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Illinois Fact Sheet

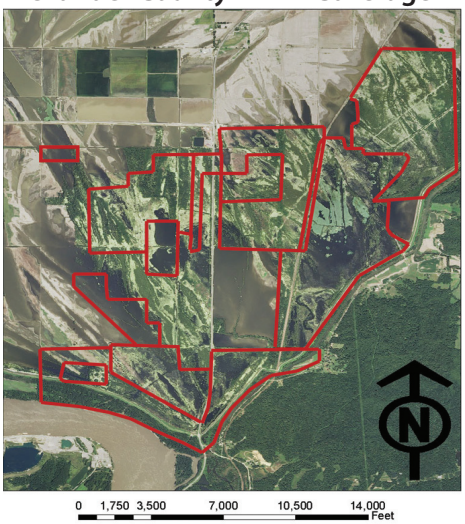
Restoring Wetlands

20 Years and Counting

November 2012

Along the Mississippi River in southern Illinois, are diverse landscapes of woodlands, open wild areas and farmland. However, that wasn't the case just 20 years ago. Back then, much of the land was cropland for corn, soybeans, and wheat. The area generally experiences frequent flooding, but nothing like the Great Flood of 1993, which ravaged the area. That was when the USDA Natural Resources Conservation Service (NRCS) offered landowners access to an easement program that does two things: helps landowners who lose crops to floods year after year and restores the area back to a fully functional wetland.

Alexander County EWRP Coverage



Map shows acres enrolled in EWRP in 1993, outlined in red.

That easement program was the Emergency Wetlands Reserve Program (EWRP). After all was said and done, there were seven easements enrolled covering a total area of 3,089 acres in Alexander County. This compilation of easements forms a "contiguous piece of Mississippi River floodplain," said Dave Hiatt, NRCS Biologist. "Each easement connects a larger area that gives migrating birds a place to rest and feed before traveling on. Located at the top of the Mississippi Alluvial Valley, this locale is now a major migration staging area."

After floodwaters receded in 1993, "these areas looked like a moon scape," said Danette Cross, NRCS District Conservationist in Alexander and Pulaski Counties. Cross was an NRCS technician when flood recovery efforts began. "It's been great to work on these wetland restoration sites from the beginning," Cross continued.

The same location took another big hit in 2011. According to Cross, "That flood was almost worse than 1993" because this area sits in what local residents call the 'bathtub' located between the Ohio and Mississippi River confluence. "Both rivers crested at the same time and the area remained flooded for months," said Cross.

Research, Restoration & Recreation

Danette Cross (NRCS), Chad Deaton (USFS), and Nick Zaczek (graduate student) examine the water control structure for beaver activity.

Once a landowner places their land in a conservation easement, their options are to sell the land, lease it for recreational purposes such as hunting, or just enjoy the new surroundings. In this case, the U.S. Forest Service (USFS) purchased 3,000 acres of the original easements. Illinois Department of Natural Resources (IDNR) purchased a smaller portion. The USFS manages the land for wildlife, game and non-game species. Residents and visitors can enjoy the recovering wetland and watch the return of flowers, fish, birds, mammals and everything else supported by a healthy wetland ecosystem.

Chad Deaton inspects a young tree planted in 2003.

Chad Deaton, Supervisory Wildlife Biologist with USFS, was adamant about restoring these wetlands because they enhance the Shawnee National Forest. "These areas are a high priority to re-establish," said Deaton. "The Mississippi floodplain has been manipulated over the years to where its function has been diminished."

We often think of wetlands only storing water after heavy rains and preventing floods. But did you know wetlands are also valuable during dry times? This year, southern Illinois experienced record drought conditions. Yet, wetland areas continually support wildlife and plants species, even with low or no water.

Colyer's tract was put into a conservation easement in 2003. This 233-acre wetland supports newly planted oak and cypress trees. The rolling terrain invites a variety of plants and habitats where wildlife can flourish. NRCS installed two water control structures on the site and built a small levee that controls timing and release of water.

"We primarily mow vegetation and maintain the levees," said Deaton. "Of course we check to make sure the beavers don't plug the control structures too." The area is open to the public but Deaton confirms that mostly hunters and birdwatchers use the site. Because Colyer's tract is located further away from the river, soils there are different. The wetland can support more diverse plant and animal life due to variations in elevation and the seasonal water table.

Nick Zaczek finds a turtle in the Colyer easement after finding the rat snake.

"This is a working wetland," adds Deaton. "There is a cropped field along one edge and water running off the field is filtered through the wetland." Some young oak trees show healthy acorn development and native plants are blooming.

A Southern Illinois University graduate student, Nick Zaczek helped Deaton for the past three summers. He has seen wildlife improvements there firsthand. While walking on trails he spotted a baby rat snake hiding under some plant growth and later encountered a turtle.

Wildlife isn't the only beneficiary of these 20-year old wetlands. They offer research opportunities. The Middle Mississippi River Wetland Field Station, made up of 1,380 acres of EWRP easements, is a research area owned by the State of Illinois and managed by Southern Illinois University at Carbondale. The station is located on the banks of the Mississippi River in Alexander County and serves as a research, education, and demonstration area.

Looking Back and Forward

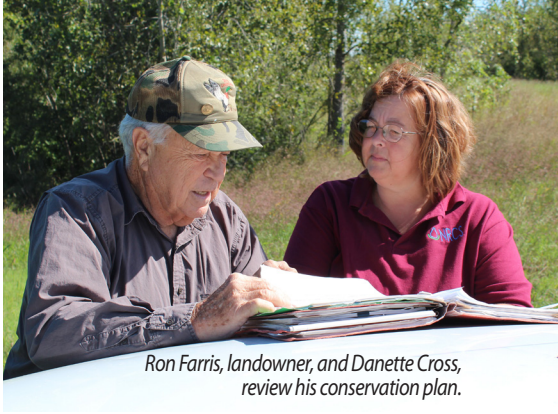
For landowners who decided to enroll their land into easements, there are no regrets. Current landowner Ron Farris, whose father originally enrolled the land, would like to add even more acres into the easement, if possible. The force of water from the 1993 flood created a lake on Farris' property that is approximately 60-feet deep when full. More site damage resulted when a road blew out and a home washed completely away.

Flood of 1993 created this 60-foot deep lake in the Farris' cropland.

The land was covered with several feet of sand that would require multiple and costly truckloads to remove. "Right now I have 100 acres of trees, a 50-acre lake, 50 acres of sand and 50 acres I crop," stated Farris. "I'd like to enroll those acres of cropland if the opportunity comes around."

Driving to another easement site in an area of the county where he grew up, Farris recalled, "I remember when this was all trees." "Back in the 60's is when all the trees were cut down and this was turned into cropland." Farris said that since the flood, the ground is unable to support good crops so restoring is the best option.

Cross confirms the devastation to cropland in the area. She agrees that returning the ground back to natural wooded areas and wetlands is best for some of the more damaged areas. She currently works with the Corps of Engineers to stabilize old levees along several easement sites.



Ron Farris, landowner, and Danette Cross, review his conservation plan.

Partnerships between NRCS, Forest Service and IDNR have been positive. Other partners, such as the American Land Conservancy and the Middle Mississippi River Partnership, as well as countless landowners have helped bring value back to both floodplains and wetlands. During this same timeframe, additional easements through the Wetlands Reserve Program (WRP) in Alexander County have purchased another 2,367 acres. Union and Jackson counties also enrolled several easements equaling thousands of acres in EWRP and WRP.

Deaton and Cross praise all partners and landowners for their help in working together to purchase and re-establish a unique area that supports such diversified plant, wildlife and aquatic life–not to mention opening up areas for migrating water birds. Hiatt compares these wetlands to a beautiful "string of pearls along the Mississippi." Pearls that give wetlands the opportunity to do what they do best, be the cleanser of water and home for native flora and fauna that we can all enjoy for years.

Egrets visit a shallow wetland located on farmland in Alexander County.

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