CHAPTER 8. CONSERVATION OPPORTUNITY AREAS

A. Conservation Opportunity Areas Need and Overview

With 342 animal Species of Greatest Conservation Need (SGCN) in Louisiana and a finite amount of time and resources for the conservation of SGCN and the habitats they require, a growing need exists to focus conservation action where it can have the greatest impact. For that reason, the 2015 Wildlife Action Plan (WAP) revision identifies priority areas for the conservation of Louisiana's SGCN based primarily on SGCN richness and habitat diversity. These exceptionally diverse areas are known as Conservation Opportunity Areas (COAs).

Conservation Opportunity Areas are geographies within Louisiana that have been identified as uniquely important for the conservation of SGCN. Conservation actions within these COAs will benefit many SGCN, often across taxa and habitats. The COAs presented in this chapter represent those areas where, all else being equal, conservation funding and other resources should be allocated to have the most significant impact on SGCN. Conservation Opportunity Areas are an addition to, rather than a replacement of, other landscape-scale conservation planning efforts such as those undertaken by Joint Ventures (JVs) and Landscape Conservation Cooperatives (LCCs). The COA approach adds a unique layer to such efforts: a focus on SGCN as identified in the WAP. COAs vary greatly in size and landscape composition, and each may have specific threats, conservation needs, and conservation actions.

The COAs identified in this WAP afford the Louisiana Department of Wildlife and Fisheries (LDWF) and partners some of the best opportunities for SGCN conservation, research, and monitoring. However, conservation actions carried out in other areas of the state are not devalued by this methodology. In fact, not all SGCN and associated habitats are represented by these COAs, and for those that are, actions within COA boundaries alone may not be sufficient to ensure their persistence. Therefore, to fully meet the objectives of the Louisiana WAP, a degree of flexibility and opportunism must be retained, along with a willingness to modify priorities as new threats, issues, and opportunities arise. No regulatory aspect exists for COAs, and all conservation actions by private landowners or other partners are strictly voluntary. Land use or other activities will not be altered or restricted as a result of COA designation.

B. Identifying COAs

As COAs are intended to enhance our ability to conserve SGCN and their habitats, the distribution of SGCN was the primary factor used in the identification of COAs. Distribution was mapped using Louisiana Department of Environmental Quality (LDEQ) subbasins.

The process of identifying COAs was a multi-tiered Geographic Information System (GIS) based approach in which multiple data layers were compiled and considered by an LDWF committee tasked with the initial delineation of COAs. The layers used to produce a draft layer of COAs were:

1) Priority Level 1[1] subbasins based on the predicted distribution of all S1, S2, and S3 SGCN.

2) Priority Level 1 + Priority Level 2 subbasins based on predicted distribution of S1, S2, and S3 SGCN.

3) Priority Level 1 + Priority Level 2 + Priority Level 3 subbasins based on predicted distribution of S1, S2, and S3 SGCN.

4) Priority Level 1 subbasins based on the distribution of all S1, S2, and S3 natural communities.

5) Priority Level 1 + Priority Level 2 subbasins based on predicted distribution of S1, S2, and S3 natural communities.

6) Priority Level 1 + Priority Level 2 + Priority Level 3 subbasins based on predicted distribution of S1, S2, and S3 natural communities.

7) Location of existing conservation lands and Louisiana Natural & Scenic Rivers.

8) Stream segments that are of very high quality for fish and wildlife propagation based on Louisiana Department of Environmental Quality (LDEQ) water quality data (LDEQ 2012).

These layers were each set to 90% transparency and overlain on each other in a GIS. Those areas where the most layers overlapped (i.e., greatest color density) were delineated and polygons created. These polygons were then assigned to one of five levels, based on visual classification of relative color density. Using the 2011 National Landcover Database (NLCD), heavily urbanized areas were removed from these polygons, as such areas are not of current value to SGCN, and are unlikely to be cost effective targets for restoration activity.

Thirty-eight potential COAs were identified using the aforementioned approach. These 38 potential COAs were placed into two Tiers, with those areas in the three highest color density levels comprising Tier 1, and the next two levels placed in Tier 2. Those COAs in Tier 1 are of higher priority for conservation action than are Tier 2 COAs, all else being equal.

This list of potential COAs was then refined by the committee, to a final list of 30 draft COAs (Table 8.1). Other factors considered while refining the list of draft COAs included predicted increases in urbanization as well as Sea Level Rise (SLR) projections. Future iterations of Louisiana COAs will endeavor to narrow the focus beyond this initial effort and refine the COAs further based on additional factors such as land use and

[1] For the predicted distribution of SGCN, Element Occurrence Records (EORs), historical distribution information, and expert opinion were used to create range maps, using LDEQ sub-basins, which are similar in scale to HUC 10s.
For more information on subbasin level distribution modelling of SGCN, including a description of the different Priority Levels that were used, see Chapter 3.

current vegetative cover. For adjacent areas that were within the same Tier, biological similarity was used to lump or split the areas. Based on the Sorenson-Dice Coefficient, areas showing 75% or greater similarity in SGCN were lumped.

The conservation needs and actions listed for each subset of COAs were developed by LDWF and reviewed by conservation partners. However, priority conservation needs and actions may change or emerge over time.

Another important factor in identifying and planning for COAs is the presence of existing or potential conservation partners. The Louisiana WAP is intended to be a blueprint for the conservation of SGCN and their habitats, and the ambitious goals of the WAP cannot be achieved by LDWF alone. Conservation Opportunity Areas provide another tool for resource managers to determine new opportunities for conservation or to add value to already planned or existing efforts.

C. Louisiana COAs

The 30 COAs detailed below cover a broad range of habitats and span the state. Each ecoregion in the state contains multiple COAs, and the ecoregions are used to group the COAs for discussion below. For each ecoregion, priority conservation actions are identified, as well as current or potential key conservation partners[2]. Lists of priority habitats and SGCN are provided for each COA below. For SGCN, these lists are not exhaustive, but represent those species for which a COA is of particular importance (e.g., a species with a limited distribution) as well as SGCN that will serve as "umbrella" species (i.e., actions to benefit that species will benefit many others). An exception to this methodology was the identification of priority bird SGCN. Birds presented a set of unique challenges, and an alternate methodology was developed. This was a two-step process, where (1) a list of priority SGCN was developed for each ecoregion, and (2) those species were listed for each COA as deemed appropriate.

These conservation actions, habitats and SGCN represent a snapshot of priorities as identified by LDWF and partners during the revision process, and it is expected that priorities will evolve over the next ten years. The LDWF COA Committee greatly appreciates input on conservation needs and welcomes comment from Louisiana conservation stakeholders. For additional detail on research needs and conservation actions for SGCN and the priority habitats listed below, refer to Chapters 4 and 5, respectively.

[2] Note that the lists of key partners for each ecoregion's COAs include only those partners that are specific to that ecoregion. Partners that LDWF works with on a statewide level are not necessarily listed, unless there is a particular emphasis on partnering with that entity in that area.

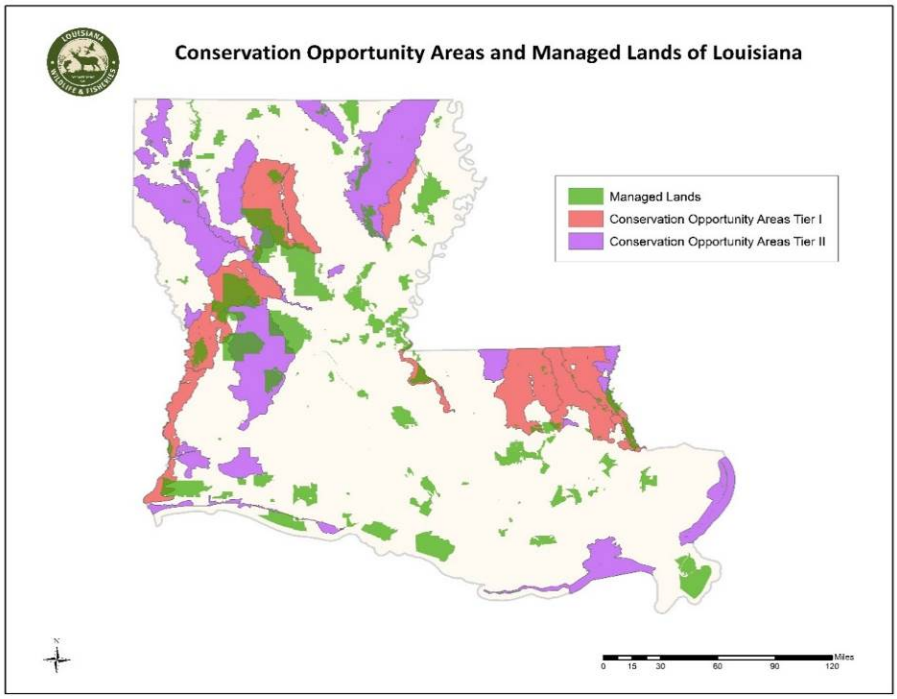

Figure 8.1 – COAs by Tier, along with managed lands located throughout Louisiana. The managed lands include LDWF WMAs and Refuges, Louisiana State Parks, USFWS Wildlife Refuges, USFS property, DOD lands, and TNC properties.

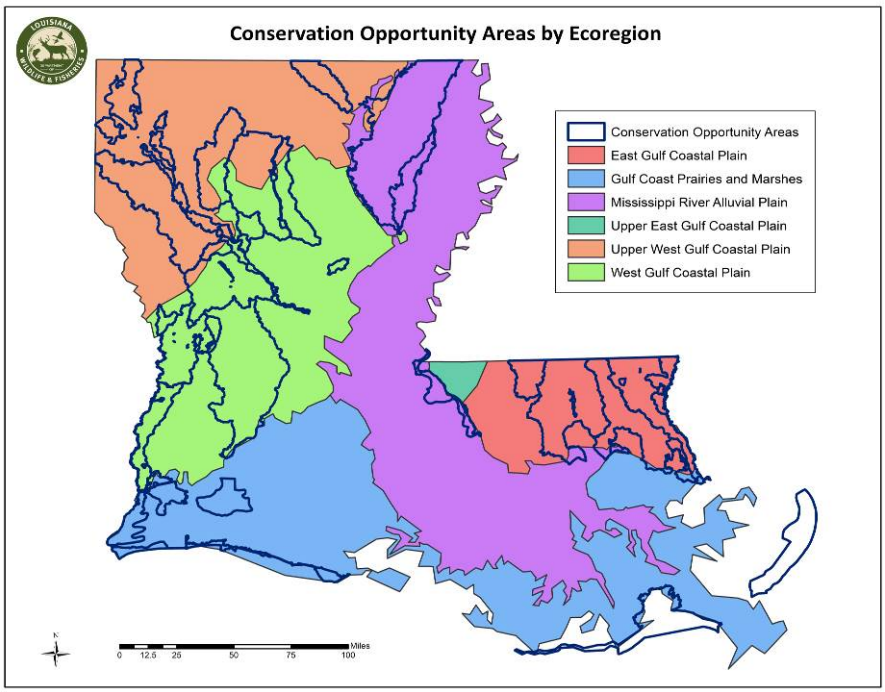

Figure 8.2 – Overview of Louisiana COA distribution relative to ecoregions

Table 8.1 – Louisiana COAs by Ecoregion and Tier, with acreage.

COA	Tier	Ecoregion	Acreage
Bogue Chitto	1	EGCP	365,896
Holmes Bayou	1	EGCP	48,230
Tchefuncte River-Northshore	1	EGCP	429,658
Tickfaw-Tangipahoa	1	EGCP	644,396
Madisonville Marsh	2	EGCP	12,569
Pearl River	2	EGCP	93,941
Upper Amite River	2	EGCP	131,095
Little Lake	1	GCPM	6,674
Barataria-Terrebonne	2	GCPM	360,298
Calcasieu Prairie	2	GCPM	147,783
Chandeleurs	2	GCPM	276,048
Chenier	2	GCPM	102,424
Sabine Prairie	2	GCPM	108,407
Richland-Franklin	1	MRAP	178,969
Tunica	1	MRAP	110,934
Ouachita	2	MRAP	1,079,020
Bodcau	2	UWGCP	58,586
Boggy Bayou	2	UWGCP	626,300
Caddo-Bossier	2	UWGCP	220,678
Kepler	2	UWGCP	333,722
Red River	2	UWGCP	166,300
Union	2	UWGCP	160,725
Dugdemona River	1	WGCP	758,240
Kisatchie Bayou-Anacoco	1	WGCP	786,638
Sabine River	1	WGCP	319,652
St. Maurice	1	WGCP	32,451
Bayou Toro	2	WGCP	38,047
Calcasieu River	2	WGCP	937,997
LaSalle	2	WGCP	20,822
Saline Lake	2	WGCP	68,956

1. **East Gulf Coastal Plains Ecoregion COAs**

Seven COAs are located in the East Gulf Coastal Plain ecoregion (EGCP, Fig. 8.3), the second highest number in any of Louisiana's ecoregions. This reflects the large number of rare species in the EGCP, many of which are found nowhere else in the state. Consequently, four of the COAs in the EGCP are Tier 1 COAs (Table 8.1). Little overlap exists between the COAs in this ecoregion and existing conservation lands, and consequently the acquisition and management of land from willing sellers as well as habitat management on private lands are critical needs for these COAs.

Priority Conservation Needs/Actions

- Land protection/acquisition/management, particularly of Longleaf Pine habitat
- Prescribed burning initiatives, with an emphasis on private lands
- Streamside zone management, including retention of riparian buffers
- Longleaf Pine restoration and management
- Stream and river conservation, including sandbar protection and retention of woody debris and snags in-stream
- Maintenance of in-stream flow at adequate levels for aquatic SGCN
- Hydrological restoration of forested wetlands

Key Conservation Partners

- East Gulf Coastal Plain Joint Venture (EGCPJV)
- Gulf Coastal Plains & Ozarks Landscape Conservation Cooperative (GCPOLCC)
- Gopher Tortoise Council (GTC)
- Lake Pontchartrain Basin Foundation (LPBF)
- Longleaf Alliance
- Louisiana Department of Agriculture and Forestry (LDAF)
- Louisiana Department of Natural Resources (LDNR)
- Louisiana Department of Environmental Quality (LDEQ)
- Louisiana Forestry Association (LFA)
- Louisiana Office of State Parks (LOSP)
- Louisiana Prescribed Fire Council (LPFC)
- Mississippi Department of Wildlife, Fisheries, and Parks (MDWFP)
- National Wild Turkey Federation (NWTF)
- Parish Governments
- The Nature Conservancy (TNC)
- Timber Investment Management Organizations (TIMOs)
- U.S. Department of Agriculture Natural Resource Conservation Service (USDA NRCS)
- United States Army Corps of Engineers (USACE)
- United States Fish and Wildlife Service (USFWS)
- Wetland Mitigation Bank Sponsors & Interagency Review Team (IRT)

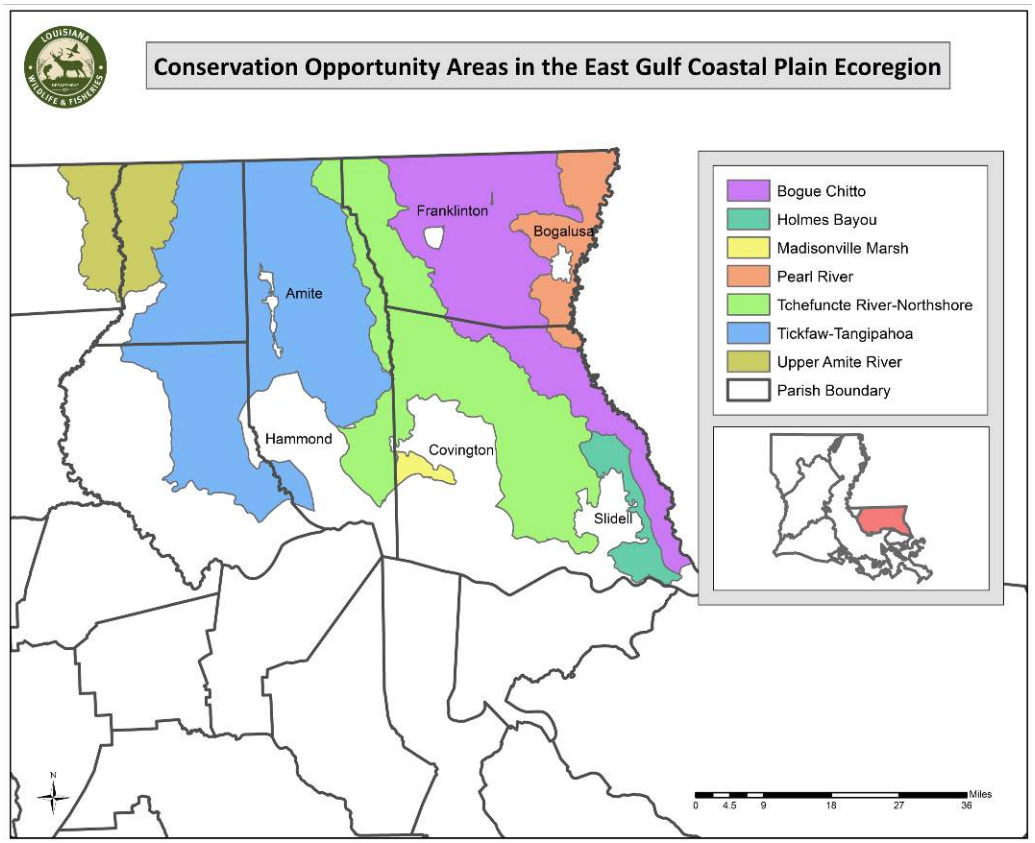

Figure 8.3 – COAs in the EGCP Ecoregion

a. Bogue Chitto COA

1. Focal Habitats

Bayhead Swamp	Eastern Upland Longleaf Pine Woodland
Bottomland Hardwood Forest	Xeric Sandhill Woodland
Cypress-Tupelo-Blackgum Swamp	Eastern Hillside Seepage Bog
Small Stream Forest	Sandbars
Eastern Longleaf Pine Flatwoods Savanna	

2. Focal SGCN

Gulf Crawfish	Pearl River Map Turtle
Ribbon Crawfish	Stripe-necked Musk Turtle
Pearl Blackwater Crawfish	Gopher Tortoise
Flatwoods Digger	Northern Bobwhite
Gulf Sturgeon	Swallow-tailed Kite
Longjaw Minnow	Common Ground-Dove
Flagfin Shiner	Red-cockaded Woodpecker
Bluenose Shiner	Southeastern American Kestrel
Southeastern Blue Sucker	Worm-eating Warbler
River Redhorse	Louisiana Waterthrush
Frecklebelly Madtom	Prothonotary Warbler
Channel Darter	Swainson's Warbler

Freckled Darter	Bachman's Sparrow
Dusky Gopher Frog	Henslow's Sparrow
Ringed Map Turtle	

b. Holmes Bayou COA

1. Focal Habitats

Cypress-Tupelo-Blackgum Swamp	Intermediate Marsh

2. Focal SGCN

Gulf Crawfish	Southeastern Blue Sucker
Flatwoods Digger	River Redhorse
Gulf Sturgeon	Frecklebelly Madtom
Flagfin Shiner	Swallow-tailed Kite
Bluenose Shiner	West Indian Manatee

c. Madisonville Marsh COA

1. Focal Habitats

Cypress-Tupelo-Blackgum Swamp	Estuarine Submersed Aquatic Vegetation
Intermediate Marsh	

2. *Focal SGCN*

Gulf Sturgeon	West Indian Manatee

d. Pearl River COA

1. Focal Habitats

Bayhead Swamp	Eastern Upland Longleaf Pine Woodland
Bottomland Hardwood Forest	Xeric Sandhill Woodland
Cypress-Tupelo-Blackgum Swamp	Eastern Hillside Seepage Bog
Small Stream Forest	Sandbar
Eastern Longleaf Pine Flatwoods Savanna	

2. Focal SGCN

White Heelsplitter	Ringed Map Turtle
Black Sandshell	Pearl River Map Turtle
Ribbon Crawfish	Stripe-necked Musk Turtle
Pearl Blackwater Crawfish	Gopher Tortoise

Gulf Sturgeon	Northern Bobwhite
Paddlefish	Swallow-tailed Kite
Longjaw Minnow	Common Ground-Dove
Flagfin Shiner	Red-cockaded Woodpecker
Bluenose Shiner	Southeastern American Kestrel
Southeastern Blue Sucker	Prothonotary Warbler
River Redhorse	Swainson's Warbler
Frecklebelly Madtom	Bachman's Sparrow
Channel Darter	Henslow's Sparrow
Freckled Darter	

e. Tchefuncte River-Northshore COA

1. Focal Habitats

Bayhead Swamp	Eastern Upland Longleaf Pine Woodland
Bottomland Hardwood Forest	Slash Pine-Pondcypress-Hardwood Woodland
Cypress-Tupelo-Blackgum Swamp	Eastern Hillside Seepage Bog
Small Stream Forest	Intermediate Marsh
Eastern Longleaf Pine Flatwoods Savanna	Sandbars

2. Focal SGCN

Elephant-Ear	Common Ground-Dove
Gulf Crawfish	Red-cockaded Woodpecker
Flatwoods Digger	Southeastern American Kestrel
Gulf Sturgeon	Prothonotary Warbler
Flagfin Shiner	Swainson's Warbler
Dusky Gopher Frog	Bachman's Sparrow
Gopher Tortoise	Henslow's Sparrow
Northern Bobwhite	West Indian Manatee
Swallow-tailed Kite	

f. Tickfaw-Tangipahoa COA

1. Focal Habitats

Cypress-Tupelo-Blackgum Swamp	Eastern Longleaf Pine Flatwoods Savanna
Small Stream Forest	Eastern Upland Longleaf Pine Woodland
Spruce-Pine Hardwood Flatwoods	Shortleaf Pine-Oak-Hickory Woodland

2. *Focal SGCN*

Florida Harvester Ant	Red-cockaded Woodpecker
Gulf Sturgeon	Southeastern American Kestrel
Broadstripe Topminnow	Prothonotary Warbler
Gopher Tortoise	Swainson's Warbler
Northern Bobwhite	Bachman's Sparrow
Common Ground-Dove	

g. Upper Amite River COA

1. Focal Habitats

Bottomland Hardwood Forest	Southern Mesophytic Forest
Small Stream Forest	Shortleaf Pine-Oak-Hickory Woodland

2. *Focal SGCN*

Inflated Heelsplitter	Eastern Spadefoot
Bluntface Shiner	Common Rainbow Snake
Broadstripe Topminnow	Northern Bobwhite
Rainbow Darter	Worm-eating Warbler
Four-toed Salamander	Louisiana Waterthrush

2. **Gulf Coast Prairies and Marshes Ecoregion COAs**

There are six COAs in the Gulf Coast Prairies and Marshes ecoregion (GCPM, Fig. 8.4 and 8.5), one of which is a Tier 1 COA. The majority of the COAs in this ecoregion include a unique or restricted habitat and is critical for the conservation of that habitat. This ecoregion's COAs includes some of Louisiana's most unique and valuable natural communities, despite the fact that most are Tier 2. Among the most critical conservation needs in this ecoregion is the protection and restoration of rare and restricted habitats such as Barrier Islands, Coastal Prairies, and Cheniers.

Priority Conservation Needs/Actions

- Land protection/acquisition/management, particularly of Coastal Prairie and Cheniers
- Coastal Prairie restoration
- Barrier Island restoration
- Chenier restoration/creation
- Beneficial use of dredge material
- Marine Seagrass Bed conservation/restoration

Key Conservation Partners

- Barataria-Terrebonne National Estuary Program (BTNEP)
- Coastal Plain Conservancy
- Coastal Prairie Partnership
- Coastal Protection and Restoration Authority (CPRA)
- Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA)
- Ducks Unlimited (DU)
- US Environmental Protection Agency (EPA)
- Gulf Coast Joint Venture (GCJV)
- Gulf Coast Prairie Landscape Conservation Cooperative (GCPLCC)
- Longleaf Alliance
- LDNR
- Louisiana Environmental Research Center
- Louisiana Native Plant Society (LNPS)
- National Audubon Society/Louisiana Audubon
- TNC
- USACE
- USFWS
- USGS
- Wetland Mitigation Bank Sponsors & IRT

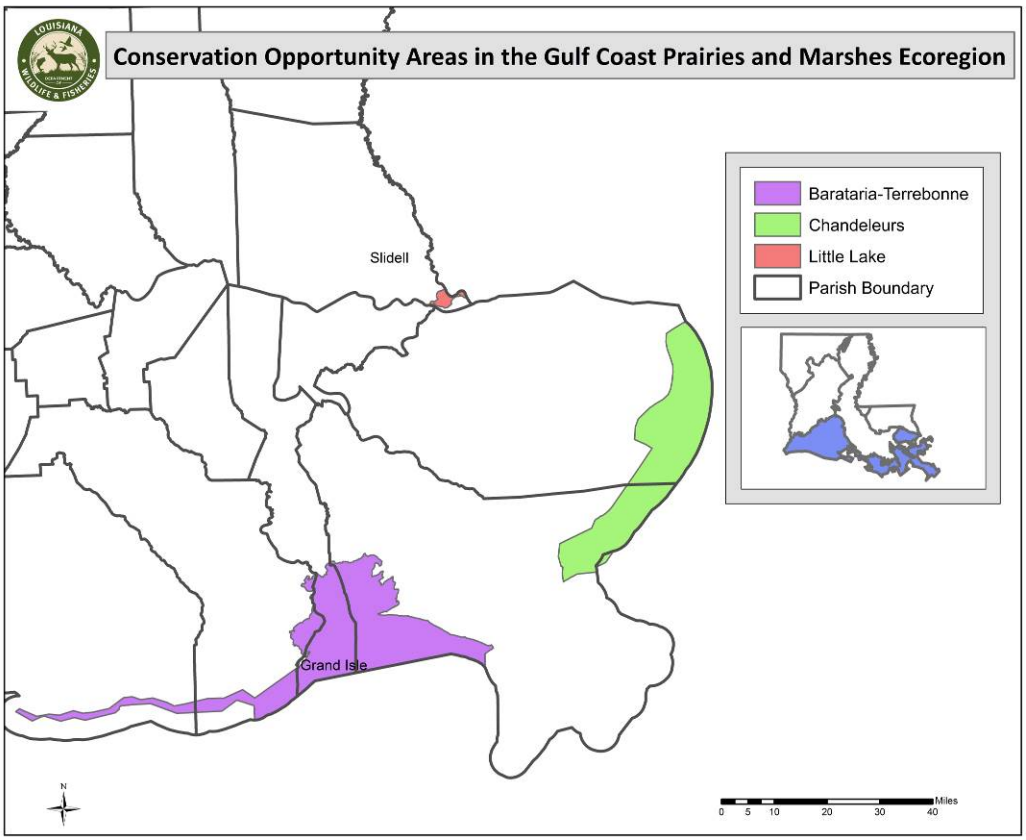

Figure 8.4 – COAs in the Eastern GCPM Ecoregion

a. Barataria-Terrebonne COA

1. Focal Habitats

Barrier Island Live Oak Forest	Louisiana Beach
Coastal Live Oak-Hackberry Forest	Salt Marsh
Coastal Mangrove-Marsh-Shrubland	Barrier Island
Coastal Dune Shrub Thicket	

2. Focal SGCN

Louisiana Eyed Silkmoth	Black Skimmer
Diamond Killifish	Chuck-will's-widow
Bayou Killifish	Yellow-throated Vireo
Kemp's Ridley Sea Turtle	Warbling Vireo
Mississippi Diamond-backed Terrapin	Wood Thrush
Eastern Glass Lizard	Worm-eating Warbler
Gulf Saltmarsh Snake	Louisiana Waterthrush
Mottled Duck	Golden-winged Warbler
Brown Pelican	Prothonotary Warbler
Reddish Egret	Swainson's Warbler
Snowy Plover	Kentucky Warbler
Wilson's Plover	Hooded Warbler
Piping Plover	Cerulean Warbler

American Oystercatcher	Prairie Warbler
Red Knot	Yellow-throated Warbler
Coastal Least Tern	Nelson's Sparrow
Forster's Tern	Seaside Sparrow
Royal Tern	Painted Bunting
Sandwich Tern	Dickcissel

b. Chandeleurs COA

1. Focal Habitats

Coastal Mangrove-Marsh-Shrublands	Marine Seagrass Bed
Louisiana Beach	Barrier Island

2. *Focal SGCN*

Bay Scallop	Snowy Plover
Sawtooth Penshell	Wilson's Plover
Half-naked Penshell	Piping Plover
Channeled Whelk	American Oystercatcher
Lightning Whelk	Red Knot
Gulf Sturgeon	Sooty Tern
Lemon Shark	Gull-billed Tern
Loggerhead Sea Turtle	Caspian Tern
Kemp's Ridley Sea Turtle	Common Tern
Redhead	Black Skimmer
Brown Pelican	West Indian Manatee
Reddish Egret	

c. Little Lake COA

1. Focal Habitats

Intermediate Marsh	Salt Marsh

2. Focal SGCN

Saltmarsh Topminnow	Seaside Sparrow
Mottled Duck	West Indian Manatee
Nelson's Sparrow	

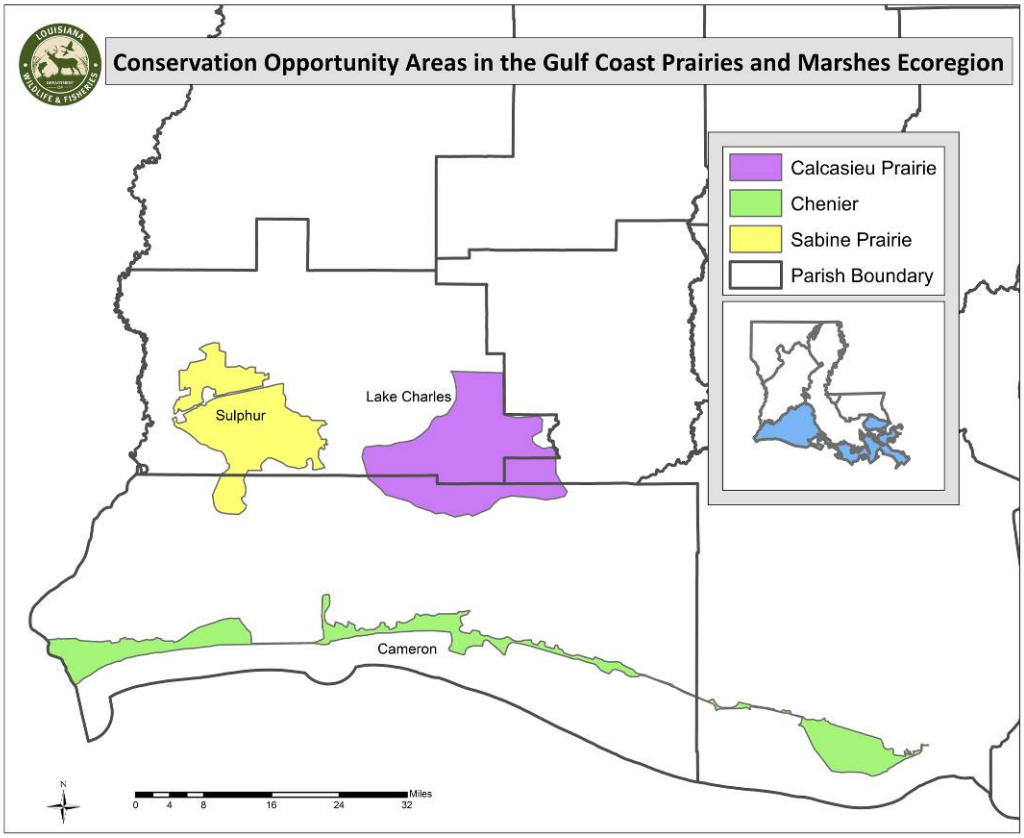

Figure 8.5 – COAs in the Western GCPM Ecoregion

d. Calcasieu Prairie & Sabine Prairie COAs

1. Focal Habitat

Coastal Prairie	Prairie Pothole

2. Focal SGCN

Celia's Roadside Skipper	Hudsonian Godwit
Old Prairie Digger	Buff-breasted Sandpiper
Southern Crawfish Frog	Short-eared Owl
Ornate Box Turtle	Crested Caracara
Mottled Duck	Loggerhead Shrike
Northern Bobwhite	Sprague's Pipit
American Bittern	Grasshopper Sparrow
White-tailed Kite	Le Conte's Sparrow
Yellow Rail	Nelson's Sparrow
King Rail	Dickcissel
Sandhill Crane	Eastern Spotted Skunk
Upland Sandpiper	

e. Chenier COA

1. Focal Habitat

Coastal Live Oak-Hackberry Forest	

2. Focal SGCN

Celia's Roadside Skipper	Prothonotary Warbler
Falcate Orangetip	Swainson's Warbler
Western Slender Glass Lizard	Kentucky Warbler
Chuck-Will's-Widow	Hooded Warbler
Yellow-throated Vireo	Cerulean Warbler
Warbling Vireo	Prairie Warbler
Wood Thrush	Yellow-throated Warbler
Worm-eating Warbler	Painted Bunting
Louisiana Waterthrush	Dickcissel
Golden-winged Warbler	

3. **West Gulf Coastal Plain Ecoregion COAs**

There are eight COAs in the West Gulf Coastal Plain ecoregion (WGCP, Fig. 8.6), four of which are Tier 1 COAs. Many of the COAs in this ecoregion have a large open-pine habitat component and are important for some of the most critically imperiled SGCN in the state such as the Louisiana Pinesnake and Red-cockaded Woodpecker. Proper management of Longleaf Pine habitats, including the appropriately timed application of prescribed fire, is vital to the conservation of SGCN in this ecoregion.

Priority Conservation Needs/Actions

- Land protection/acquisition/management, particularly of Longleaf and Shortleaf Pine habitats
- Prescribed burning initiatives for private and public lands
- Sandbar conservation and restoration
- Maintenance of in-stream flow at adequate levels for aquatic SGCN
- Streamside zone management and riparian habitat restoration
- Longleaf and Shortleaf Pine restoration and management

Key Conservation Partners

- Coastal Plain Conservancy
- Department of Defense (DOD - Ft. Polk)
- GCPOLCC
- Longleaf Alliance
- LDAF
- LDEQ
- LFA
- LOSP
- Lower Mississippi Valley Joint Venture (LMVJV)
- NWTF
- Sabine River Authority (SRA)
- Texas-Louisiana Longleaf Taskforce
- Texas Parks and Wildlife Department (TPWD)
- TNC
- TIMOs
- United States Forest Service (USFS)
- USFWS
- West Gulf Coast Longleaf Ecosystem Partnership
- Wetland Mitigation Bank Sponsors and IRT

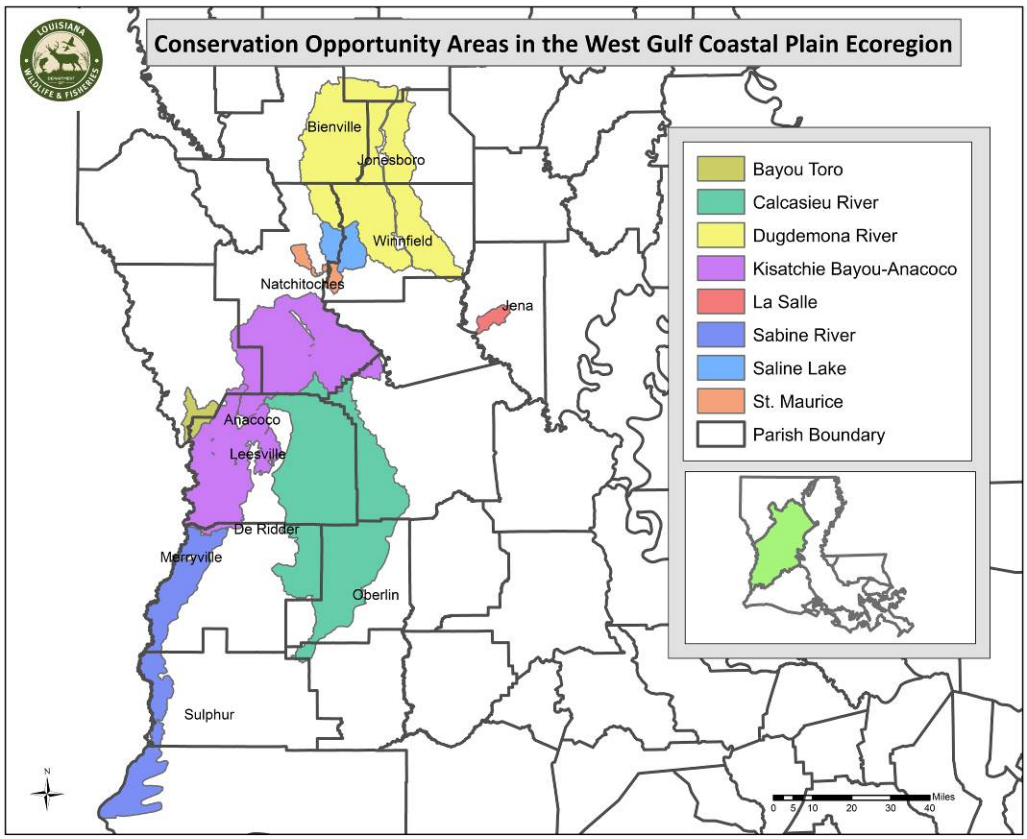

Figure 8.6 – COAs in the WGCP Ecoregion

a. Bayou Toro COA

1. Focal Habitats

Bayhead Swamp	Hardwood Slope Forest
Western Upland Longleaf Pine Woodland	Xeric Sandhill Woodland

2. Focal SGCN

Texas Heelsplitter	Bigscale Logperch
Texas Brown Tarantula	Northern Bobwhite
Southwestern Creek Crawfish	Chuck-will's-widow
Suckermouth Minnow	Bachman's Sparrow
Western Sand Darter	Hispid Pocket Mouse

b. Calcasieu River COA

1. Focal Habitats

Bayhead Swamp	Western Upland Longleaf Pine Woodland
Hardwood Slope Forest	Western Hillside Seepage Bog

Small Stream Forest	WGCP Flatwoods Pond
Western Longleaf Pine Flatwoods Savanna	

2. Focal SGCN

Yellow Brachycercus Mayfly	Red-cockaded Woodpecker
Calcasieu Painted Crawfish	White-breasted Nuthatch
Gumbo Darter	Worm-eating Warbler
Bigscale Logperch	Louisiana Waterthrush
Louisiana Pinesnake	Prairie Warbler
Northern Bobwhite	Bachman's Sparrow
Greater Roadrunner	Henslow's Sparrow
Chuck-will's-Widow	Hispid Pocket Mouse

c. Dugdemona River COA

1. Focal Habitats

Bayhead Swamp	Xeric Sandhill Woodland
Calcareous Forest	Calcareous Prairie
Shortleaf Pine-Oak-Hickory Woodland	Saline Prairie
Western Upland Longleaf Pine Woodland	

2. Focal SGCN

Texas Brown Tarantula	White-breasted Nuthatch
Comanche Harvester Ant	Worm-eating Warbler
Ouachita Fencing Crawfish	Louisiana Waterthrush
Pine Hills Digger	Prairie Warbler
Louisiana Pinesnake	Lark Sparrow
Northern Bobwhite	Bachman's Sparrow
Greater Roadrunner	Northern Long-eared Bat
Chuck-will's-widow	Ringtail
Red-cockaded Woodpecker	

d. Kisatchie Bayou – Anacoco COA

1. *Focal Habitats*

Calcareous Forest	Xeric Sandhill Woodland
Bayhead Swamp	Calcareous Prairie
Hardwood Slope Forest	Sandstone Glade
Mixed Hardwood-Loblolly Pine Forest	Western Hillside Seepage Bog
Western Upland Longleaf Pine Woodland	

2. Focal SGCN

Texas Heelsplitter	Chuck-will's-widow
Kisatchie Painted Crawfish	Red-cockaded Woodpecker

Pitcher Plant Spiketail	Greater Roadrunner
Shovelnose Sturgeon	White-breasted Nuthatch
Suckermouth Minnow	Worm-eating Warbler
Gumbo Darter	Louisiana Waterthrush
Bigscale Logperch	Prothonotary Warbler
Eastern Tiger Salamander	Swainson's Warbler
Southern Red-backed Salamander	Prairie Warbler
Southern Crawfish Frog	Bachman's Sparrow
Louisiana Pinesnake	Henslow's Sparrow
Northern Bobwhite	Hispid Pocket Mouse

e. LaSalle COA

1. Focal Habitats

Mixed Hardwood-Loblolly Pine Forest	Western Upland Longleaf Pine Woodland
Small Stream Forest	Sandstone Glade

2. Focal SGCN

Ouachita Fencing Crawfish	Chuck-will's-widow
Redspot Darter	Bachman's Sparrow
Red-cockaded Woodpecker	Henslow's Sparrow
Northern Bobwhite	Northern Long-eared Bat

f. Sabine River COA

1. Focal Habitats

Bottomland Hardwood Forest	Western Upland Longleaf Pine Woodland
Cypress-Tupelo-Blackgum Swamp	Western Hillside Seepage Bog
Western Longleaf Pine Flatwoods Savanna	WGCP Flatwoods Pond

2. Focal SGCN

Southwestern Creek Crawfish	Sabine Map Turtle
Pine Hills Digger	Northern Bobwhite
Paddlefish	Swallow-tailed Kite
Suckermouth Minnow	Greater Roadrunner
Gumbo Darter	Prothonotary Warbler
Bigscale Logperch	Swainson's Warbler

g. Saline Lake COA

1. Focal Habitats

Calcareous Forest	Xeric Sandhill Woodland
Cypress-Tupelo-Blackgum Swamp	Calcareous Prairie

Mixed Hardwood-Loblolly Pine Woodland	Saline Prairie
Western Upland Longleaf Pine Woodland	

2. Focal SGCN

Texas Brown Tarantula	White-breasted Nuthatch
Texas Emerald	Bachman's Sparrow
Strecker's Giant Skipper	Grasshopper Sparrow
Northern Bobwhite	Henslow's Sparrow
Chuck-will's-widow	Northern Long-eared Bat
Red-cockaded Woodpecker	

h. St. Maurice COA

1. Focal Habitats

Bottomland Hardwood Forest	Western Upland Longleaf Pine Woodland
Mixed-Hardwood Loblolly Pine Woodland	

2. Focal SGCN

Texas Emerald	Northern Bobwhite
Yucca Giant Skipper	Chuck-will's-widow
Redspot Darter	Bachman's Sparrow
Pine Hills Digger	Henslow's Sparrow

4. **Upper West Gulf Coastal Plain Ecoregion COAs**

There are 6 COAs within the Upper West Gulf Coastal Plain ecoregion (UWGCP, Fig. 8.7), all of which are Tier 2. Despite the lack of Tier 1 COAs, this area of Louisiana is of great importance to many SGCN, including such restricted distribution species as Louisiana Pinesnake, Smith's Longspur, Grasshopper Sparrow, Bell's Vireo, Interior Least Tern, and Southern Crawfish Frog. Additionally, Saline Prairie, which is a critically imperiled natural community, is found largely within this ecoregion. Primary threats to SGCN and natural communities in this ecoregion include urbanization and industrial development.

Priority Conservation Needs/Actions

- Streamside management zones and riparian restoration and conservation
- Maintenance of in-stream flow at adequate levels for aquatic SGCN
- Prescribed burning initiatives for public and private lands
- Land protection/acquisition/management, including Saline Prairie, Calcareous Prairie, and Longleaf and Shortleaf Pine habitats
- Sandbar conservation and restoration
- Grassland restoration and management

Key Conservation Partners

- Arkansas Game and Fish Commission (AGFC)
- Arkansas Natural Heritage Commission (ANHC)
- DOD
- GCPOLCC
- Longleaf Alliance
- LDAF
- LDEQ
- LFA
- Louisiana National Guard
- LMVJV
- NWTF
- Texas-Louisiana Longleaf Taskforce
- TNC
- TPWD
- TIMOs
- USACE
- USFS
- USFWS

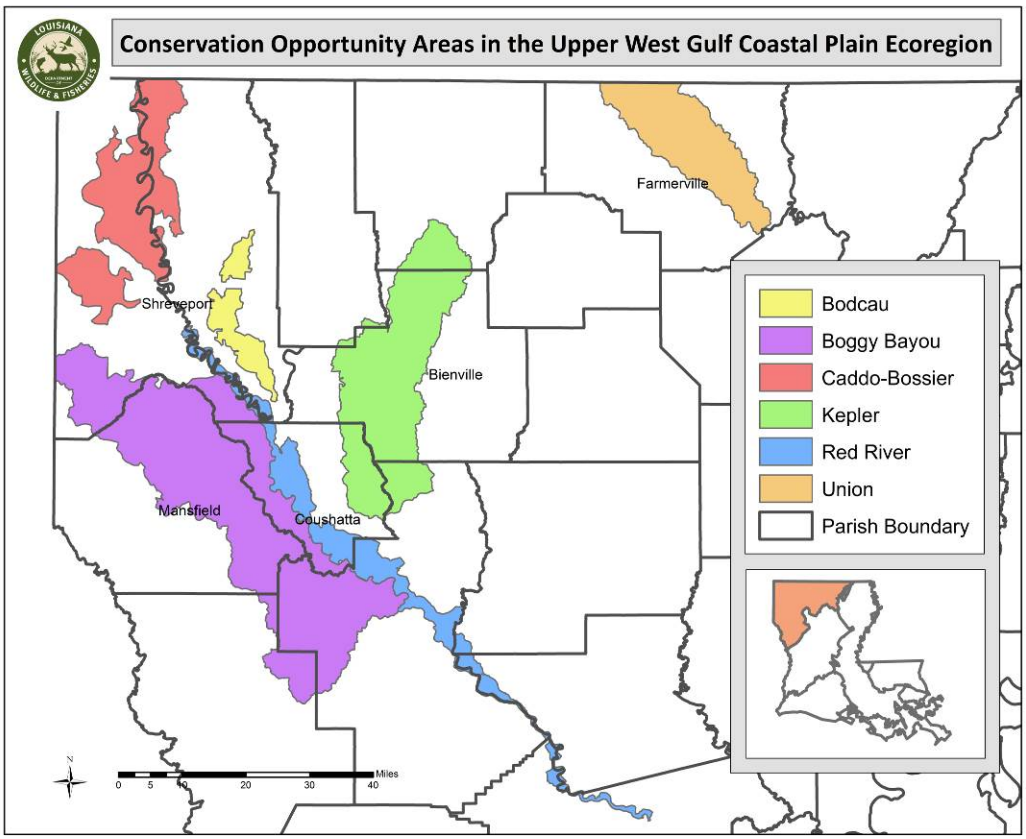

Figure 8.7 – COAs in the UWGCP Ecoregion

a. Bodcau COA

1. Focal Habitats

Bayhead Swamp	Hardwood Flatwoods
Bottomland Hardwood Forest	Shortleaf Pine-Oak-Hickory Woodland
Calcareous Forest	Calcareous Prairie
Cypress-Tupelo-Blackgum Swamp	

2. Focal SGCN

Comanche Harvester Ant	Chuck-will's-widow
Southern Crawfish Frog	Red-cockaded Woodpecker
Alligator Snapping Turtle	Lark Sparrow
Northern Bobwhite	Bachman's Sparrow
Greater Roadrunner	Henslow's Sparrow

b. Boggy Bayou COA

1. Focal Habitats

Hardwood Flatwoods	Small Stream Forest
Hardwood Slope Forest	Shortleaf Pine-Oak-Hickory Woodland
Mixed Hardwood-Loblolly Pine Forest	Saline Prairie

2. Focal SGCN

Sabine Fencing Crawfish	Chuck-Will's-Widow
Western Sand Darter	Lark Sparrow
Greater Roadrunner	Ringtail

c. Caddo-Bossier COA

1. Focal Habitats

Batture	Small Stream Forest
Bottomland Hardwood Forest	Shortleaf Pine-Oak-HickoryWoodland
Cypress-Tupelo-Blackgum Swamp	Sandbar
Hardwood Slope Forest	Oxbow
Mixed Hardwood-Loblolly Pine Forest	

2. Focal SGCN

Caddo Chimney Crawfish	Greater Roadrunner
Shovelnose Sturgeon	Chuck-will's-widow
Chub Shiner	Bell's Vireo
Bluehead Shiner	Warbling Vireo
Blue Sucker	Sprague's Pipit
Strecker's Chorus Frog	Smith's Longspur
Southern Crawfish Frog	Lark Sparrow
Southern Prairie Skink	Grasshopper Sparrow

d. Kepler COA

1. Focal Habitats

Bayhead Swamp	Shortleaf Pine-Oak-Hickory Woodland
Bottomland Hardwood Forest	Western Upland Longleaf Pine Woodland (especially xeric phase)
Cypress-Tupelo-Blackgum Swamp	Saline Prairie
Hardwood Flatwoods	West Gulf Coastal Plain Muck Bog

2. Focal SGCN

Louisiana Pinesnake	Bachman's Sparrow

Northern Bobwhite	Lark Sparrow
Greater Roadrunner	Henslow's Sparrow
Chuck-will's-widow	Ringtail
Red-cockaded Woodpecker	

e. Red River COA

1. Focal Habitats

Batture	Sandbar
Bottomland Hardwood Forest	Oxbow
Cypress-Tupelo-Blackgum Swamp	

2. Focal SGCN

Pallid Sturgeon	Bell's Vireo
Shovelnose Sturgeon	Warbling Vireo
Interior Least Tern	

f. Union COA

1. Focal Habitats

Bayhead Swamp	Shortleaf Pine-Oak-Hickory Woodland
Bottomland Hardwood Forest	Xeric Sandhill Woodland
Cypress-Tupelo-Blackgum Swamp	

2. Focal SGCN

Vernal Crawfish	Greater Roadrunner
Elegant Creek Crawfish	Chuck-will's-widow
Pine Hills Digger	Red-cockaded Woodpecker
Steelcolor Shiner	Bachman's Sparrow
Northern Bobwhite	Henslow's Sparrow

5. **Mississippi River Alluvial Plain Ecoregion COAs**

There are three COAs within the Mississippi River Alluvial Plain ecoregion (MRAP, Fig. 8.8 and 8.9), two of which are Tier 1 COAs. Many SGCN, particularly freshwater mussels, are found only in this ecoregion. Conservation priorities in this area are largely concerned with aquatic systems and species. A large portion of the landscape in this ecoregion is, or has been, converted for agriculture and therefore habitat restoration and soil conservation are of high priority.

Priority Conservation Needs/Actions

- Land protection/acquisition/management (including Hardwood Flatwoods)
- Soil conservation practices
- Streamside zone management and riparian habitat restoration
- Hydrological restoration of forested wetlands
- Maintenance of in-stream flow at adequate levels for aquatic SGCN

Key Conservation Partners

- AFGC
- ANHC
- DU
- GCPOLCC
- LDAF
- LDEQ
- LFA
- LOSP
- Louisiana-Mississippi Conservation Delivery Network (LMCDN)
- LMVJV
- MDWFP
- TNC
- USACE
- USDA NRCS
- USFWS

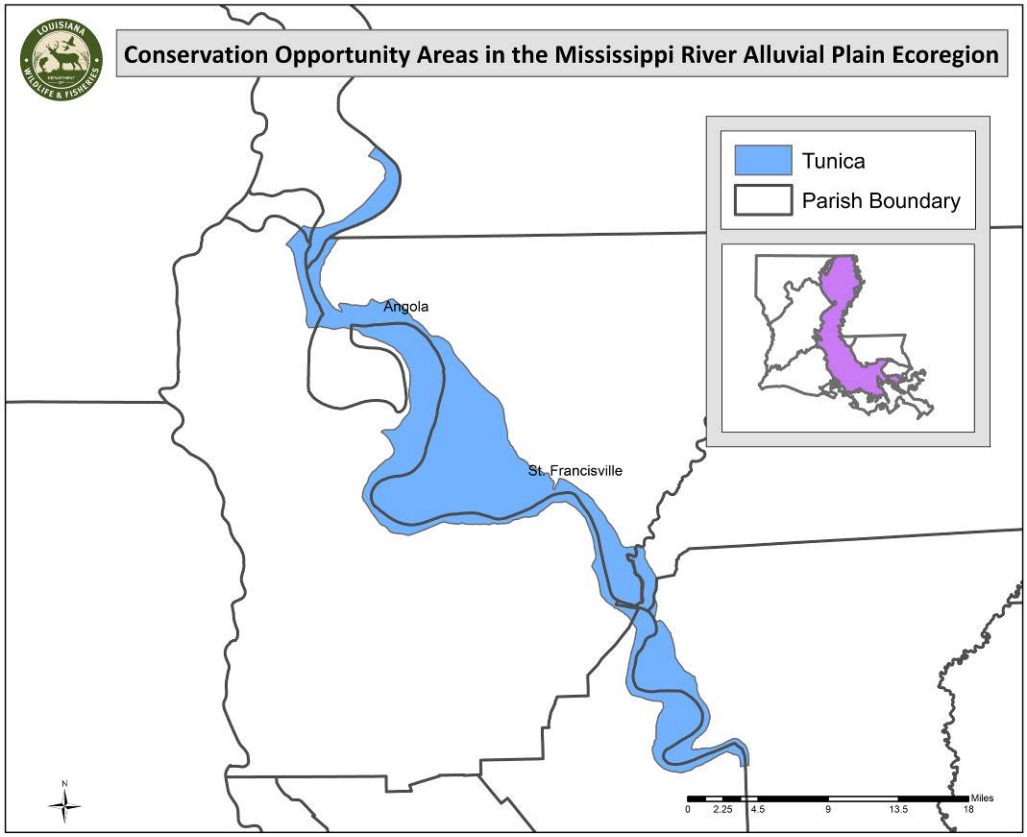

Figure 8.8 – COAs in the Southern MRAP Ecoregion

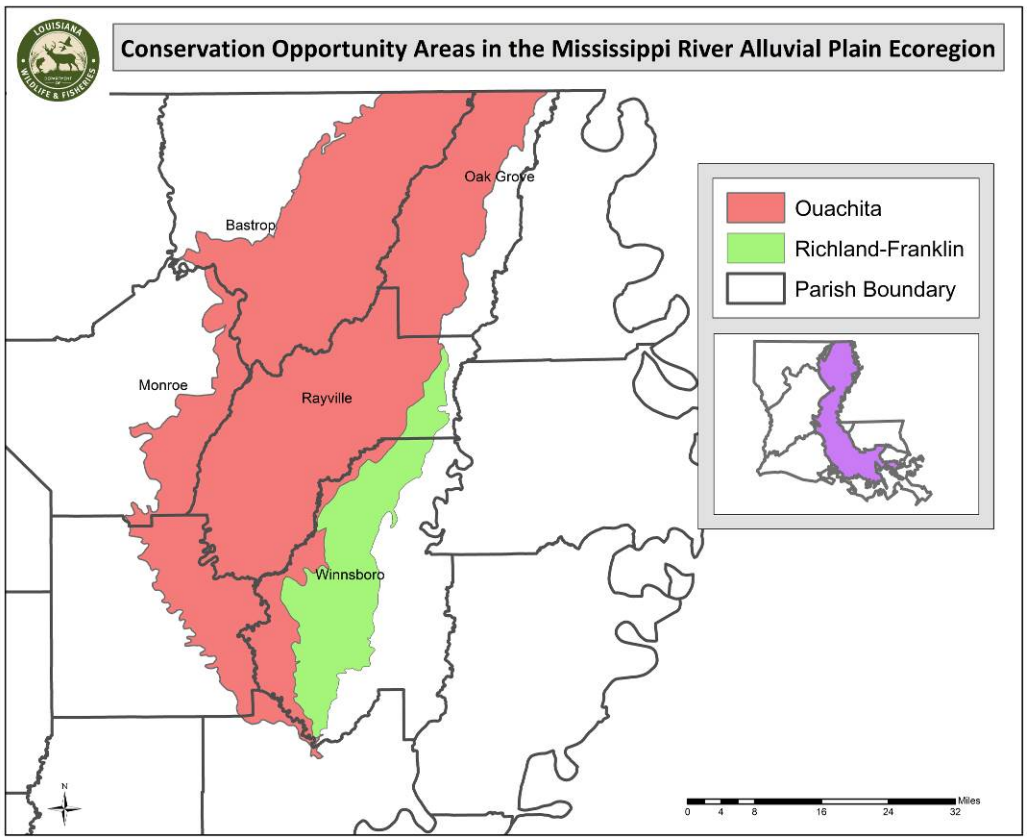

Figure 8.9 – COAs in the Northern MRAP Ecoregion

a. Tunica COA

1. Focal Habitats

Batture	Southern Mesophytic Forest
Bottomland Hardwood Forest	Sandbar
Cypress-Tupelo-Blackgum Swamp	

2. Focal SGCN

Southern Unstriped Scorpion	Rainbow Darter
Pallid Sturgeon	Interior Least Tern
Shovelnose Sturgeon	Worm-eating Warbler
Central Stoneroller	Louisiana Waterthrush
Bluntface Shiner	Prothonotary Warbler
Sturgeon Chub	Swainson's Warbler
Sicklefin Chub	Rusty Blackbird
Chub Shiner	Eastern Chipmunk

b. Ouachita COA

1. Focal Habitats

Bottomland Hardwood Forest	Mixed Hardwood-Loblolly Pine Forest
Cypress-Tupelo-Blackgum Swamp	Macon Ridge Green Ash Pond
Hardwood Flatwoods	

2. Focal SGCN

Butterfly	Bluehead Shiner
Spike	Blue Sucker
Ebonyshell	Channel Darter
Pink Mucket	Alligator Snapping Turtle
Plain Pocketbook	Ouachita Map Turtle
Fatmucket	Western Chicken Turtle
Black Sandshell	American Woodcock
Hickorynut	Chuck-will's-widow
Pyramid Pigtoe	Chimney Swift
Ouachita Kidneyshell	Red-cockaded Woodpecker
Rabbitsfoot	Prothonotary Warbler
Monkeyface	Swainson's Warbler
Vernal Crawfish	Dickcissel
Elegant Creek Crawfish	Rusty Blackbird
Shovelnose Sturgeon	Oak Ridge Pocket Gopher
Central Stoneroller	

c. Richland-Franklin COA

1. Focal Habitats

Bottomland Hardwood Forest	Mixed Hardwood-Loblolly Pine Forest
Cypress-Tupelo-Blackgum Swamp	Macon Ridge Green Ash Pond
Hardwood Flatwoods	

2. Focal SGCN

Alligator Snapping Turtle	Prothonotary Warbler
American Woodcock	Swainson's Warbler
Chimney Swift	Rusty Blackbird