

EASTERN TALLGRASS PRAIRIE AND BIG RIVERS LANDSCAPE CONSERVATION COOPERATIVE

PROGRESS REPORT 2016



Agroecology



Gulf Hypoxia



Monarch
Butterfly Habitat



Prairie
Restoration



River Restoration



Urban
Conservation

FOCUS

The Eastern Tallgrass Prairie and Big Rivers Landscape Conservation Cooperative is dedicated to addressing the conservation challenges of a largely privately owned and agricultural landscape that stretches across the nation's heartland through cornfields, grazing lands, small towns and large cities from southwest Ohio westward across to parts of eastern Kansas, Oklahoma and Nebraska and northward into segments of Iowa, South Dakota and Minnesota.

VISION

Functional tallgrass prairie and big river natural communities embedded in a healthy and productive agricultural and urban landscape—ecologically connected lands and waters, managed cooperatively for current and future generations.

MISSION

Restore and connect wildlife with people on the rich soils of a functional working landscape.



*Kelley Myers, Iowa DNR,
ETPBR LCC Steering
Committee Co-Chair*

I am constantly amazed, but never surprised, by the relentless and passionate work of natural resource professionals around me. I am so fortunate to work shoulder-to-shoulder with them every day in support of their work to monitor and recover wildlife, restore wetlands and prairies, increase self-sustaining fisheries and protect sensitive or ecologically important lands. Each biologist, technician or planner working on the landscape is focused on their corner of the world, working to support robust fish and wildlife management in their immediate community. But given the nature of our riverine systems, the migrations of many of our species and the movement of resources, their work is indelibly connected to a piece

of greater Conservation occurring beyond. And the LCC framework has really facilitated that connection to amplify it across state lines, regions and even nationally and internationally.

Our LCC has the unique distinction of encompassing ecologically important major rivers and grasslands among working, highly-productive lands. As the projects highlighted in this report demonstrate, professionals from across the region are coming together to explore and solve complex problems and achieve the vision of the Eastern Tallgrass Prairie and Big Rivers LCC: Restoring and connecting wildlife with people on the rich soils of a functional working landscape.

None of this work is possible without the participation of the members, the Technical Advisory Groups, the TAG Coordinators and the staff. In true LCC fashion, the success of the effort directly correlates to the engagement of the team.

PROJECT HIGHLIGHTS

With more than 80 percent of the nation's population living in urban areas, connecting urban dwellers to natural communities is increasingly important. Therefore, the Eastern Tallgrass Prairie and Big Rivers LCC and the Upper Mississippi and Great Lakes LCC have jointly launched EPiC – Ecological Places in Cities – to foster biodiversity in large cities and small towns across the region.

The iconic monarch has captured the attention of the American public and may be an ideal fit to invite urban residents into conservation efforts. One of EPiC's first milestones is a project with the City of St. Louis mayor's Office of Sustainability to expand and evaluate the **Milkweeds for Monarchs initiative** that to date has established 319 monarch gardens, well over the goal of 250 gardens planted to commemorate the city's 250th anniversary.



THE URBAN MONARCH LANDSCAPE CONSERVATION DESIGN PROJECT PROVIDES PLANNING TOOLS, LANDSCAPE CONSERVATION PLANS, ON-THE-GROUND HABITAT DEVELOPMENT AND WORKSHOPS TO HELP COMMUNITIES DO THEIR PART FOR MONARCH CONSERVATION.



To further build on the monarch momentum, with funding from the U.S. Fish and Wildlife Service and multiple LCCs, experts at the Field Museum of Chicago are leading **A Monarch's View of the City** to develop an ecologically and socially relevant landscape design for urban monarch conservation, focused initially on key metropolitan areas along the migration corridor: Chicago, Kansas City, Kansas/Missouri, Minneapolis-St. Paul and Austin, Texas. The program provides planning tools, landscape conservation plans, on-the-ground habitat development and workshops to help

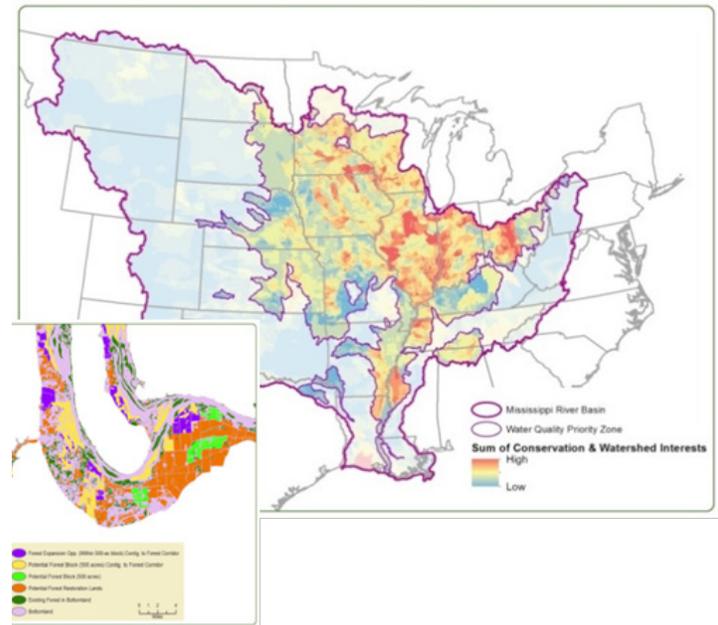
communities get started. By incorporating geographic, biological, and social science data, we will define objectives, metrics, stakeholders and best management practices to match each city and develop a monarch conservation plan unique to each city!

The LCC continued to support interagency science in the region, for example on the Maquoketa River in Green Island, Iowa, where a U.S. Army Corps of Engineers levee buyout supported by Iowa Natural Heritage, the Natural Resources Conservation Service, and the Iowa Department of Natural Resources led to the U.S. Geological Survey adopting the site for **continuous nutrient water quality monitoring, ground water monitoring, hydrodynamic modeling, and high resolution topographic mapping**. Their study documented floodplain ecosystem service potential as a site in their Large River Initiative where sediment settlement and the contained nutrients are studied. They also used samples to document denitrification and carbon sequestration potential. The wealth of data at the site attracted USACE Engineer Research and Development modelers who will use the resources at this site to upgrade nutrient and riparian vegetation models to an improved two-dimensional platform. The combined activity enhanced modeling capacity and documented nutrient function at an agricultural tributary delta that is representative of the entire Corn Belt region.

“ THE ETPBR LCC PROVIDES AN IMPORTANT FORUM FOR INTEGRATED WATER RESOURCE MANAGEMENT AT A SYSTEM SCALE. THE ENDURING RELATIONSHIPS DEVELOPED WITH THE FEDERAL, STATE AND NGO PARTNERS CONTRIBUTES SIGNIFICANTLY TO TRUSTING COLLABORATIVE EFFORTS NEEDED FOR THE CORPS OF ENGINEERS TO MEET ITS MISSIONS WITHIN THE GREATER UPPER MISSISSIPPI RIVER WATERSHED.

KEN BARR, U.S. ARMY CORPS OF ENGINEERS, ROCK ISLAND DISTRICT

Reducing nutrient loading from the agricultural lands of the Midwest and Mississippi Alluvial Valley may significantly address hypoxia, from local waters to the recovering resources of the Gulf of Mexico. Modifying the design and/or shifting the location of conservation practices could make program dollars go farther and appeal to more land managers by producing multi-sector benefits for wildlife, water quality and agricultural production. Based on the design and practices, the Conservation Fund was contracted to develop a prototype Precision Conservation Blueprint v1.0 GIS Targeting Tool for the **Mississippi River Basin/Gulf Hypoxia Initiative** to identify opportunity areas for conservation investment. We hosted a workshop in March 2016 to assemble researchers and technical program managers to review proposed conservation practices or strategies designed to achieve multi-sector objectives within five agricultural production systems: corn and soybeans, grazing lands, floodplain forest, and rice and cotton. The feedback gathered during this workshop is currently being digested by Gulf Hypoxia Initiative staff and the experts will again be convened to further refine and develop Conservation Practice Sheets based on that guidance.



Protection of existing habitat and creation of carefully sited restorations will begin to stem the loss of particularly vulnerable species including pollinators and grassland birds. Our Prairie Restoration Technical Advisory Group facilitated a workshop with an established team of scientists and managers in January 2016 to clarify reconstruction objectives, consider what products or projects will help meet our most important needs, and how to improve communication of **prairie restoration activities**.

“PRECISION CONSERVATION BLUEPRINT – MAKING EVERY DOLLAR COUNT FOR WILDLIFE, WATER QUALITY, ENERGY AND AGRICULTURE.

In September 2015, we helped organize and facilitate a three-day Floodplain Forest Workshop, convening 60 researchers and managers in Dubuque, Iowa. The agenda addressed landscape level considerations, factors to consider when writing management prescriptions, identifying specific research needs, and forming a work team to move forward. The LCC previously supported an online survey of 80 resource managers of floodplain conservation lands along the Upper and Middle Mississippi River and Lower Missouri River to evaluate management priority, management intensity, and available scientific information for management objectives and conservation targets. The recently released assessment provides guidance for developing relevant and accessible science products to **inform management of highly dynamic floodplain environments**.



“THE LCC NOT ONLY PROVIDES MESKWAKI NATION A VOICE IN CONSERVATION ISSUES AROUND THE REGION, BUT AN OPPORTUNITY TO COLLABORATE WITH OTHER AGENCIES AND GAIN KNOWLEDGE TO BRING BACK TO OUR OWN PROGRAMS. THESE PARTNERSHIPS HAVE AND WILL CONTINUE TO EVOLVE TOWARD MORE SUCCESSFUL AWARENESS OF CONSERVATION ISSUES AND RECOGNIZE CONSTRAINTS AND NEEDS OF ALL MEMBER ORGANIZATIONS FOR A BETTER PROGRESSION OF CONSERVATION TOOLS. I AM EXCITED TO BE PART OF THE ETPBR LCC STEERING COMMITTEE AND AGROECOLOGY CORE TEAM AND LOOK FORWARD TO WORKING WITH ALL OF THE ORGANIZATIONS INVOLVED.

JARRETT PFRIMMER, DIRECTOR, DEPARTMENT OF NATURAL RESOURCES
SAC AND FOX TRIBE OF MISSISSIPPI IN IOWA, MESKWAKI NATION



Knowing the value of communicating the efforts of our LCC and strengthening our network, we upgraded and relaunched TallgrassPrairieLCC.org in January 2016. To celebrate our collaborative contributions to landscape-scale conservation our new website is structured around people, teams and organizations – we have structured it around our partners and our collective efforts. We will continue to use this valuable tool to share the latest stories, events, resources and projects and illustrate the connections we forge with partners across the landscape.

“ THE LCCS ARE CRITICAL TO SITUATIONAL AWARENESS. STATE AND FEDERAL AGENCIES ARE ALL PRESUMED TO BE CONNECTED TO A SINGLE MIND. REALITY PALES, BUT LCC MEETINGS AND VENTURES BEST APPROXIMATE THAT INTEGRATIVE EFFORT FOR THE TOPICS WE COVER AND THE GEOGRAPHIES WE DISCUSS. I APPRECIATE THE LCCS FOR ASSISTING ME IN CONNECTING SIMILAR EFFORTS AND PARALLEL RESOURCES WITH OUR OBJECTIVES AND EXPERTISE. ULTIMATELY, THE LCC PROVIDES A VENUE FOR FOREST SERVICE TO REMAIN IN TUNE WITH BROADER HABITAT EFFORTS THAT CONNECT WITH OUR FOREST AND GRASSLAND CONSERVATION MISSION.

JEREMY PEICHEL, MS, MPP, WATERSHED FORESTRY SPECIALIST, FOREST SERVICE

AT THE LANDSCAPE LEVEL, NOTHING IN CONSERVATION CAN BE ACCOMPLISHED ALONE, AND EVERYTHING CAN BE ACCOMPLISHED BY WORKING TOGETHER.



Charlie Wooley, US Fish and Wildlife Service, ETPBR LCC Steering Committee Co-Chair

Our first steering committee meeting in May of 2012 and strategic planning retreat a few months later really set the stage for us to focus our energies on emerging challenges in our geography, to be able to look at conservation at the landscape level, and to be entrepreneurial in our approach to find opportunities where our partnership can bring new tools to the on-the-ground conservation managers.

That approach has put our ETPBR LCC partnership in a position to help solve some of the nation’s most complex landscape level conservation problems, such as Gulf hypoxia. We are coordinating efforts with six other LCCs to not only “fix the plumbing”, but find a balance where wildlife and aquatic habitats are woven into a productive farming landscape.

Our efforts impact entire landscapes like the Monarch flyway. With The Chicago Field Museum and an amazing group of partners, we have launched pilot projects and research efforts in Chicago, Minneapolis/St. Paul, Kansas City and Austin to develop planning tools and best management practices which can be adopted by other cities and towns across the flyway to make a difference for this iconic species and among the 80% of our nation’s population who live, work, and play in urban spaces.

Our extensive Technical Advisory Group members have contributed technical reviews, business plan concepts, community leadership, and supported projects and workshops on river and prairie topics that stand alone and fold into the hypoxia and monarch initiatives. We really appreciate their efforts.

At the landscape level, nothing in conservation can be accomplished alone, and everything can be accomplished by working together.



For more on the Eastern Tallgrass Prairie and Big Rivers LCC, including the latest news, upcoming events, project information, and resources visit www.TallgrassPrairieLCC.org.