

What will fish and wildlife populations need in the face of climate change?



..... a reserve network with connectivity managed by a conservation community that practices adaptive resource management.

# Mississippi River Alluvial Basin

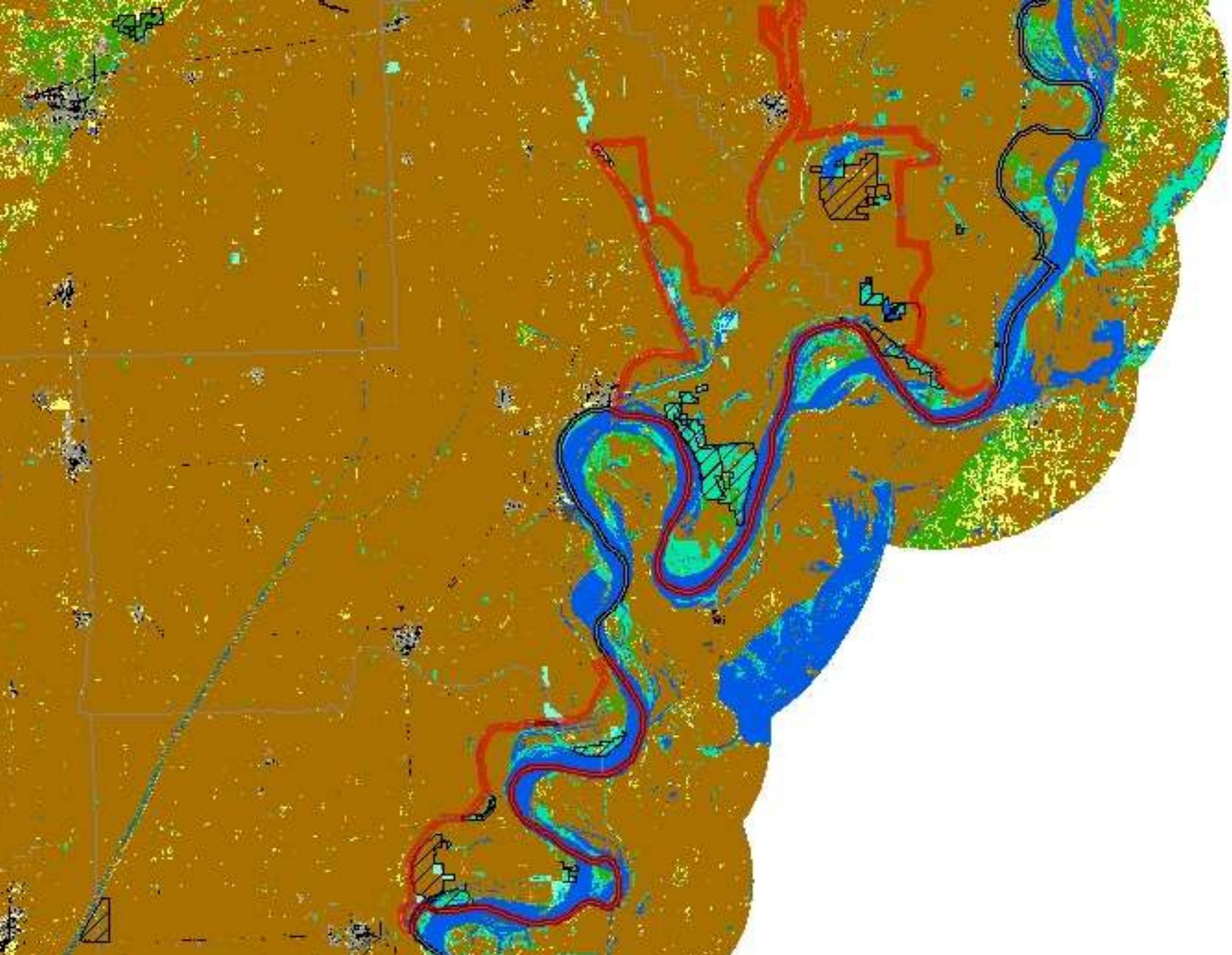
Historically, the Mississippi Alluvial Basin was an inaccessible wilderness of swamps, bottomland forests and marshes. Frequent flooding played a significant role in the creation and maintenance of complex wetlands. Soils are very deep, accumulating as floodplain sediments left by the Mississippi and Ohio rivers. The broad alluvial plain has remarkably low relief except for the sandy terraces or natural levees that rise 15-30 feet above the general surface. Sand prairies, savannas, and woodlands are restricted to elevated sandy areas. Riverfront forests occupied natural levees along the Mississippi River and other large rivers.

While the Mississippi River Alluvial Basin region has largely been drained and converted to row crop agriculture, remnants exist that can perhaps sustain the Bootheel's characteristic wildlife.



Photo: Allard Lake Natural Area and Green Toadling  
Jim Zahner, Missouri Department of Conservation





# River Bends

## Conservation Opportunity Area



Mississippi River  
Alluvial Plains



Swamp and Bayouland State Park in the River Bends Conservation Opportunity Area.

Early explorers to the Southeast region of southern Missouri discovered a landscape of hardwoods with giant trees. Bottomland trees grew to enormous proportions in the fertile earth. Regular flooding over millions of years created bottomland forests, swamps, marshes and oxbow wetlands. Over the past two centuries, activities closed the land and drained the swamps to create productive cropland.

The River Bends Conservation Opportunity Area (COCA) includes several important blocks of remnant forest centered at Donaldson Forest Conservation Area and Big Oak Tree State Park. Forested lands are also owned by the timber products industry - agencies that implement conservation practices, an adept at producing rapid forested areas and have significant recreational amenities of forested lands.

Land along the Mississippi River is still regularly influenced by flooding. In most areas, however, the timing, duration, depth and velocity of flood events have been altered, eliminating much of the natural flooding important to swamp and wetland natural communities.

In addition to the towering loblomies and magnolia, oaks, reds and white provide habitat for green ash, swamp cottonwood, American elm, black willow, persimmon, baldcypress and juniper of giant cane. Bottomland trees within Big Oak Tree State Park are recognized in the state for size, with one qualifying as state champion of their species and two registered as national champions. More than 150 kinds of birds live among the lofty bottomland trees, including porphyriety warblers, sandbar warblers, red-shouldered hawks, Mississippi kites and fall owls.





Swainson's Warbler	29
Cerulean Warbler	28
Prothonotary Warbler	24
Red-headed Woodpecker	23
Northern Parula	23
Kentucky Warbler	22





Swainson's Warbler



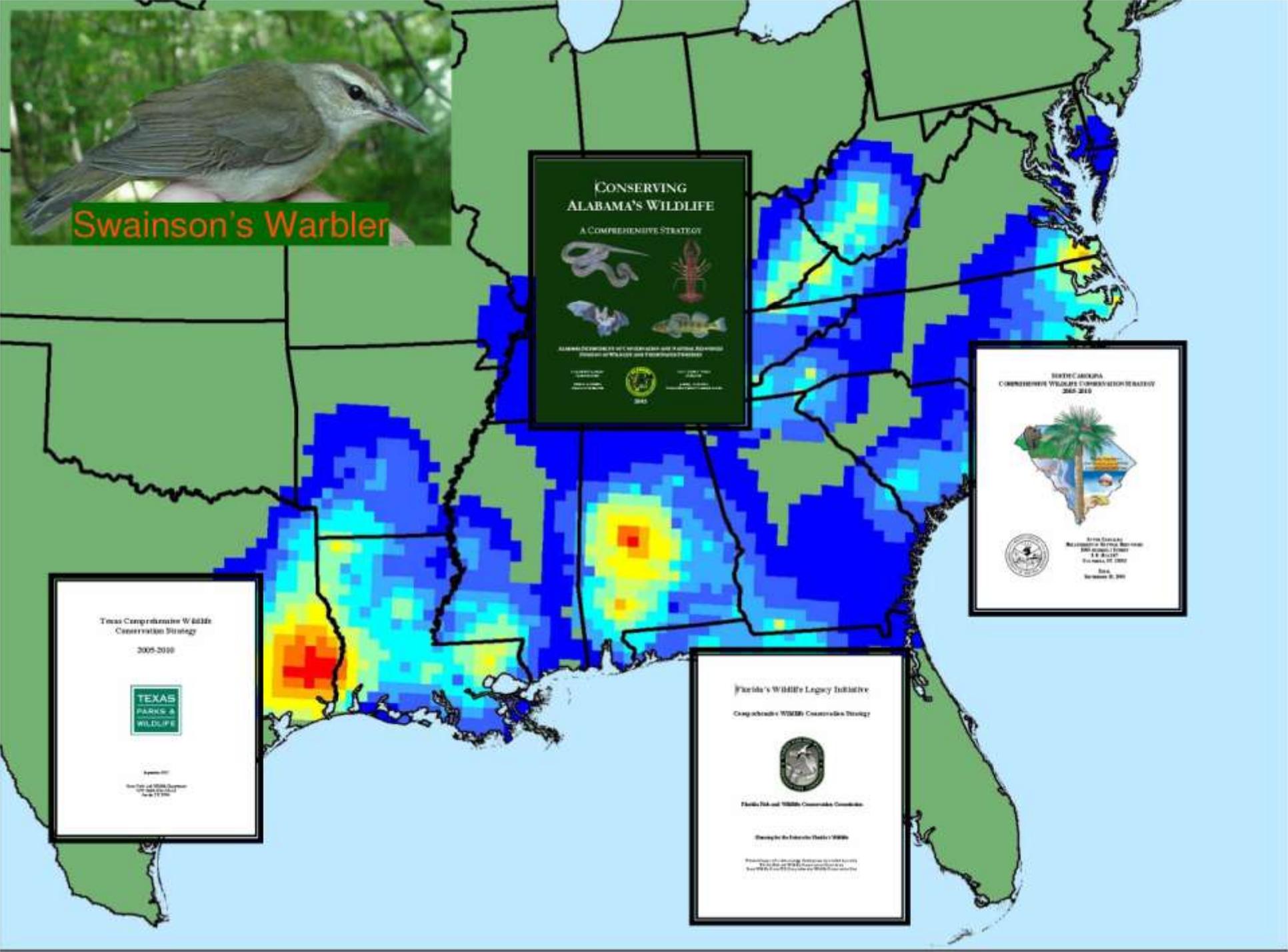
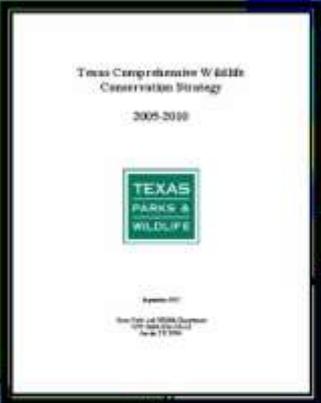
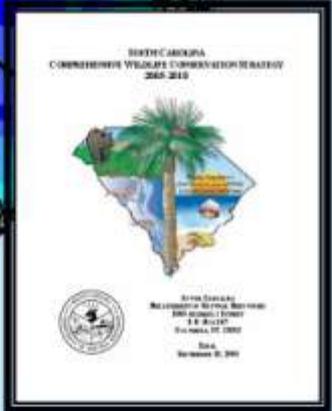
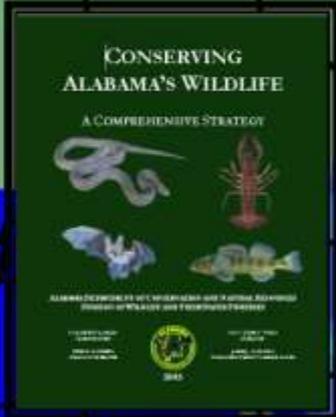


Swainson's Warbler





Swainson's Warbler





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In the face of climate change, fish and wildlife agencies must begin to address ALL WILDLIFE AND THE HABITATS THEY DEPEND UPON.



