

SOUTHEASTERN GREAT PLAINS RIPARIAN FOREST

Nature Serve ID: CES205.709

Geology: As defined, this system occupies buffer zones of headwater streams, and soils develop in place over a variety of geologic surfaces

Landform: Valleys and drainages along headwater streams of the Sulphur, Sabine, Navasota, Brazos, upper Trinity River, and middle portions of the Guadalupe and San Antonio River Basins. Typically in areas with erosional processes dominating over alluvial deposition. In the Trinity River basin, occurrences were mapped upstream of approximately the Leon/Madison County line, near the confluence with Cobb Creek.

Soils: By definition, this system is mapped along drainages upstream of the Bottomland Ecoclasses, so they will be mapped on soils of the surrounding uplands.

Parent Description: Trees that may be present in stands of this system include *Celtis laevigata* (sugar hackberry), *Ulmus crassifolia* (cedar elm), *Platanus occidentalis* (American sycamore), *Populus deltoides* (eastern cottonwood), *Quercus fusiformis* (plateau live oak), *Quercus nigra* (water oak), *Quercus phellos* (willow oak), *Sapindus saponaria* var. *drummondii* (western soapberry), *Salix nigra* (black willow), *Fraxinus americana* (white ash), *Fraxinus pennsylvanica* (green ash), *Gleditsia triacanthos* (common honeylocust), *Prosopis glandulosa* (honey mesquite), and *Carya illinoensis* (pecan). To the east, *Quercus falcata* (southern red oak) and *Liquidambar styraciflua* (sweetgum) may become important components of the overstory. To the east, evergreen dominated occurrences may contain *Pinus taeda* (loblolly pine) or *Pinus echinata* (shortleaf pine), as well as *Juniperus virginiana* (eastern redcedar). The shrub layer development is variable, sometimes with species such as *Amorpha fruticosa* (indigobush), *Forestiera acuminata* (swamp privet), *Ilex decidua* (possumhaw), *Ilex vomitoria* (yaupon), *Sideroxylon lanuginosum* (gum bumelia), *Juniperus virginiana* (eastern redcedar), *Diospyros virginiana* (common persimmon), *Cornus drummondii* (roughleaf dogwood), *Condalia hookeri* (brasil), *Acacia farnesiana* (huisache), and/or *Viburnum rufidulum* (rusty blackhaw). A few sites may be shrub dominated without an overstory canopy, containing species such as *Forestiera acuminata* (swamp privet), *Cephalanthus occidentalis* (common buttonbush), *Acacia farnesiana* (huisache), or *Sesbania drummondii* (rattlebox sesbania). Herbaceous cover is also variable, depending on overstory and shrub canopies and recent flooding history. Herbaceous species may include *Elymus virginicus* (Virginia wildrye), *Verbesina virginica* (frostweed), *Chasmanthium latifolium* (creek oats), *Chasmanthium sessiliflorum* (narrowleaf woodoats), *Tripsacum dactyloides* (eastern gamagrass), *Symphotrichum drummondii* var. *texanum* (Drummond's aster), *Amphiachyris dracunculoides* (common broomweed), *Ambrosia psilostachya* (western ragweed), *Geum canadense* (white avens), *Sanicula canadensis* (Canada snakeroot), *Panicum virgatum* (switchgrass), *Galium* spp. (bedstraw), and *Carex* spp. (caric sedges). Upland species such as *Schizachyrium scoparium* (little bluestem), *Nassella leucotricha* (Texas wintergrass), and *Sorghastrum nutans* (Indiangrass) may be common. Woody vines such as *Smilax bona-nox* (saw greenbrier), *Toxicodendron radicans* (poison ivy), *Ampelopsis arborea* (peppervine), and *Vitis* spp. (grapes) may be common. The environment and characteristics of the vegetation of this system become drier from east to west, with moister representatives (such as communities containing *Quercus nigra* (water oak)) occurring in the eastern parts of the range. Non-native grass species that may be common to dominant on these sites include *Arundo donax* (giant reed) and *Cynodon dactylon* (bermudagrass) and *Sorghum halepense*

(Johnsongrass). The non-native species, such as *Ligustrum* spp. (privets) and *Triadica sebifera* (Chinese tallow), may be commonly encountered.

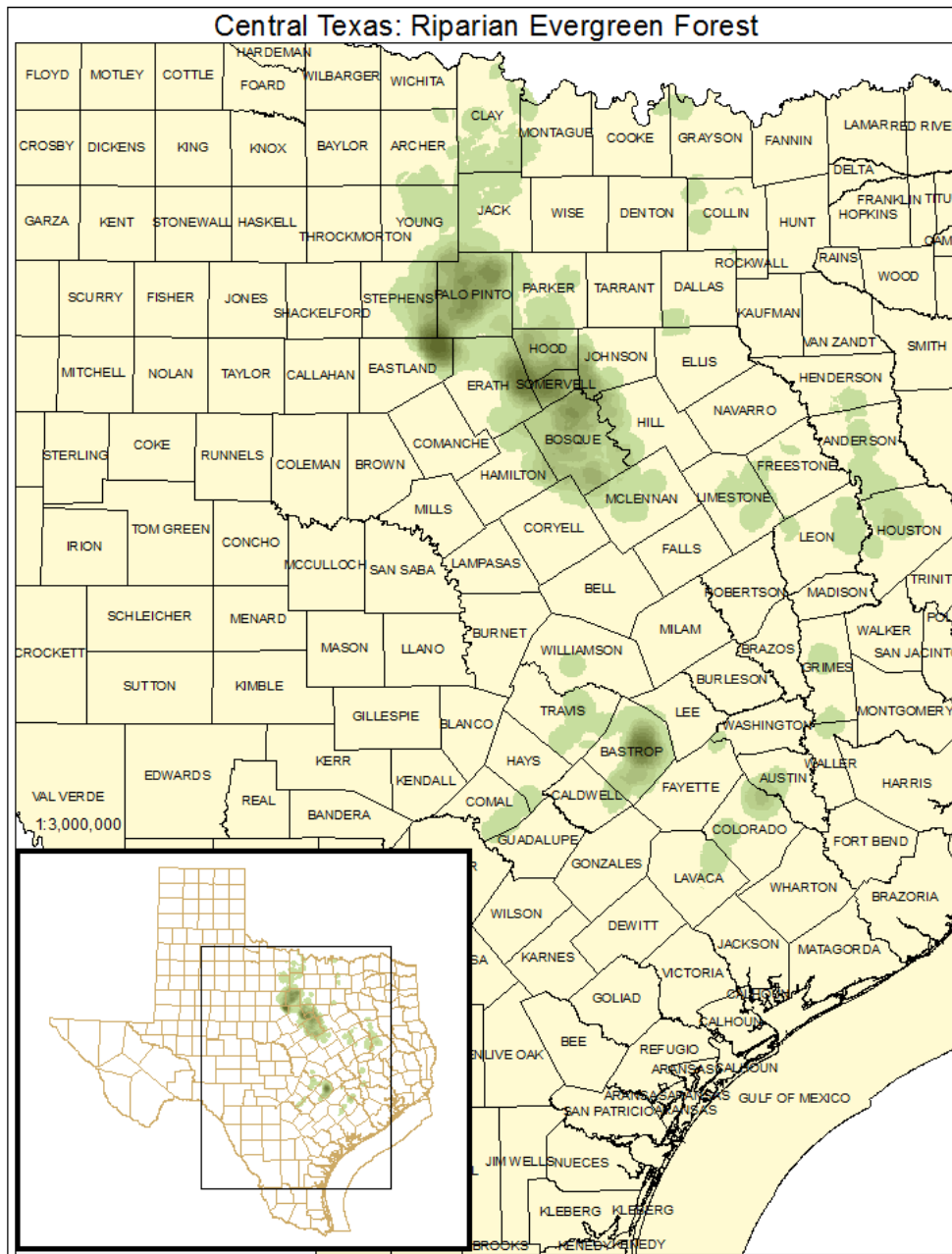
ECOLOGICAL MAPPING SYSTEMS:

CENTRAL TEXAS: RIPARIAN EVERGREEN FOREST

Mapping System ID: 1901

EMS Description: As described for the system, with *Juniperus virginiana* (eastern redcedar) dominating the canopy. On the eastern edge of the range of this system, some occurrences may be dominated by *Pinus taeda* (loblolly pine), or less commonly, *Pinus echinata* (shortleaf pine).

Distribution Map:



Example:



Public Land Occurrence:

Bastrop State Park: Texas Parks & Wildlife Department

Buescher State Park: Texas Parks & Wildlife Department

Cleburne State Park: Texas Parks & Wildlife Department

Ham Creek Park: City of Blum

Lake Whitney Recreation Area: US Army Corps of Engineers

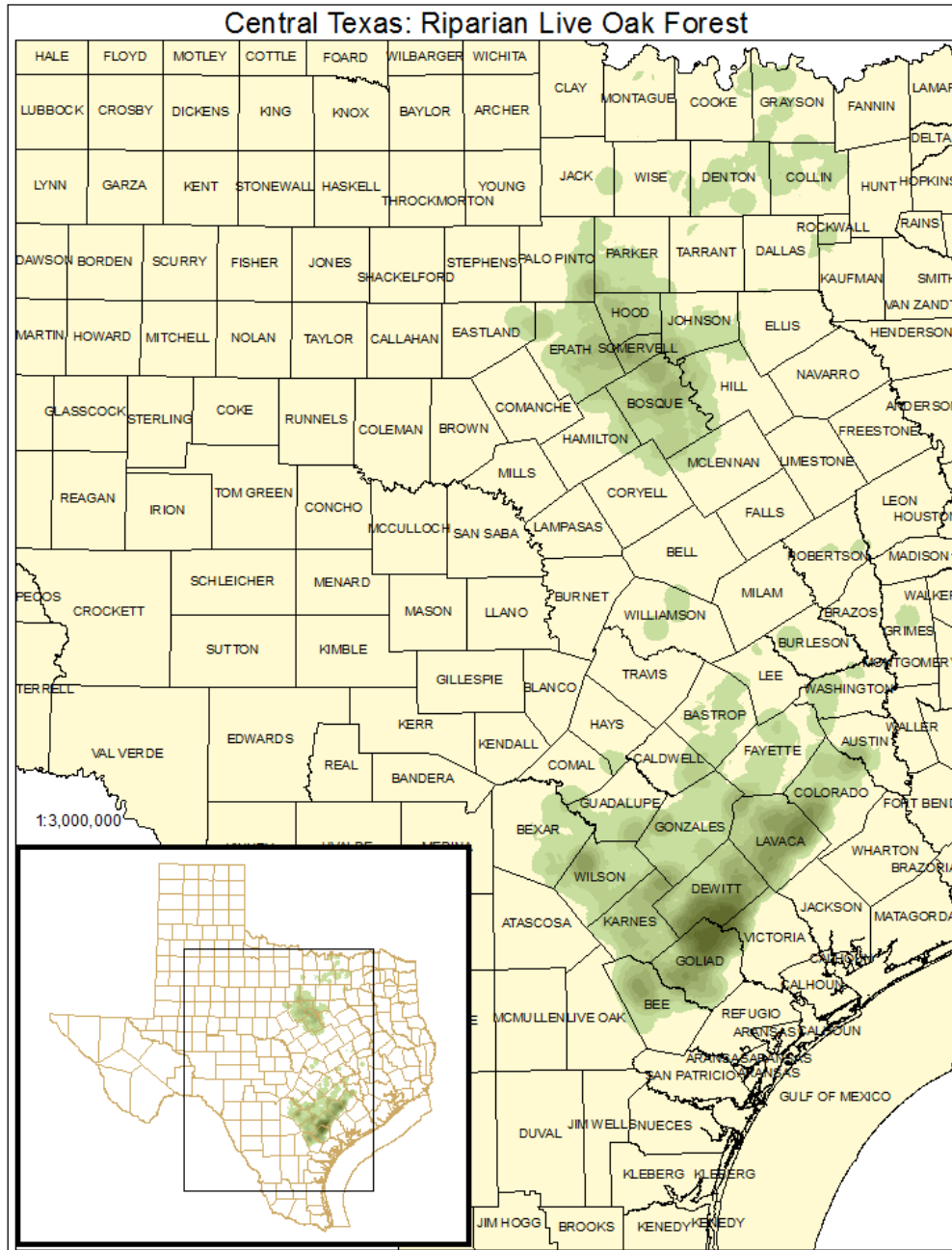
Possum Kingdom State Park: Texas Parks & Wildlife Department

CENTRAL TEXAS: RIPARIAN LIVE OAK FOREST

Mapping System ID: 1902

EMS Description: As described for the system, with *Quercus fusiformis* (plateau live oak) or *Quercus virginiana* (coastal live oak) dominating the canopy. Deciduous species can be, and frequently are, common in the canopy, but *Q. 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:

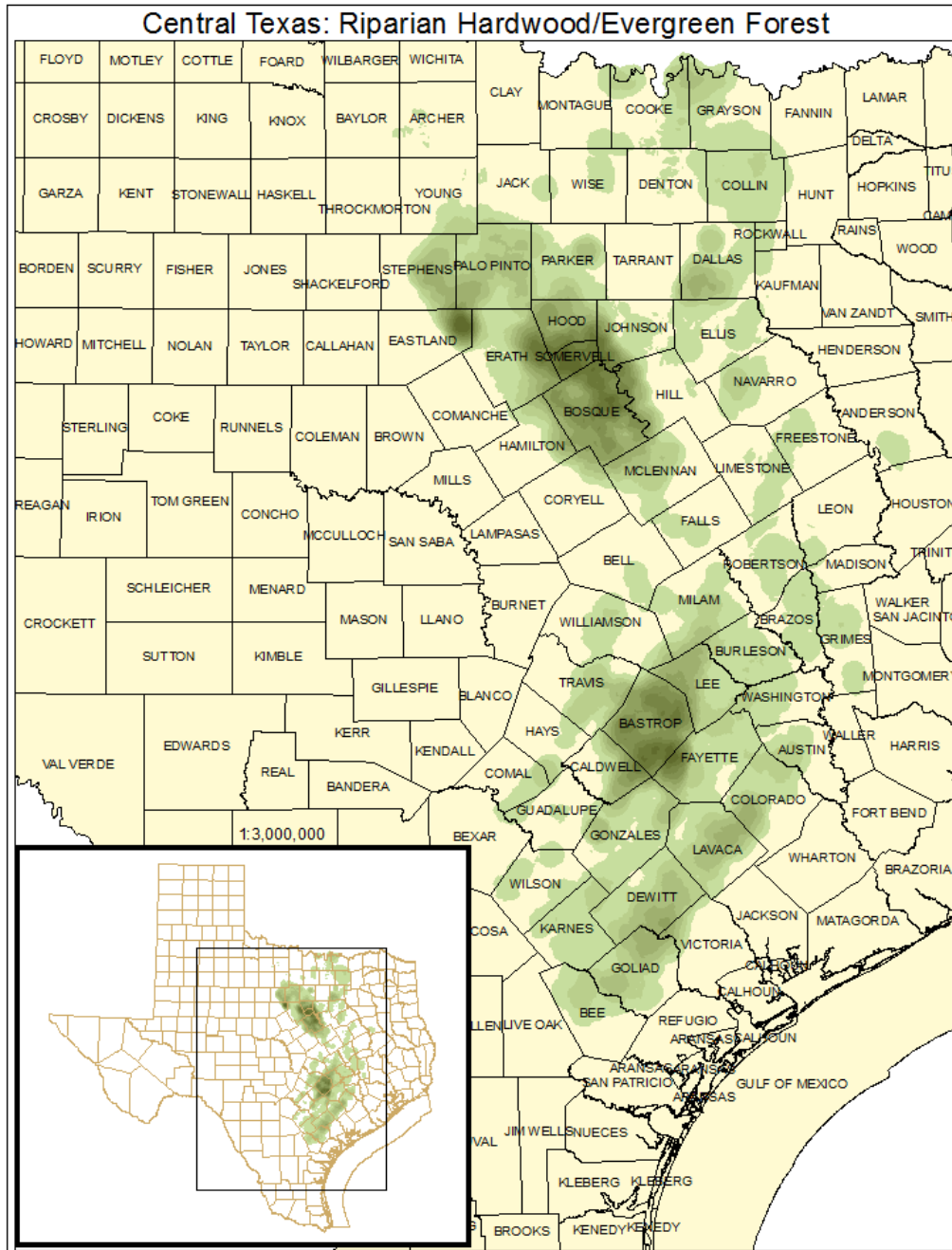
Lake Whitney Recreation Area: US Army Corps of Engineers

CENTRAL TEXAS: RIPARIAN HARDWOOD / EVERGREEN FOREST

Mapping System ID: 1903

EMS Description: As described for the system, with a mix of evergreen species, including *Juniperus virginiana* (eastern redcedar), *Pinus* spp. (pines) (to the east), *Quercus fusiformis* (plateau live oak) and/or *Quercus virginiana* (coastal live oak) and deciduous species in the canopy.

Distribution Map:



Example:



Public Land Occurrence:

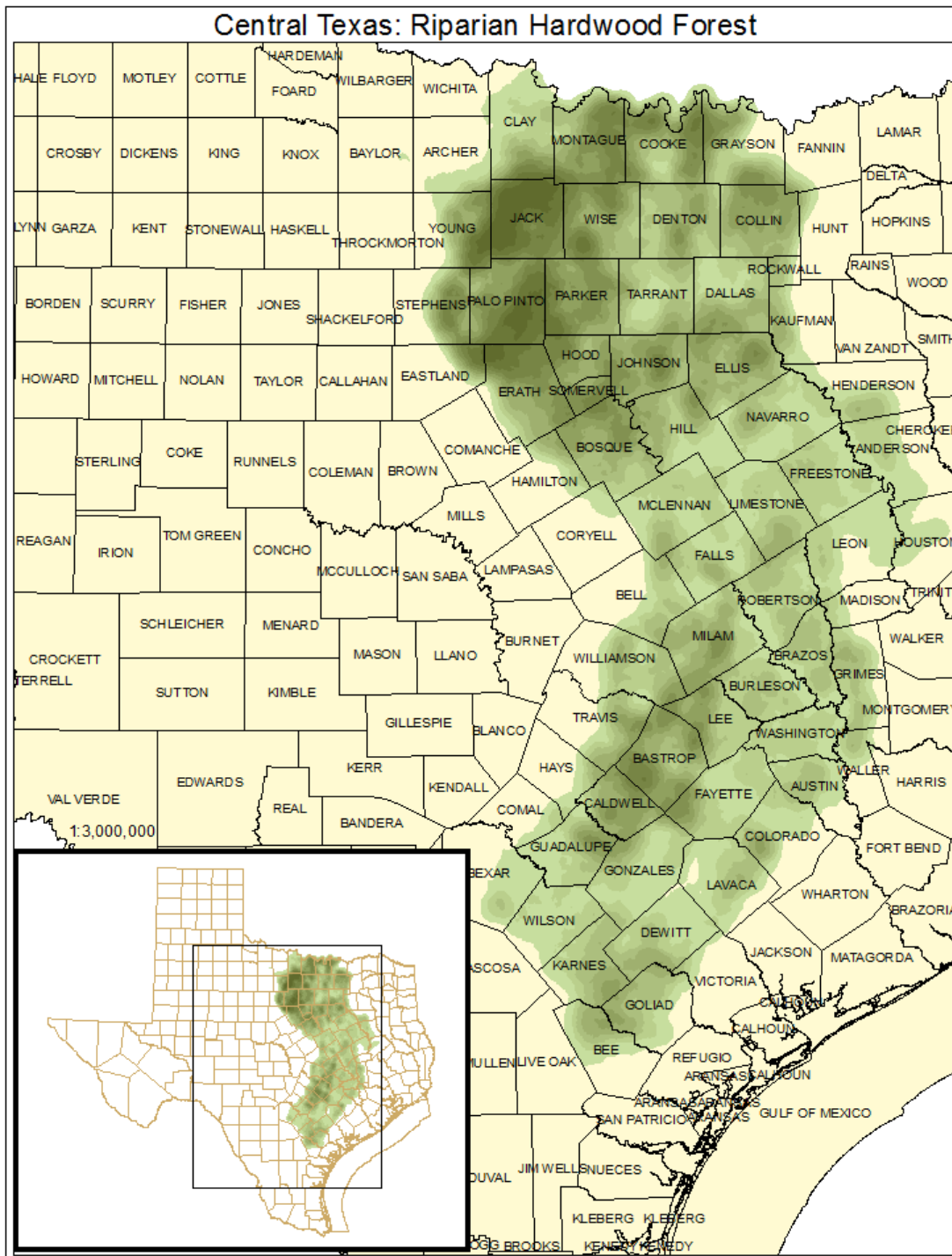
Bastrop State Park: Texas Parks & Wildlife Department
Buescher State Park: Texas Parks & Wildlife Department
Caddo National Grassland – Lake Fannin: US Forest Service
Cedar Hill State Park: Texas Parks & Wildlife Department
Dinosaur Valley State Park: Texas Parks & Wildlife Department
Ham Creek Park: City of Blum
Lake Whitney Recreation Area: US Army Corps of Engineers
McKinney Roughs: Lower Colorado River Authority

CENTRAL TEXAS: RIPARIAN HARDWOOD FOREST

Mapping System ID: 1904

EMS Description: As described for the system, with deciduous species dominating the canopy.

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

Cedar Hill State Park: Texas Parks & Wildlife Department

Fort Richardson State Park and Historical Site

Granger Wildlife Management Area: Texas Parks & Wildlife Department

Gus Engeling Wildlife Management Area: Texas Parks & Wildlife Department

Hagerman NWR: US Fish and Wildlife Service

Lake Lewisville Recreation Area: US Army Corps of Engineers

Lake Mineral Wells State Park: Texas Parks & Wildlife Department

Lake Whitney Recreation Area: US Army Corps of Engineers

Lavon Lake Recreation Area: US Army Corps of Engineers

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

Somerville Lake Recreation Area: US Army Corps of Engineers

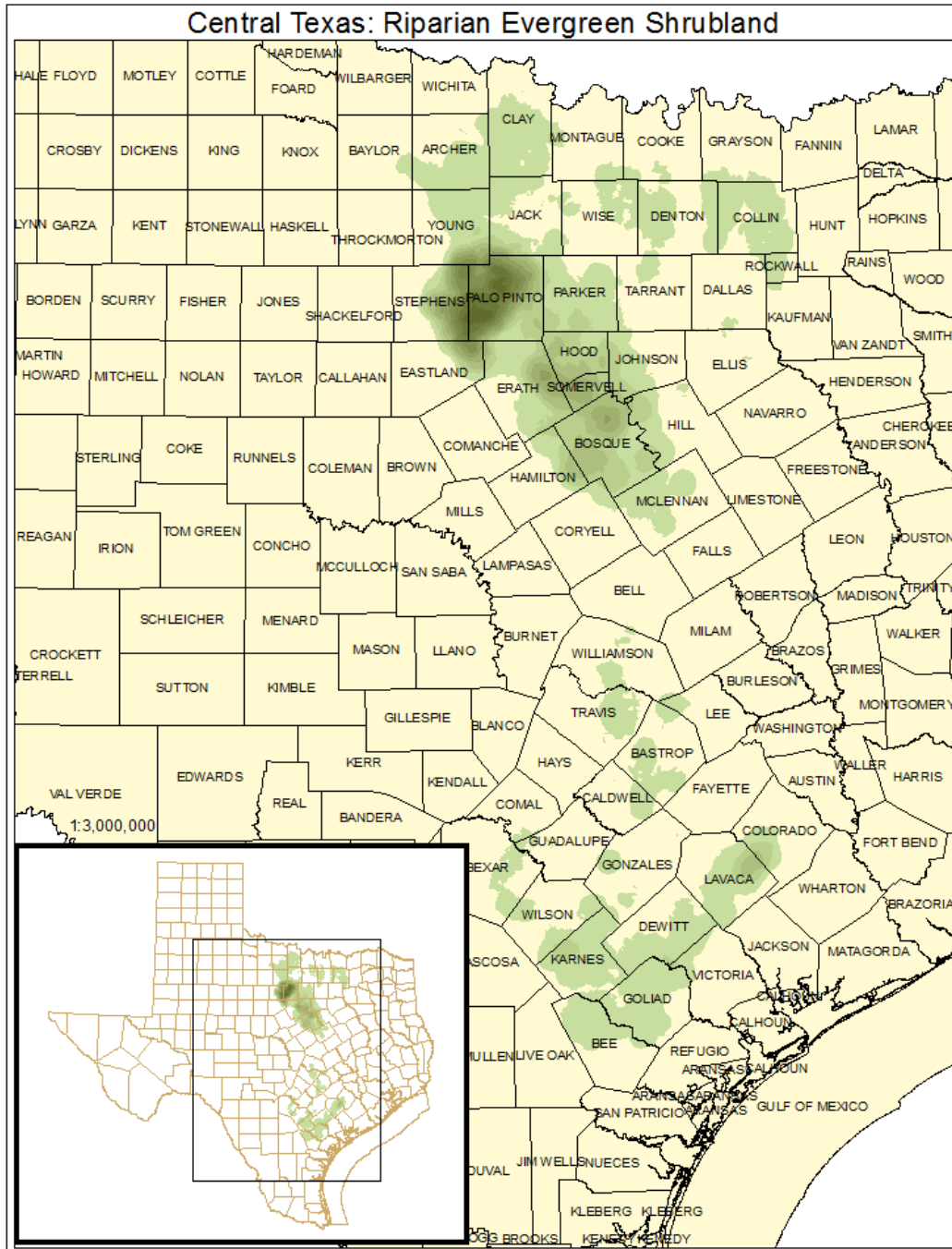


CENTRAL TEXAS: RIPARIAN EVERGREEN SHRUBLAND

Mapping System ID: 1905

EMS Description: Shrublands in riparian sites that are dominated by *Juniperus virginiana* (eastern redcedar), young *Pinus* spp. (pines) or, sometimes broadleaf evergreen shrubs such as *Ilex vomitoria* (yaupon).

Distribution Map:



Example:



Public Land Occurrence:

Fort Richardson State Park and Historical Site: Texas Parks & Wildlife Department

Ham Creek Park: City of Blum

Lake Waco Recreation Area: US Army Corps of Engineers

Lake Whitney Recreation Area: US Army Corps of Engineers

Possum Kingdom State Park: Texas Parks & Wildlife Department

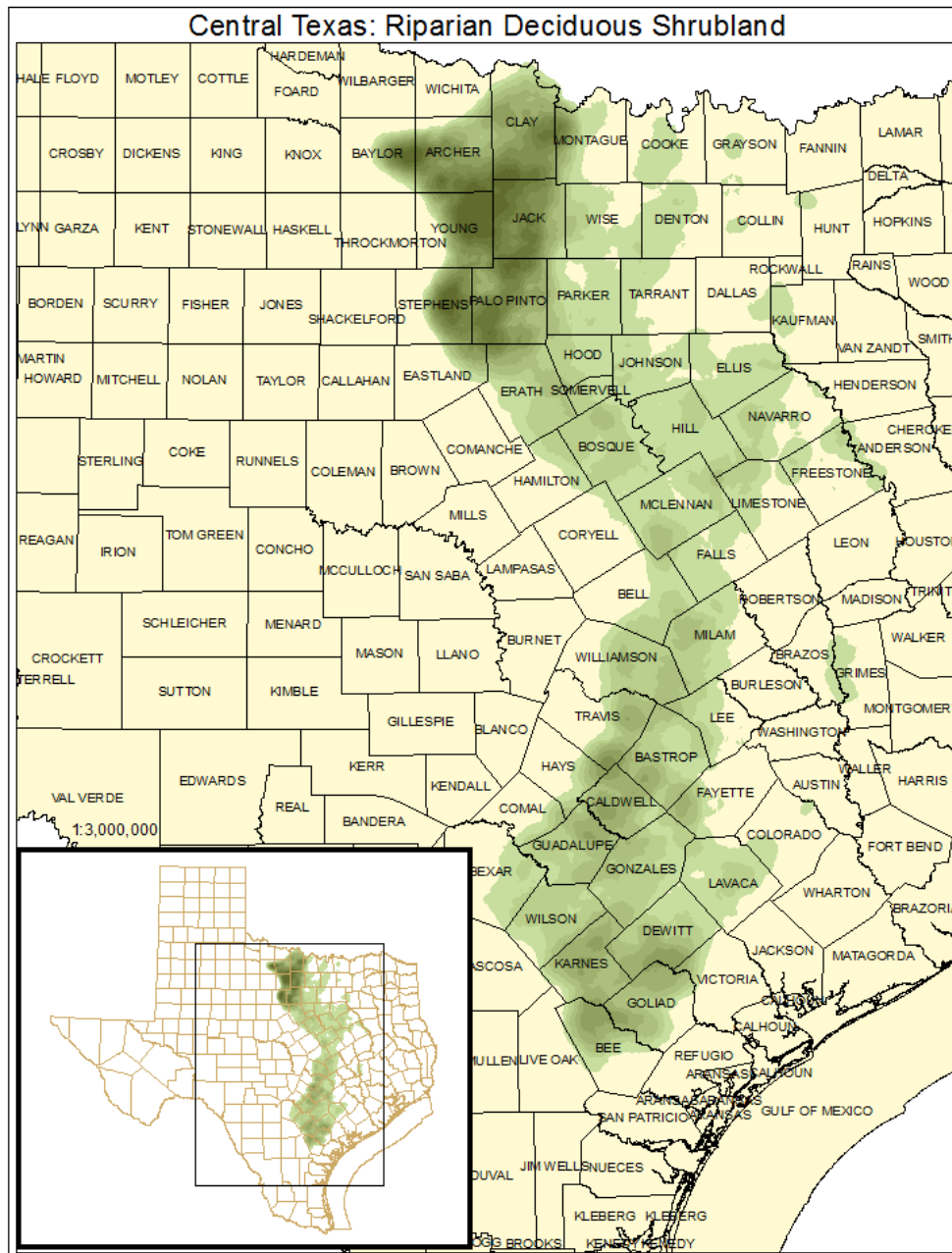
Ray Roberts Lake Wildlife Management Area: Texas Parks & Wildlife Department

CENTRAL TEXAS: RIPARIAN DECIDUOUS SHRUBLAND

Mapping System ID: 1906

EMS Description: Shrublands in riparian sites that may be dominated by deciduous shrubs such as *Ilex decidua* (possumhaw), *Prosopis glandulosa* (honey mesquite), *Salix nigra* (black willow), *Cornus drummondii* (roughleaf dogwood), *Forestiera acuminata* (swamp privet), and/or *Cephalanthus occidentalis* (common buttonbush). This mapped type may also represent relatively sparse woodlands dominated by overstory species typical of the system.

Distribution Map:



Example:



Public Land Occurrence:

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 Whitney Recreation Area: US Army Corps of Engineers

Navarro Mills Lake Recreation Area: US Army Corps of Engineers

Poosum Kingdom State Park: Texas Parks & Wildlife Department

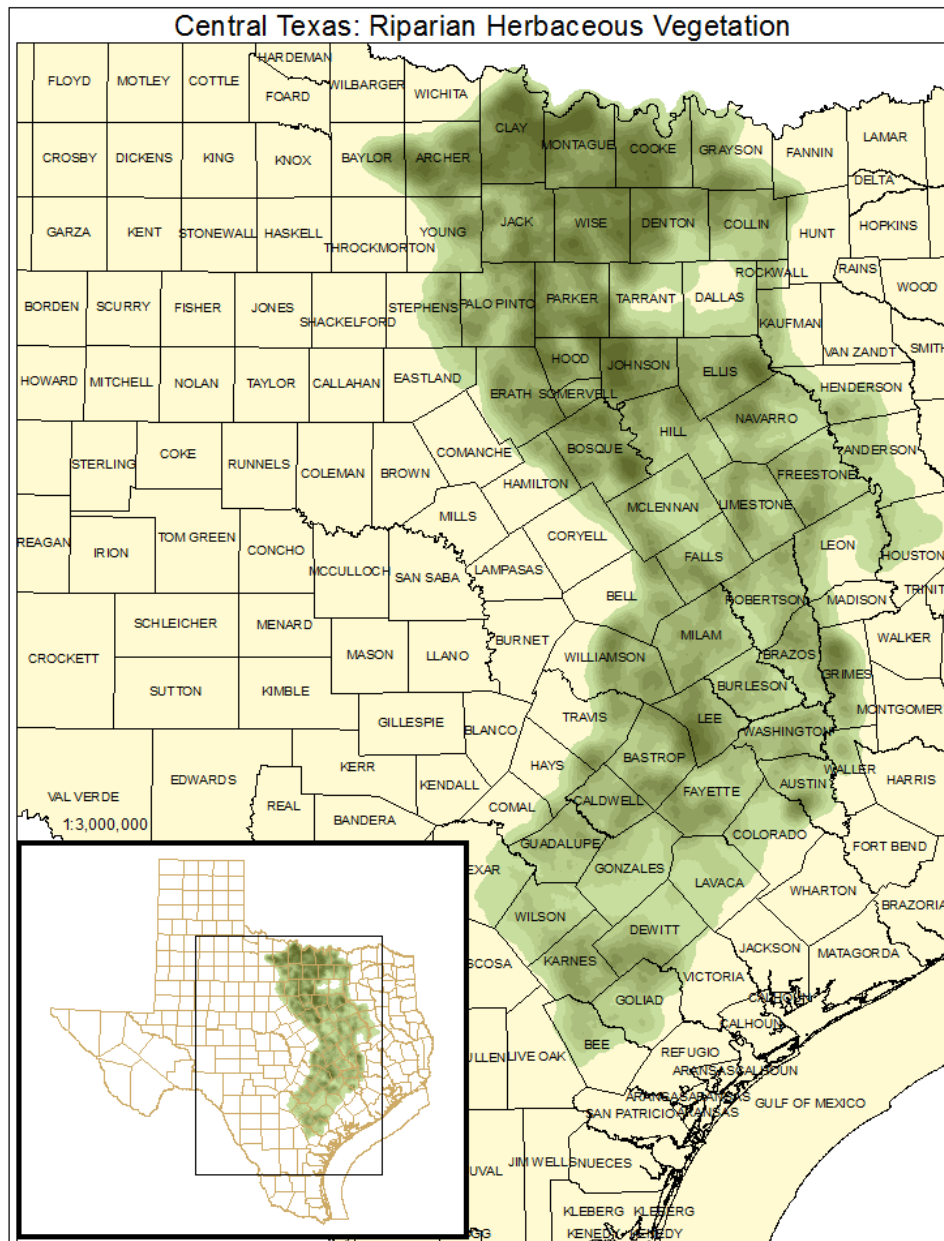
Ray Roberts Lake Wildlife Management Area: Texas Parks & Wildlife Department

CENTRAL TEXAS: RIPARIAN HERBACEOUS VEGETATION

Mapping System ID: 1907

EMS Description: Riparian sites lacking overstory or shrub canopy but retaining herbaceous cover. Some sites may be dominated by species such as *Schizachyrium scoparium* (little bluestem) or *Sorghastrum nutans* (Indiangrass), that are more commonly encountered in surrounding uplands. Other sites may be dominated by the non-natives like *Arundo donax* (giant reed), *Bothriochloa ischaemum* var. *songarica* (King Ranch bluestem), or *Cynodon dactylon* (bermudagrass).

Distribution Map:



Example:



Public Land Occurrence:

- Attwater Prairie Chicken National Wildlife Refuge: US Fish and Wildlife Service
- Clymer Meadow Preserve: The Nature Conservancy
- Fort Richardson State Park and Historical Site: Texas Parks & Wildlife Department
- Granger Wildlife Management Area: Texas Parks & Wildlife Department
- Hagerman National Wildlife Refuge: U. S. Fish and Wildlife Service
- Lake Arrowhead State Park: Texas Parks & Wildlife Department
- Lake Lewisville Recreation Area: US Army Corps of Engineers
- Lake Waco Recreation Area: US Army Corps of Engineers
- Lake Whitney 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

