range of the system, baldcypress swamps are more commonly encountered, particularly in the eastern part of the upper Trinity River basin. These sites are dominated by *Taxodium distichum* (baldcypress). Some mapped occurrences may be dominated by *Planera aquatica* (water elm).

Distribution Map:



Example:



Public Land Occurrence:

None.