Mississippi Alluvial Valley

Conservation Opportunity Area

The corridor along the Mississippi River is recognized as one of the most significant migratory bird corridors in the world (the Mississippi Flyway). Annually, up to 50 million ducks, geese, shorebirds, wading birds, neotropical birds, and raptors migrate through this area. The MAV is an extensive area along the Mississippi River that lies mostly within the Mississippi Alluvial Plain Ecoregion, which encompasses about 2% of the total land area in Tennessee.

The landscape consists mostly of forested wetland habitats interspersed with agricultural lands and uplands. An estimated 80% of the original bottomland hardwood forest has been removed, along with the large river cane (a type of native bamboo) corridors that once existed. TWRA personnel are reforesting areas on state-owned lands to restore bottomland hardwood habitat. As of 2015, TWRA has restored over 7,500 acres of former agricultural lands to forest. The agency is also experimenting with native habitat restoration on agricultural lands by planting river cane along the Mississippi.

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Its diverse habitats, species richness, proximity to Memphis, and location along the Great River Road leading to Reelfoot make the MAV an attractive destination for hunters, anglers, and wildlife viewers. TWRA will consider future land acquisitions in this COA for watershed protection, critical habitat protection, habitat restoration, streambank stabilization, planting of bottomland hardwoods, and planting of buffer strips along the river. TWRA will also seek partnerships with other agencies and landowners to implement many of the management strategies on private lands within the COA.

Public Lands within the COA

Bogota Wildlife Management Area (WMA), Chickasaw National Wildlife Refuge (NWR), Eagle Lake Refuge, Fort Pillow State Park (SP), Hatchie River State Scenic River, John Tully WMA, Lake Isom NWR, Lower Hatchie NWR, Meeman-Shelby Forest SP/State Natural Area (SNA)/WMA, Moss Island WMA, Sunk Lake SNA, Thorny Cypress WMA, Tumbleweed WMA, White Lake Refuge

Top to bottom: Western Sandpiper Juvenile - Chris Sloan; River cane - Travis/next page: Banks of the Mississippi River - John Henry Photography

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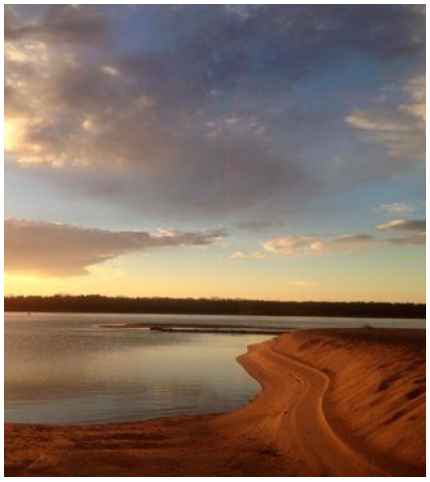

Partnerships

TWRA will develop and foster partnerships with the US Fish and Wildlife Service, Tennessee Department of Environment and Conservation, Army Corps of Engineers, The Nature Conservancy, Tennessee Ornithological Society, Tennessee Wildlife Resources Foundation, National Wild Turkey Federation, Natural Resources Conservation Service, Farm Bureau, Tennessee Department of Forestry, Ducks Unlimited, Cooperative Extensions, University of Memphis, UT Martin, and various other universities, institutions, and local governments.

	Desired Change	Units
+	Increase the application of Best Management Practices to benefit GCN species and habitats on private lands using government funded incentive programs	number
+	Restore acres and stream miles of bottomland hardwood forest by converting former agriculture lands.	acres/miles
+	Restore river cane corridors.	acres
+	Create or improve buffers around tributaries to reduce sediment transfer and runoff of contaminants.	acres
+	Increase mudflat and moist soil habitat on wildlife refuges through enhanced water management to provide habitat for migrating birds and Mississippi kites	acres
−	Decrease the negative effects of development on GCN species and habitats by encouraging municipal and county governments to limit or regulate development within critical units of aquatic, subterranean, and terrestrial habitats.	plans
✓	Protect existing riparian zones and bottomland hardwood forests.	acres

To learn more about the Mississippi Alluvial Valley Conservation Opportunity Area, please contact: Rob Colvin, Wildlife Diversity Coordinator, Region 1 (731) 423-5725

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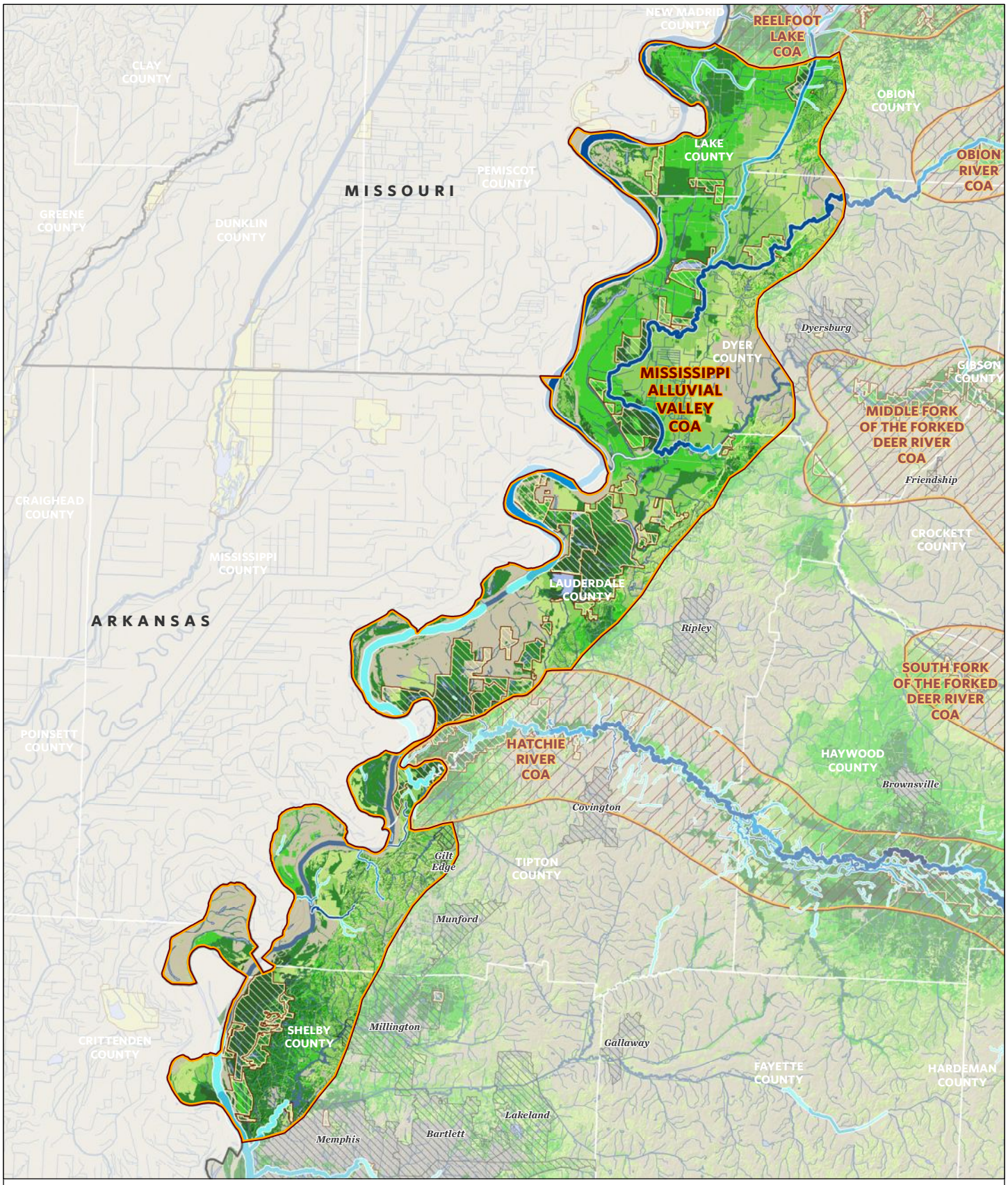

Taxa group	MISSISSIPPI ALLUVIAL VALLEY COA GCN SPECIES (TN) Scientific & Common names
Bat	Corynorhinus rafinesquii (Rafinesque's Big-eared Bat)
Bat	Myotis austroriparius (Southeastern Bat)
Bat	Perimyotis subflavus (Tri-colored Bat)
Bird	Accipiter striatus (Sharp-shinned Hawk)
Bird	Ammodramus leconteii (LeConte's Sparrow)
Bird	Ammodramus savannarum (Grasshopper Sparrow)
Bird	Anas rubripes (American Black Duck)
Bird	Ardea alba (Great Egret)
Bird	Asio flammeus (Short-eared Owl)
Bird	Bartramia longicauda (Upland Sandpiper)
Bird	Botaurus lentiginosus (American Bittern)
Bird	Calidris canutus (Red Knot)
Bird	Calidris himantopus (Stilt Sandpiper)
Bird	Calidris mauri (Western Sandpiper)
Bird	Calidris pusilla (Semipalmated Sandpiper)
Bird	Caprimulgus carolinensis (Chuck-will's-widow)
Bird	Chaetura pelagica (Chimney Swift)
Bird	Charadrius melodus melodus (Piping Plover)
Bird	Chordeiles minor (Common Nighthawk)
Bird	Circus cyaneus (Northern Harrier)
Bird	Cistothorus platensis (Sedge Wren)
Bird	Colinus virginianus (Northern Bobwhite)
Bird	Egretta caerulea (Little Blue Heron)
Bird	Empidonax minimus (Least Flycatcher)
Bird	Empidonax traillii (Willow Flycatcher)
Bird	Euphagus carolinus (Rusty Blackbird)
Bird	Falco peregrinus (Peregrine Falcon)
Bird	Geothlypis Formosa (Kentucky Warbler)
Bird	Haliaeetus leucocephalus (Bald Eagle)
Bird	Helmitheros vermivorum (Worm-eating Warbler)
Bird	Hylocichla mustelina (Wood Thrush)
Bird	Icteria virens (Yellow-breasted Chat)
Bird	Icterus spurius (Orchard Oriole)
Bird	Ictinia mississippiensis (Mississippi Kite)
Bird	Ixobrychus exilis (Least Bittern)
Bird	Lanius ludovicianus (Loggerhead Shrike)
Bird	Limnothlypis swainsonii (Swainson's Warbler)
Bird	Limosa fedoa (Marbled Godwit)
Bird	Limosa haemastica (Hudsonian Godwit)
Bird	Melanerpes erythrocephalus (Red-headed Woodpecker)
Bird	Numenius phaeopus (Whimbrel)
Bird	Nycticorax nycticorax (Black-crowned Night-heron)
Bird	Parkesia motacilla (Louisiana Waterthrush)
Bird	Passerina ciris (Painted Bunting)
Bird	Pluvialis dominica (American Golden Plover)
Bird	Protonotaria citrea (Prothonotary Warbler)
Bird	Riparia riparia (Bank Swallow)
Bird	Scolopax minor (American Woodcock)
Bird	Setophaga cerulea (Cerulean Warbler)
Bird	Setophaga discolor (Prairie Warbler)
Bird	Sternula antillarum athalassos (Interior Least Tern)

	MISSISSIPPI ALLUVIAL VALLEY COA GCN SPECIES (TN)
Taxa group	**Scientific & Common names**
Bird	Sturnella magna (Eastern Meadowlark)
Bird	Thryomanes bewickii (Bewick's Wren)
Bird	Tryngites subruficollis (Buff-breasted Sandpiper)
Bird	Tyto alba (Barn Owl)
Bird	Vermivora chrysoptera (Golden-winged Warbler)
Bird	Vermivora cyanoptera (Blue-winged Warbler)
Bird	Vireo bellii (Bell's Vireo)
Fish	Atractosteus spatula (Alligator Gar)
Fish	Cycleptus elongatus (Blue sucker)
Fish	Fundulus chrysotus (Golden Topminnow)
Fish	Notropis dorsalis (Bigmouth Shiner)
Fish	Polyodon spathula (Paddlefish)
Fish	Scaphirhynchus albus (Pallid Sturgeon)
Gastropod	Webbhelix multilineata (Striped Whitelip)
Mammal	Neotoma floridana illinoensis (Eastern Woodrat)
Mammal	Ochrotomys nuttalli (Golden Mouse)
Mammal	Sorex longirostris (Southeastern Shrew)
Plant	Carex hyalina (Tissue Sedge)
Plant	Iris fulva (Copper Iris)
Plant	Panax quinquefolius (American Ginseng)
Plant	Sagittaria platyphylla (Ovate-leaved Arrowhead)
Plant	Ulmus crassifolia (Cedar Elm)
Plant	Zanthoxylum americanum (Northern Prickly-ash)
Reptile	Crotalus horridus (Timber Rattlesnake)
Reptile	Macrochelys temminckii (Alligator Snapping Turtle)
Reptile	Terrapene carolina (Eastern Box Turtle)

MISSISSIPPI ALLUVIAL VALLEY COA HABITATS (TN)	
Terrestrial Habitat Type	**Total acres of very high, high, and medium ranked habitat**
Natural habitat	
Mississippi River Low Floodplain (Bottomland) Forest	87810
Mississippi River Riparian Forest	20521
East Gulf Coastal Plain Northern Loess Bluff Forest	15274
East Gulf Coastal Plain Small Stream and River Floodplain Forest	5162
South-Central Interior Small Stream and Riparian	1826
East Gulf Coastal Plain Large River Floodplain Forest	1389
East Gulf Coastal Plain Northern Loess Plain Oak-Hickory Upland	276
East Gulf Coastal Plain Northern Mesic Hardwood Slope Forest	42
South-Central Interior / Upper Coastal Plain Flatwoods	22
Semi-natural habitat	
Cropland	90666
Old Field / Successional	18444
Pasture	12358

Aquatic Habitat Type	**Total stream miles of very high, high, and medium ranked habitat**
Headwaters and streams	18
Small River	8
Medium River	46
Large River	45