Gulf Coast Prairie LCC

2016 Annual Report

The GCP LCC is a collaborative science support partnership working to deliver sustainable natural and cultural resource conservation in the Gulf Coast Prairie geography by sharing scientific knowledge, leveraging resources, and working toward common landscape goals.

Thoughts from the Steering Committee Chairman, Jim Giocomo, Oaks & Prairies Joint Venture

– When Matt Wagner retired, it was both challenging and yet exciting to embrace the opportunity to become your Chair. As an original Steering Committee member since 2011, I have been encouraged by many original members and new members alike. I hope to make this partnership relevant in ways that build on our past efforts. The GCP LCC has always focused on key landscape elements, such as the health of our coastal ecosystems and rivers. Knowing that rapid population growth in our landscape is altering groundwater quality and availability, water quality and quantity will continue to be at the top of our radar screen. But let's not forget, of course, our southern Great Plains and coastal grasslands, where losses due to development have impacted many acres and numerous species.

A recent New York Times article quoted research that describes significant losses in the Great Plains, which include our GCP LCC grasslands. The article states that "the Great Plains lost more grassland to agriculture in 2014 than the Brazilian Amazon lost to deforestation, and the continued expansion of cropland in the region is impacting birds, pollinators, and water, while releasing millions of tons of carbon dioxide into the atmosphere each year." This decline of grassland and prairie is not widely known or publicized, but it is something we in landscape conservation grasp, and we will be developing strategies to best conserve and sustain these vital resources. The article concludes by indirectly challenging that it should be "America's mission" to develop strategies to offset these losses of grasslands in our Great Plains. If it is true that more than 53 million acres of land in the Great Plains have been converted to cropland since 2009, with approximately 3.7 million acres lost in the past two years, it is no wonder our grassland birds, bees and butterflies are dwindling, and the iconic Monarch butterfly is in trouble. If we are down to half of our original Great Plains, **let us make conservation of our grasslands a primary focus in the coming years.**

How did we do in 2016? Last year, we said you would see new elements of our Operations Plan, building a solid foundation on these goals: (a) provide the science behind strategic conservation; (b) strengthen collaboration across the LCC; (c) foster communication and information exchange; and (d) ensure our governance structure meets our actions and matches our mission. For almost 18 months now, we have worked continuously on our Vision, Mission Goals, and Objectives. With many new Steering Committee faces, it was imperative that we commit "in total" to this dialogue. This hard work by each and every Steering member, and especially those "ad hoc" work groups, has helped hone a more collective conservation compass. Guided by our refined Operations Plan "governance" and Science Strategy, this collective vision provides a foundation for further development of landscape conservation design, and sets the framework for future conservation investments. Since 2011, we have supported the Southeast Conservation Adaptation Strategy, or SECAS. This year, our GCP LCC coarse filter "landscape blueprint" was foundational to the SECAS Blueprint. We intend to use it to define strategic areas for conservation delivery. Both SECAS and the Gulf Coast Vulnerability Assessment have been recognized as "break-through" collaborative strategies that will grow our conservation future – not just in the GCP LCC, but over a much larger and growing network of conservation partners.

Looking towards 2018 – I see us using our collectively developed tools, vision and collaboration to produce strategic conservation recommendations across the GCP. I see a more focused landscape conservation delivery, monitoring, and evaluation demand in order to succeed. Let's think grasslands. In the GCP LCC, private ownership is north of 95%. Adding strategic conservation as a desirable aspect of private lands management in our grassland ecosystems will take a focused effort in Human Dimensions Social Science. This cultural side of landscape conservation must and will be a priority in 2017. Early this year, we will discuss the details of making cultural resource conservation a platform of the GCP. As 2017 unfolds, we will refine how we engage the social-cultural component of our conservation cooperative.

--Jim Giocomo

Gulf Coast Prairie
Landscape Conservation Cooperative

PARTNERSHIPS


Toby Gray

Landscape Conservation Cooperatives succeed by the strength and commitment of the partners and partnership organizations of which they are made. In 2016, the Gulf Coast Prairie LCC held a joint Steering Committee meeting with the Gulf Coastal Plains & Ozarks LCC in conjunction with the Gulf of Mexico Alliance annual All Hands Meeting in Baton Rouge, LA.

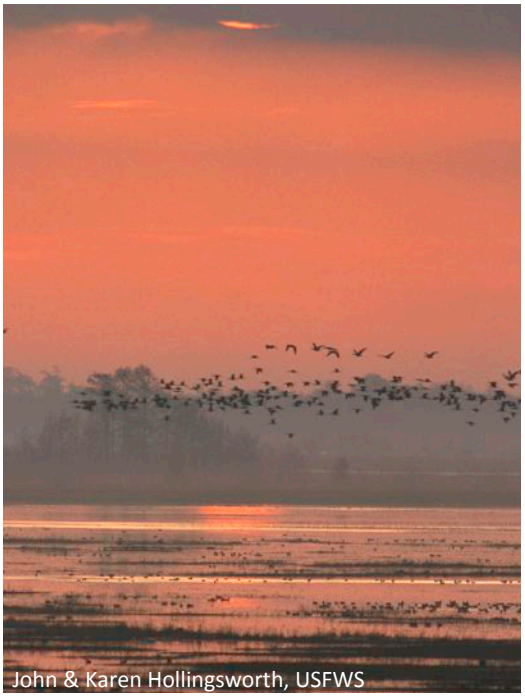
In addition, the GCP LCC continues to collaborate closely with the South Central Climate Science Center (CSC). In 2016, the GCP LCC shared communications staff to aid the CSC in development of a five-year communications strategy.

CONVENING & COLLABORATION

Collaboration across jurisdictions and partnerships is central to our mission of achieving a sustainable, resilient landscape of natural and cultural resources. The LCC initiated two major collaborations focused on critical ecosystems that span large areas in 2016.

The Red River initiative, begun in collaboration with the South Central Climate Science Center (SC CSC), seeks to lay out a vision for conservation of resources in the Red River watershed, from its headwaters to the Gulf of Mexico. The Red River also runs through the neighboring Gulf Coastal Plains & Ozarks LCC. The SC CSC is supporting social science research to identify key interests, representatives, and research needs within the region.

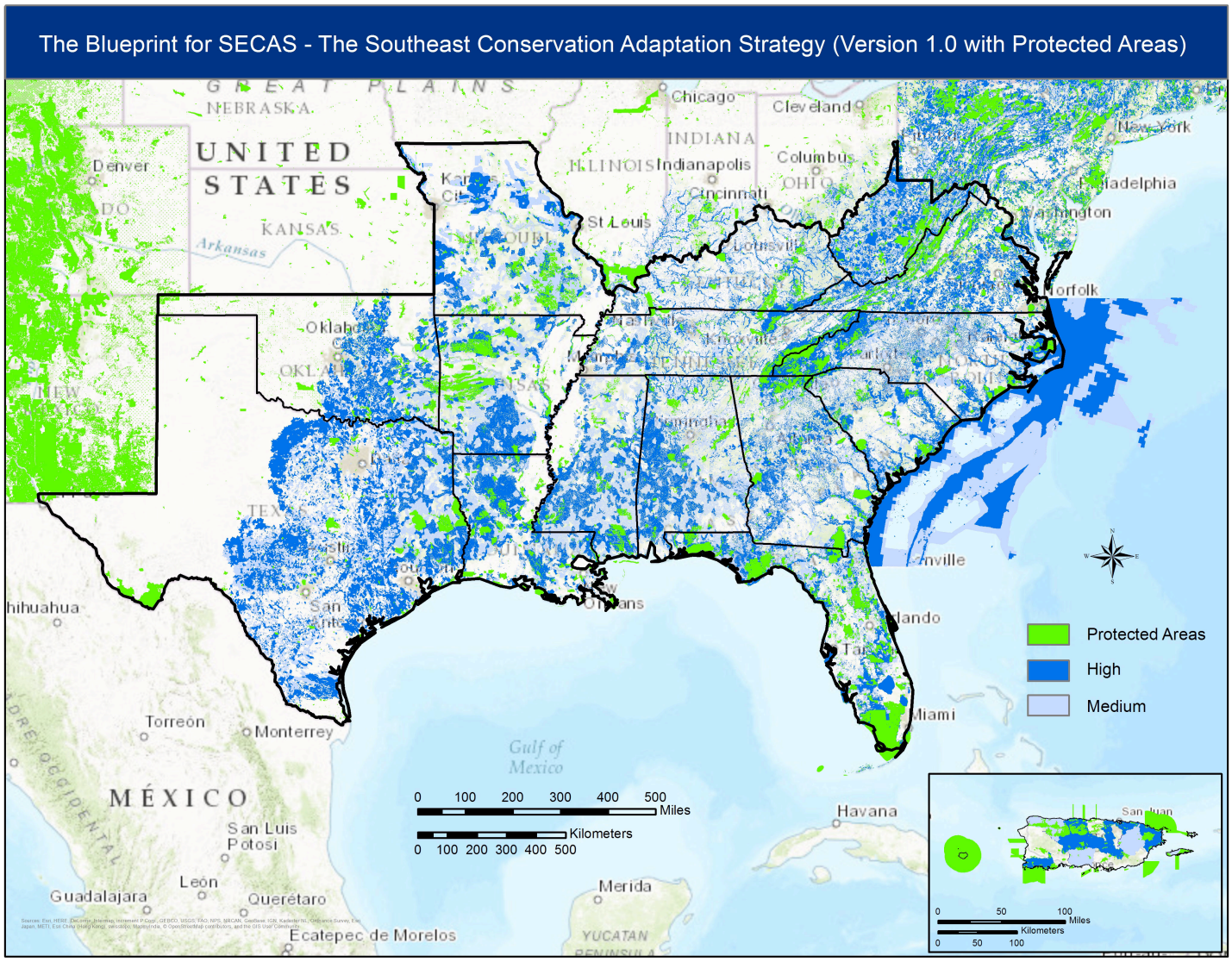

Matt Wagner


John & Karen Hollingsworth, USFWS

In a Chenier Plain Partners meeting held in August 2016, the GCP LCC hosted a diverse array of local, state, federal, and NGO partners already working in the Chenier Ecoregion of Texas and Louisiana. Their focus was how to improve conservation actions across multiple jurisdictions.
The Chenier Ecoregion extends approximately 200 miles from Vermillion Bay, LA westward nearly to Galveston, TX. It is comprised of gulf coastal prairies, floodplains, loess plains, low terraces, and the Chenier Plain marked by alternating ridges of prairie interspersed with marshes/lakes.

The meeting:

- Developed a common understanding of partner conservation objectives, priorities and constraints in the Chenier Ecoregion.
- Identified common vision, goals and potential strategies for enhanced regional or landscape scale partnership for conservation in the Chenier Plain, inclusive of the existing Chenier Plain Alliance and new partners.
- Outlined next steps which include the Gulf Coast Prairie LCC completing a conservation map (a gap analysis) within the Chenier Plain. Communication will be improved among partners to relay activities and success stories about the Chenier Plain. Interested partners are forming a Chenier Plain Caucus or science support group to help inform future conservation efforts in the Chenier.



SOUTHEAST CONSERVATION ADAPTATION STRATEGY SUMMIT

The year 2016 saw the culmination of the first round of planning in the Southeast Conservation Adaptation Strategy (SECAS), with the approval and adoption of the **SECAS Conservation Blueprint 1.0** by 15 federal and state agency directors at the SECAS Leadership Summit, held Oct. 17, 2016. The Gulf Coast Prairie Conservation Blueprint 1.0, along with Blueprints from five additional southeastern LCCs, was a critical component of this effort. The GCP Blueprint takes into account the effects of development and climate projected to the year 2060 to designate the top-ranked catchments with highest conservation potential for 11 of the 17 broadly defined habitat types identified in the **GCP Science Strategy**.


Roy Luck, CC2.0

LANDSCAPE CONSERVATION DESIGN

In 2016 the Gulf Coast Prairie LCC completed its Conservation Blueprint 1.0 landscape conservation design (LCD). We developed a first cut of conservation priorities for 11 of the 17 broadly defined habitat types identified in the **Science Strategy**. We used a "coarse filter" approach based on existing datasets and an agreed-upon ruleset for making decisions. For the "fine filter" LCD process, the Science Team designated a zone within the Colorado River watershed of Texas, extending from the Edwards Plateau to the Gulf Coast (at right).

SCIENCE DELIVERY HIGHLIGHTS 2016

In 2016, the GCP Science Team decided to begin advance planning for science needs in the form of a list of priority science topics to be updated every two years. The priority topics will guide the development of year-to-year research priorities. In 2016, two such funding opportunities were released: (1) A **Request for Statements of Interest on landscape conservation design** and (2) a request for Statements of Interest to advance Monarch Butterfly conservation in the GCP and Monarch Central Flyway.

4 Projects in progress

A focus on Guadalupe Bass, an economically and ecologically important endemic species in Texas, is clarifying this fish's requirements for instream flow, the water that remains in rivers. Research will also identify how to restore river-floodplain connectivity to benefit Alligator Gar, an important sport fish in the Trinity River of Texas. Both of these Texas-based projects will help guide river management decisions that seek to support these economically important sport fisheries, as well as many other forms of aquatic life.

The GCP LCC was a partner in two multi-LCC projects ongoing in 2016. The project to establish explicit biological objectives for Gulf of Mexico species and their habitats is supported by the four Gulf Coast LCCs, which span 6 Gulf of Mexico states. It seeks to develop explicit biological objectives for species in each of 16 planning units based on areas identified in the U.S. Fish and Wildlife Service's Vision for a Healthy Gulf of Mexico report. Species objectives are essential for both strategic conservation and defining metrics for success. The RESTORE Council approved the Dept. of Interior's Strategic Conservation Assessment of Gulf Coast Landscapes proposal as well. The four Gulf LCCs will help synthesize wildlife conservation planning across the Gulf and provide a strong foundation for identifying and addressing conservation priorities.

6 Projects completed

Four projects on focal species in the GCP Science Plan were completed in 2016:

Two projects provided a more detailed understanding of how grassland habitat fragmentation and loss and the impacts of habitat fragmentation over a 40-year period have affected Northern Bobwhite in Texas and Oklahoma. Both studies confirmed that habitat fragmentation -- caused by changes in agricultural land use, housing and mining development -- have contributed to this popular game bird's long-term decline. A followup evaluation of the 2012 Mottled Duck Decision Support Tool demonstrated the accuracy and effectiveness of this tool, which is now being used by LCC partners to guide habitat restoration in grasslands and wetlands along the Gulf Coast of Texas and Louisiana.

Another study compiled much needed information on current distributions, life history traits, ecology and conservation needs of Quadrula species. These mollusks are key indicator species for water quality in the region. This information will be integral to an upcoming species status assessment for endemic Texas mussels in the lower Colorado River watershed. The U.S. Fish and Wildlife Service conducts these assessments to determine long-term viability under conditions of rapid change.

4 Multi-LCC projects completed

The national project on integrating approaches to conservation design across LCCs issued its final report in 2016, which is being used to in guidance for LCC landscape conservation design, as recommended by the National Academy of Science.

An assessment of submersed aquatic vegetation (SAV) in the Gulf of Mexico was completed in December 2015. It is aimed at developing an understanding of environmental factors that cause variation in this type of vegetation. SAV, a critical component of highly productive coastal ecosystems, is greatly affected by sea level rise.

A project with the Southeast Aquatic Resources Partnership and the Gulf Coastal Plains & Ozarks LCC succeeded in refining aquatic landscape and species endpoints for much of the Southeast. These data will inform the focus of aquatic planning and research in the Southeast, which is a hotspot for aquatic diversity.


Tara Schmidt, CC2.0

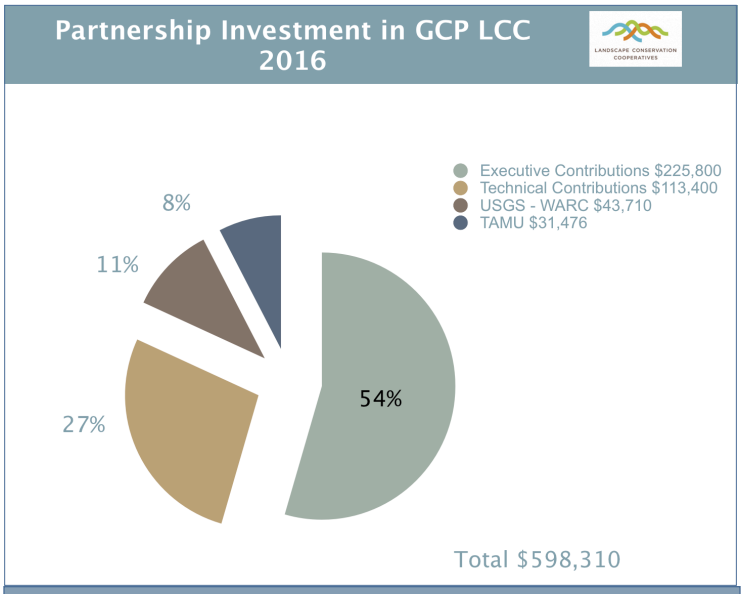
The Ecological Places in Cities (EPIC) project, led by the Eastern Tallgrass Prairie & Big Rivers LCC, worked in four pilot cities within the Monarch's Central Flyway, culminating in a workshop to rollout spatial planning tools, a monitoring protocol, and a "how to guide" for regional players. The guide and demonstration projects will assist more municipalities to create their own spatial plans to help conserve this pollinator species, which is highly popular with the public.

MONITORING

The GCP LCC is continuing to develop the Grassland Monitoring and Inventory Tool (GMIT) in collaboration with US Geological Survey, Texas Parks & Wildlife Dept., and Great Plains LCC. Refinements to the design are expected to facilitate expanded input and utilization of the tool by and for a growing number of conservation professionals.

COMMUNICATIONS

- Monthly newsletter continued.
- List growth of 23% to 264 subscribers.
- First Wednesday Webinar series continued, with a focus on GCP projects and partnerships.
- Recorded project webinar listing on GCP YouTube channel.



Estimated contributions of staff time from Steering Committee, Science Team, staff and other participating partners in 2016.

STAFFING CHANGES

- Heather Baldwin joined as Ecologist.
- Cynthia Edwards transitions back as Gulf Liaison, HD & SECAS Coordinator.

ABOUT LANDSCAPE CONSERVATION COOPERATIVES

The Gulf Coastal Prairie Landscape Conservation Cooperative (GCP LCC) is part of the Landscape Conservation Cooperative Network, which consists of 22 LCCs that cover the entire U.S. and its protectorates. LCCs are applied conservation science partnerships that provide scientific and technical support for conservation and promote collaboration in achieving shared conservation goals and sustainable natural resource management at landscape scales.

"LANDSCAPE CONSERVATION"

* preserving large, connected areas
* entire prairie, forest, mountain range, wetland, & river context
* regionally planned
* integrated and connected
* incorporating natural processes (floods, drought)
* wildlife habitats & human communities
* planning for change
* keeping future generations in mind

The Gulf Coast Prairie Region

The Gulf Coastal Prairie region covers about 120 million acres, including areas within five states in the south-central United States (Kansas, Louisiana, Mississippi, Oklahoma, and Texas) and portions of three states in northeastern Mexico (Coahuila, Nuevo Leon, and Tamaulipas).
The LCC focuses on habitats and species occurring in the following four ecoregions:

- Edwards Plateau
- Gulf Coastal Prairie
- Oaks & Prairies
- Tamaulipan Brushlands

GCP LCC Vision: A sustainable landscape of natural and cultural resources in the Gulf Coast Prairie geography that is resilient to the threats and stressors associated with climate and land use changes.

GCP LCC Mission: The GCP LCC is a collaborative science support partnership working to deliver sustainable natural and cultural resource conservation in the Gulf Coast Prairie geography by sharing scientific knowledge, leveraging resources, and working toward common landscape goals.

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