

**Desert LCC Outreach Meeting**  
**Sul Ross State University**  
**Alpine, TX**  
**September 23<sup>rd</sup>, 2010**

For a complete list of meeting participants, please see Appendix 1.

Presentations from this meeting are available at <http://www.usbr.gov/WaterSMART/lcc.html>.

**Meeting Objectives**

1. Provide information on LCCs in general and specifically in the Desert LCC.
2. Determine agency and stakeholder interest in participating in Desert LCC and identify other potential partners.
3. Provide an overview of existing regional, state and local partnerships that link science and management and discuss how Desert LCC can build on and work with these partnerships.
4. Expand existing scoping committee (or other mechanism) to include other partners and to help guide future actions taken to organize and develop a charter for the LCC.
5. Initiate identification of landscape-scale research and science needs.

**Overview of LCCs (Avra Morgan, BOR)**

***Presentation***

- What is an LCC?
- Department Approach to LCCs
- Climate Science Centers
- LCC Partnerships and Potential Partners
- What LCCs are not
- What products can an LCC deliver
- Geographic scope of the Desert LCC
- Organizing the Desert LCC-Outreach, Scoping, and Formation of Steering Committee
- Desert LCC Scoping Committee and scoping activities
- LCC Key components and Structure
- Next steps

***Questions***

- Can you clarify “permanent” subcommittees?
  - The formation of subcommittees is up to the steering committee. They could be ad hoc or permanent based on the needs identified for the LCC and they will get fleshed out in the operational plan.
- How do the USFWS performance measures play into the formation of the LCCs? Are there different performance measures for each LCC?
  - This is still under discussion. The FWS performance measures will not apply to BOR because of different agency mandates. It is still a question if FWS has to comply with these for the Desert LCC. We plan to wait to further discuss the measures until we get more clarity on what will be required.
- What is the budget for BOR?
  - We have \$350K for 2010 and we are requesting \$1 million for 2011. BOR is committed to funding and will continue to request funding. USGS has provided funding for the Southern Rockies LCC for a position for 1 PhD student with Colorado State that would

have emphasis on fish habitat and large river systems (Colorado River) and one RGE scientist. USGS would like to fund these positions for the Desert LCC in 2011.

- Will the LCC be conducting science or stand as a data clearinghouse?
  - I think it will be a combo of both. There could be RFPs for specific science projects. It would also be a clearinghouse and a network to exchange information.
- Can you provide clarity on how the LCCs are providing funding for conservation projects?
  - One of the purposes of the LCCs is to fill the gap between on-the-ground conservation and science. We also would provide the vehicle for agencies to work on projects collaboratively and find ways for different agencies to bring funding to the table.
- If an organization within the LCC identified a research priority, would LCC scientists do the research?
  - It will depend on the situation and funding. We could possibly do an RFP for the research project and your particular project could compete for funding and you could do the research. If there happened to be USGS staff in the Desert LCC that fits the project that could work, too.

### **Overview of existing partnerships in the Chihuahuan Desert (5 minute presentations each)**

#### ***Big Bend Bi-National Conservation Cooperative (Mark Briggs)***

A diverse group of agencies/institutions working together on fresh water ecosystems-Rio Grande/Big Bend region and surrounding springs and grasslands. The Cooperative has a long standing working relationship with Mexico and is active in doing research, on the ground-monitoring, and restoration. Currently have a grant with NOAA that links climate data and scientists from Mexico and Texas. One deliverable of this grant is a climate change action plan where specific research priorities will be identified that could be linked into the LCC.

#### ***Rio Grande Joint Venture (Mary Gustafson)***

This JV is a bi-national joint venture to conserve avian communities. This JV has identified priority habitats within grasslands, riparian corridors and wetlands as well as identified focal and priority species.

#### ***Pine Canyon Watershed Climate Change Study (Kevin Urbanczyk)***

A collaborative effort to collect the same types of information across national parks including patterns in air and soil temperature, precipitation patterns, and understanding impacts of climate change.

#### ***Chihuahuan Desert Grasslands Regional Alliance (Jurgen Hoth)***

An alliance of organizations and partnerships that have been working over 10 years in the area. Work has included studying patterns of breeding and winter distribution in over 400 species of birds, and developing a common language among Mexico and the U.S. to address climate change.

#### ***TCEQ-Surface Water Quality Monitoring Program (Chuck Dvorsky)***

Partnerships working cooperatively together to do water quality monitoring and managing large amounts of data, particularly on the biological integrity in the Rio Grande. The group is interested in accessing/managing/sharing data in the area.

#### ***Group discussion on existing partnerships:***

- NPS Inventory and Monitoring Partnership (Chihuahuan desert) & Sonoran Desert and Mohave Desert network
- The Nature Conservancy
- TCQ, USGS, NPS Water Resources Group

- Rocky Mountain Research Station & Long Term Ecological Research (LTER) sites
- Texas Conservation and Recreation Forum
- Mid-Rio Grande endangered species collaborative program
- TransPecos Water and Land trust
- Chihuahuan Desert Restoration Institute
- World Wildlife Fund
- ProNatura
- Lincoln National Forest (cave inventory, monitoring)
- New Mexico State WAF
- Desert Fish Habitat Partnership
- Watershed Conservation Groups-Gila
- SW tribal fish mission-encompasses all NM and TX tribes
- San Juan recovery program-also has tribal component
- Rocky Mountain Bird Observatory
- Management of Pecos Pup Fish-involves many partners

***Group Discussion on who is missing today:***

- Mexican Partners-Corporate and Individuals
- State Wildlife Grants Programs
- Tribes
- New Mexico groups/New Mexico Department of Game and Fish
- Border Governors Association
- Texas Wildlife Association-Private Landowners
- Friends Groups
- Far west Texas water planning group
- Ground water management districts
- Soil and water local conservation districts
- Texas Outdoor Partners (all Texas hook and bullet groups)
- USDA
- NRCS (at meeting)
- Turner endangered species fund
- DOD (Center for Ecological Management on Military Lands)
- City of El Paso
- MRGCD
- EBID
- IBWC/CILA
- ARS-Ag research service
- NM Interstate Commission

**Potential approaches to development of LCCs (presentation by Aimee Roberson)**

***Presentation***

- Steering Committee will ultimately decide what the best structure is; need your input
- Great Plains LCC-Joint Venture management board actually transformed into the steering committee
- California LCC-segmented into Northern/Southern, using a facilitator
- Great Northern LCC-3 geographic eco-forums

- Gulf Coastal Plains and Ozarks LCC
- Gulf Coast Prairie LCC
- There are lots of options of how we can do this
- FWS performance measures

### ***Questions***

- Has there been any thought about breaking up the Desert LCC into other geographic areas?
  - Yes, we want feedback on this...certainly a plausible option.
- Did each of the LCCs develop the performance measures?
  - No, that was a top down list from FWS to convey expectations.
- Is the steering committee in charge of how the money for the LCC is allocated?
  - The steering committee would set priorities and define mechanisms for funding, what gets staff support, etc. We will need to discuss this further when we have more insight on FACA.
- Who will give direction to the LCC coordinator, the steering committee or agency supervisors?
  - I hope it would be a combo. Experience in the joint venture is the steering committee would set the priorities for the coordinators.

### **Group input on functions of the Desert LCC steering committee**

#### ***Functions***

- There will be a review/evaluation component for the steering committee.
- Steering committee should make sure the operations of the LCC are meeting the overall vision of the LCC.

#### ***Structure/Committees***

- Need geographic breakup because of the immense scale and different attributes to each desert.
- Ad hoc groups may need to be formed to address issues that affect all areas such as groundwater mining; I agree geography is important.
- Lines drawn between geographic areas will be difficult, too; consider the two rivers.
- LCC would need to maintain communication among geographic subcommittees.
- The subcommittees need to be structured so they do not overlap existing groups (like BBICG).
- Reps from each geographic area could be on the steering committee.
- Steering committee could be major decision makers and the subcommittees could have people with expertise in those areas.
- Communication should happen between the steering committee and the subcommittees in both directions.
- Steering committee could be more agency people (not reps from subcommittees).
- There should be a bi-national subcommittee.
- There could be a committee that looks at needs testing.
- There could be a science committee that is more discipline based.

#### ***Criteria for the Steering Committee***

- The ability to commit resources (funding, staff, connection to decision makers).
- Contribution to science (maybe a corollary to #1 on the handout regarding bringing resources).
- There are funded and non-funded NGO partnerships so need to consider that on steering committee representation.

- Should steering committees involve other non-federal entities that have funding (utilities, energy companies, private landowners consortium)?
- Private landowners (caution to not focus on this today, focus on the traditional people we know need to be on there and keep it smaller with the ability to add later).

#### *Size*

- One argument to keep it small is duplication on people's time from existing partnerships (burnout).
- Possible size limit so it does not get impossible to manage.

### **Gathering Science Needs for the LCC (presentation by Christina Vojta)**

#### *Presentation*

- Why identify science needs?
- Scope of science needs assessment
- Obtain science needs from stakeholders and collate
- Existing documents/topic breakout
  - Add rare plants to wildlife populations category
- Science and information priorities

#### *Identified Science Needs from Participants (Group Discussion):*

- A list of the threatened species that are greatest imperiled and what habitats are most important for biologists and other to focus their work on (Vulnerability Assessments).
  - This will be available through NatureServe especially climate vulnerability assessment for species and water sources such as rare springs
- The Chihuahuan Desert Eco-regional assessments by TNC
- How to use the smaller scale assessments that have been completed and how to roll these up and make these useful.
- The science coordinator role will have to work hard to make sure we are putting the money in the right place. Need to avoid spreading money out too broadly or we have will not have effects on the ground.
- Need to identify what is already out there so we don't reinvent the wheel/avoid duplication
- Connection to Mexico is critical.
- A Desert LCC shapefile that can then be overlaid with things so it is all in one place.
  - Advice for the shapefile: don't cut the map off right at the border of the LCC. We have had issues with this in the GBLCC because there are contributing factors to the LCC beyond the border.

#### *Identified science needs by subject area (written on flip charts in back of the room)*

\*Means it was highlighted by another person

#### **WATER**

- Quantifying environmental flow needs in the context of a changing climate
- How do vegetation management programs (tire, brush removal, etc.) impact the hydrologic cycle?
- Interaction of groundwater and desert spring ecosystems
- Quality of water for human and wildlife use in relation to oil and gas exploration and urban sprawl

- Fine scale coverage of distribution of permanent and ephemeral surface waters
- Comprehensive coverages of dams/diversions including functional/operational attributes
- Spring occurrence and discharge database
- Water harvesting from surface or groundwater sources for municipal or energy needs and potential effects on ecosystem resiliency

## **ECOSYSTEMS**

- Changes in plant community composition\*
- Risks to “sky island” mountain species and microhabitats
- Altered fire regimes
- Land use tenure/fragmentation
- In Texas, changing demographics linking ecological systems with demographics spatial analysis

## **PLANT and WILDLIFE POPULATIONS**

- Identification of habitat and species vulnerable to climate change
- Changes in species assemblages by change in niche or trophic level
- Changes in food webs
- Changes in geographic distribution
- Changes in migratory status/times
- High quality, geo-referenced and verified species occurrence records
- Seed collection of rare species for conservation and common species for restoration.  
Establishment of Chihuahuan desert seed bank for multi agency use

## **WILDLIFE HABITAT**

- Effects of climate change on desert grasslands and associated species including spatial expanse, contiguity, disease, and predation(pronghorn, birds, Kit fox)
- Riparian gallery woodlands, intactness, contiguity, linkage, corridor function-neo-tropical migrant and nesting birds
- Spring/Cienegas “endemism” and ecological /aquifer integrity

## **HUMAN ENVIRONMENT**

- Assessing and monitoring how climate change will affect frequency of flood events that deleteriously affect riverside human communities
- Are conservation programs tied to well defined and locally accepted desired future conditions?

## **THREATS**

- Climate change effects on tributary sediment input into the Rio Grande
- Development of restoration species and availability
- Golden Algae: effects in aquatic species distribution and cause/management strategies for rivers\*
- Future energy needs and effects on habitat connectivity as well as soil and water quality
- Border security activities (fences, walls)
- Large scale land use (ex. oil/gas, cattle, water demands) as influenced by government policy and influence on wildlife/habitat

## **DECISION SUPPORT TOOLS**

- Assessing readiness to use and incorporate climate information into decision making (management, monitoring, research priorities)
- Increase ability to access and share scientific information (accessible database?)\*

## **MONITORING**

- Is restoration, rehabilitation, preservation progressing or achieved? How are “we” doing, target health, viability, durability, at scale?\*

## **NEEDS FOR INFRASTRUCTURE/TRAINING**

- Formation of an informative sharing structure
- The LCC needs large area mapping capabilities and the capability to assemble and disseminate large quantities of data\*
- Better ways to share/access data\*

## **SOILS**

- Erosion: redistribution of soils from uplands and lowlands
- Soil formation processes with detritus nutrients vs. erosion

## **Key take-away points from the meeting (provided by participants)**

- There is concern that Mexico is not in this conservation up front about the formation of the LCC.
- It is critical that we determine the science needs.
- Plants are an essential piece of the LCC.
- It is critical that we explore how to dovetail with existing partnerships and efforts so we don't duplicate efforts.
- The scale of the science needs to fit the scale the manager is working at so they can use it. Science needs to be applied and management focused.
- Sometimes the local concern is not what gets support at the higher level-so need to watch that local information is conveyed to the steering committee.
- It would be helpful to have lessons learned from previous collaboration efforts that have been done in the past on why they were or were not successful.
- A function of the steering committee could be to ensure sustainability and longevity of the LCC
- We need to avoid losing momentum by finding a way to be a cohesive group and keep people in the loop.

## **Wrap up (Avra Morgan, BOR)**

- Liked comment on keeping people in the loop. This will be challenging because it is a big area and we need to think this through.
- Need for coordination and dissemination of information is as big as funding.
- Bi-national nature-we shouldn't be waiting.
- Who is the boss of the coordinators-good question.
- Representation of technical people and commit resources people.

## **Next Steps**

- Email the notes from the meeting
- Presentations on website
- Scoping committee is going to use the information to help develop the LCC structure and operational plan proposal.

## **Appendix 1: Meeting participants – Desert LCC Scoping Alpine, TX, September, 2010**

Fred Armstrong (National Park Service (NPS))  
Patti Barney (USDA-NRCS)  
Megan Bean (Texas Parks and Wildlife Department (TPWD))  
Jeff Bennett (National Park Service (NPS))  
Scott Boruff (TPWD)  
Mark Briggs (World Wildlife Fund (WWF))  
Brenner Brown (Texas Water Development Board)  
Gary Bryant (Texas Agri Life Extension Service)  
James Cain (New Mexico Cooperative Fish and Wildlife Research Unit)  
Amanda Cleghorn (World Wildlife Fund (WWF))  
Stacy Duckett (Sul Ross State University)  
Chuck Dvorsky (TCEQ)  
Jeanne Dye (USBR)  
Michael Eason (Lady Bird Johnson Wildflower Center)  
Jonah Evans (TPWD)  
Sabrina Flores (Lincoln National Forest)  
Paulette Ford (USDA Forest Service, Rocky Mountain Research Station)  
Greg Garetz (National Park Service (NPS))  
Gary Garrett (Texas Parks and Wildlife Department (TPWD))  
Mary Gustafson (RGJV)  
Wade Harrell (FWS)  
Dean Hendrickson (University of Texas - Austin)  
Leslie Hopper (Sul Ross State University)  
Jürgen Hoth (World Wildlife Fund (WWF))  
John Karges (The Nature Conservancy - Texas Chapter)  
Mark Lockwood (Texas Parks and Wildlife Department (TPWD))  
Mike Montagne (FWS)  
Patricia Moody Harveson (Sul Ross State University)  
Avra Morgan (USBR)  
John Morlock (NPS - Fort Davis)  
Gary Mowad (FWS)  
Jeannie Munoz (TPWD)  
Wally Murphy (U.S. Fish and Wildlife Service (FWS))  
George Ozuna (USGS Texas Water Science Center)  
Yvette Paroz (Bureau of Reclamation)  
Rosemary Pendleton (USDA Forest Service, Rocky Mountain Research Station)  
Pete Diaz (FWS)  
Duane Pool (Rocky Mountain Bird Observatory (RMBO))  
Jeff Raasch (Texas Parks and Wildlife Department (TPWD))  
Jason Remshardt (USFWS, New Mexico Fish and Wildlife Conservation Office)  
Aimee Roberson (FWS)  
Joe Saenz (U.S. Fish and Wildlife Service (FWS))

Jeff Sanchez (Bitter Lake National Wildlife Refuge)  
Ken Saunders (Texas Parks and Wildlife Department (TPWD))  
Joe Sorptmal (NPS-BBNP)  
Billy Tarrant (TPWD)  
Dustin Taylor (Bitter Lake National Wildlife Refuge)  
Kevin Urbanczyk (Sul Ross State University)  
Christina Vojta (U.S. Fish and Wildlife Service)

Facilitator: Julie Shapiro (The Keystone Center)  
Recorder: Kim Caringer (U.S. Institute for Environmental Conflict Resolution)