Our vision is 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.
A message from the Steering Committee Chairman, Matt Wagner, Texas Parks and Wildlife Department

The GCP has turned a corner – This is our 5th GCP LCC Annual Report. Entering year six, and after a great deal of review, reflection, and planning, we have adjusted our trajectory for the next 5 years. We are now positioned to connect nationally, regionally, and with each of our member organizations through an Ecologically Connected Network, as described in the Southeast Conservation Adaptation Strategy or SECAS.

In 2015 we re-evaluated our goals and developed a collective GCP Vision, emphasizing communication. Through the use of a revamped website and constant content development, Gregg Elliott and others provided regular information, news, and coordinated conservation dialogue. Our new monthly newsletter has been a huge success, driving readers to our new GCP website and the LCC Network website, and bringing consistency to the communication of LCC progress for all of our partners across this continent. LCC partnerships are about “finding value,” where collective energy through good communication makes us greater than the sum of individual parts; one of us cannot accomplish as much as all of us! We want to freely communicate and be transparent, as described in our new mission statement and seek simple ways to view budgets, contributions, and accomplishments.

GCP Science – Since 2011, our overall focus has been the Gulf Coast and watershed ecosystems, with important water quality and quantity issues, and the vast southern and coastal grassland ecosystems. The cultural component, as described in our Operations Plan, revolves around supporting the working lands that contain the vast majority of these important GCP landscape elements, to ensure sustainability for future generations. The GCP LCC has played an integral part in many Multi-LCC science projects. With our adaptive management process, using species and habitats to focus on our future landscape conservation efforts, you will see how the GCP science strategy, focal species, and associated habitats have taken time, but it has become our most critical and successful step.

GCP Leadership Change – 2015 saw a transition in leadership when I took on the role of Chair from Allison Shipp. I felt strong support and a responsibility to continue the success of the GCP LCC. Managing resources on a landscape scale will only be possible through strong partnerships at the federal, state, and local levels. Engaging private landowners is essential, and that is where our state and NGO partners will have a major role. In addition to economic incentives and policy benefits to land and water stewardship, there must be a shared vision for what we want the future to look like. The breakup of large family ranches into smaller parcels presents one of the greatest threats to wildlife conservation, along with ever increasing pressures from exotic and invasive plants and animals. Overlaid on top of it all is a highly variable and uncertain, but changing, climate. In Texas, and over much of the South, we suffered an intense and prolonged drought for nearly 5 years before the rains of 2015 brought much needed relief -- and widespread flooding! Adapting to these intense and unpredictable extremes will require new and innovative approaches to habitat conservation. All of this will require funding at a scale unforeseen by our predecessors, and yet we look with optimism for solutions because we recognize the economy and the environment are inextricably linked. Together, we can build a sustainable future for fish and wildlife and their habitats.

Gulf Coast Prairie Future for 2016 – This coming year, you will see new elements of our Operations Plan. We will continue our momentum through 2016, 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.

-- Matt Wagner
### Landscape Conservation Design & Research
- **1 coarse filter blueprint** completed (tallgrass prairie)
- **1 fine filter design** begun (Edwards Plateau to Gulf of Mexico corridor)
- **7 focal species research projects** awarded (alligator gar, bobwhite, guadalupe bass, mottled duck, oyster reefs, quadrula)
- **6 focal habitat and species research projects** completed

### Gulf Coast Vulnerability Assessment (GCVA)
- **12 partner organizations**, including 4 Gulf Coast LCCs
- **3 coordinators** spanning 39 months
- **59 contributing experts**
- **11 species** (Kemp’s ridley sea turtle most vulnerable)
- **4 habitats** (salt marsh most vulnerable)
- **inaugural recipient** of the Sam D. Hamilton Award for transformational science!

### ONE sustainable landscape of natural and cultural resources

### Communications & Staffing
- **monthly newsletters** initiated
- **214 new subscribers**
- **GCP LCC website** improvements
- **11 first Wednesday project webinars**
- **New science coordinator**
- **New shared position**: SECAS coordinator/Gulf liaison (shared)
- **Part-time Communications support**

### Beyond LCC Borders
**11 Multi-LCC Projects**
- **1 initiated**
- **6 completed**
- **4 ongoing**

**South Central Climate Science Center**
- **3 collaborative co-funded projects**

**SECAS Symposium**
- packed house of 90 - 120 people in audience throughout
- **7 LCCs represented** / **17 presentations**
- **significant positive response**
2015 CONSERVATION HIGHLIGHTS:
The broad regional effort called the Southeast Conservation Adaptation Strategy (a multi-LCC project) is progressing toward a pivotal leadership summit in fall 2016. The well-attended November 2015 SECAS Symposium highlighted how federal and state agencies and 6 Southeast LCCs are integrating science and leadership from across the region. Presentations from the symposium can be viewed in the SECAS group on Griffithgroups. GCP science projects are a critical component of this ongoing initiative.

7 projects awarded through competitive Request for Proposals

Two studies address basic knowledge gaps about the distribution of mussels and intertidal oyster reefs, which serve as indicators of aquatic health in fresh and salt water environments, respectively. Both mussels and oysters serve important nutrient cycling and filtration functions; additionally, intertidal oyster reefs are limited in extent but crucial as parental stock to the commercial oyster industry.

A focus on Guadalupe Bass, the state fish of Texas, will clarify this endemic species’ 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.

Two projects centered on the focal species Northern Bobwhite aim to provide a more detailed understanding of grassland habitat fragmentation and loss. A followup evaluation of the 2012 Mottled Duck Decision Support Tool will improve the accuracy and effectiveness of this tool.

5 GCP LCC-funded projects/online tools completed

The Grassland Decision Support Tool (DST), completed in 2015, is helping to focus the work of the Oklahoma Dept. of Wildlife Conservation on its Wildlife Management Areas. Seamless landcover data for Oklahoma ecological systems have been hailed by conservation partners. A Conservation Framework tool (completed in late 2014) provides Best Management Practices for landowners who want to conserve grassland-shrubland prairie habitat.

Improving the SLAMM tool for modeling sea level rise will help characterize the impacts of sea level rise on coastal marshes and the hundreds of species, as well a project to address data gaps on barrier island vulnerability.

Finally, studying the responses of bird species, such as the Altamira oriole and green jay, to farmland revegetation will help improve restoration taking place in Texas’ Lower Rio Grande Valley, one of the largest migratory bird stopovers in North America.

10 multi-LCC projects: 5 completed, 4 ongoing, and 1 initiated

These include 2 national projects on integrating approaches to conservation design across LCCs and establishing explicit biological objectives for Gulf of Mexico species and their habitats.

Two very large scale projects focused on modeling pintail population response to habitat changes and monitoring the long-term status of Interior Least Tern populations, a requirement for delisting this species.

The Ecological Places in Cities (EPIC) project will strategically design urban landscapes to benefit monarchs and other pollinators.

Several aquatic/Gulf of Mexico-focused projects include an assessment of submersed aquatic vegetation and a study funded by the South Central CSC to evaluate tidal wetland migration under alternative sea level rise and urbanization scenarios. A project with the Southeast Aquatic Resources Partnership is refining aquatic landscape and species endpoints.
AWARD WINNING GULF COAST VULNERABILITY ASSESSMENT

The Gulf Coast Vulnerability Assessment (GCVA) evaluated the effects of climate change, sea level rise, and urbanization on 4 Gulf Coast ecosystems and 11 associated species, highlighting the vulnerability of salt marsh habitats and Kemp’s Ridley sea turtles. The GCVA and its highly collaborative team of 12 organizations and >60 experts won the inaugural Sam D. Hamilton award for “transformational conservation science.”
Landscape Conservation Design is a bridge between biological planning and conservation delivery. The Gulf Coast Prairie LCC’s LCD is a two-pronged approach: coarse and fine filter.

**COARSE FILTER**
Depicts an aggregation of habitat data in light of projected expansion of development and sea level rise across the entire GCP geography. Tallgrass prairie completed; others in process.

**FINE FILTER**
Requires species population targets and habitat models that explain how habitat conditions will influence species populations. Far more data and time intensive, this approach will be developed first in the corridor from the Edwards Plateau to the Gulf of Mexico, encompassing the lower Colorado River watershed.

**COMMUNICATIONS**
- Website organization improved
- New monthly newsletter created
- List growth to 214 subscribers
- First Wednesday Webinar series

**STAFFING CHANGES**
(shown clockwise from upper left)
- Ben Kahler hired as Science Coordinator
- Cynthia Edwards transitioned to Gulf liaison/SECAS coordinator
- Gregg Elliott supports GCP LCC communications
- Aislinn Maestas serves as communications liaison to USFWS Southwest Region
PARTNERSHIPS

State Wildlife Action Plan updates:
Work ongoing through the GCP LCC, other LCCs, and the Climate Science Centers provided climate change scenarios to help Louisiana and Oklahoma address predicted impacts on species of greatest conservation need.

Multi-LCC summit in Texas:
Showcased linkages between Texas Parks & Wildlife Dept. and 4 LCCs in the state of Texas; discussed actionable recommendations for further integration.

RESTORE Council:
The Strategic Conservation Assessment Framework proposal to the Gulf RESTORE Council was approved.

Monarch Butterfly initiative:
In 2015, in response to precipitous declines on the Monarch butterfly’s wintering ground, the US Fish & Wildlife Service initiated Save the Monarch. LCC collaboration on a grassland inventory tool in support of the Oaks & Prairies Joint Ventures’ Grassland Restoration Incentive Program, is helping to guide implementation of grassland projects that will benefit birds, monarchs, and other pollinators.

Climate Science Center collaboration:
The GCP LCC participates annually in the South Central CSC stakeholders advisory committee meeting, as well as bimonthly calls with its 4 consortium universities.

2015 Projects funded or co-funded by Climate Science Centers:
- Submersed aquatic vegetation
- Tidal saline wetland migration
- Evaluating sea level rise modeling for the GOM
- A Handbook on using SLR modeling

Total: $786,260

“Skin in the game” . . .
staff time contributions from various Gulf Coast Prairie partner teams in 2015