

Strategic Plan: 2021-2025

Great Plains Cooperative Ecosystem Studies Unit

Introduction

The Great Plains Cooperative Ecosystem Studies Unit (GP CESU), one of 17 regional CESUs (see below figure) in the United States, is a network of 12 federal agencies and 24 non-federal partners, including one non-government organization (NGO). The CESU network acts to facilitate relatively rapid funding agreements between participating federal agency partners and scientists, students and other professionals in both academic and nonprofit institutions.



The GP CESU engages scientists, resource managers and conservation professionals to address problems and issues throughout the Great Plains region. Projects funded through the network involve individuals from across the spectrum of cultural and resource scientists and professionals with expertise in the biological, cultural, engineering, physical and social sciences. The University of Nebraska-Lincoln (UNL) has served as the host university of the GP CESU since its establishment in October 2000, and in January 2020the CESU network renewed our role as host through 2025. To date the GP CESU office has been housed in the School of Natural Resources (SNR) and is staffed by Dr. Paul Hanson, the Director of the Great Plains CESU and a faculty member in the School of Natural Resources, as well as part time Administrative Coordinator Brittany Grove. Since 2015 Dr. Tanya Shenk has served as our National Park Service (NPS) Research Coordinator.

Analysis/Assessment

External environments: The Great Plains region is unique in that the amount of public land ownership is relatively low compared to our peer CESU regions. In fact, within the GP CESU the area of public lands administrated by federal agencies is often less than 5% of each member state. Therefore, it is important to tailor our strategic goals and outlooks to the unique setting of the Great Plains and ensure our efforts and accomplishments remain relative to the opportunities available in this region. At present many of the larger universities that fall within the footprint of the Great Plains region, and most of the land grant institutions, are partners. However, we believe we can effectively expand the number of partner universities and NGOs in the GP CESU over the coming years. This will include engaging with smaller academic institutions in the region. We will also aim to add partners from institutions that fall outside the Great Plains region, as many researchers from

other locales engage in research endeavors in the agriculturally productive landscapes of the Great Plains. Lastly but certainly not least, we expect to engage with the region's many tribal colleges to explore their interests in joining the GP CESU.

Federal Agencies

US Army Corps of Engineers
US Bureau of Indian Affairs
US Bureau of Land Management
US Department of Defense
US Farm Service Agency

US Fish and Wildlife Service US Forest Service

US Geological Survey National Oceanic and Atmospheric Administration

National Park Service Natural Resources Conservation Service

Western Area Power Administration

Academic Partners

Black Hills State University
Colorado State University
Colorado State University
Emporia State University
Language Haliversity

Kansas State University Langston University

New Mexico Highlands University North Dakota State University

Oklahoma State University

South Dakota School of Mines and Technology
South Dakota State University

Southwestern Oklahoma State University

Texas A&M University Texas Tech University

University of Minnesota
University of Nebraska-Lincoln
Univ. of Nebraska Medical Center
University of North Dakota

University of Oklahoma

University of South Dakota

University of South Dakota

University of Wisconsin-Extension University of Wyoming

Non-Governmental Organization (NGO) Partners

Winona University

Western Association of Fish & Wildlife Agencies

Internal environment: Given the fluctuating amounts of external support funding that is provided to the program annually, the management of the GP CESU has been somewhat challenging over the past 20 years. These external funds are used to support our part-time office assistant, as well as expenses related to telecommunications, web services and data fees. During the period of the 2010-2015 agreement, operating funds for the GP CESU from the initial member fees for federal partners had largely disappeared, because no schedule for new support dollars was in place from the National CESU Network. Since 2015funding from the federal partners was somewhat more reliable, but still these funds fluctuated annually. Thankfully, the Integrated Regions 3, 4 and 5 Office (legacy Midwest Region) of the NPS has financially supported our efforts by providing critical supplemental base funding to support our basic operations over the past 10 years.

The operation of the GP CESU continues to be in part supported by federal funding streams from our federal partners and the supplemental funding from the NPS. The remainder of our funding stems from an agreement with UNL's Institute of Natural Resources (IANR) that was facilitated by former GP CESU Director Dr. Larkin Powell and the Director of SNR, Dr. John Carroll. Since 2014, IANR has provided a \$4,000/yr administrative stipend for the GP CESU Director, \$10,000/year to

hire an adjunct faculty member to teach one of the GP CESU Director's courses, and \$15,000/year to support an office assistant for the GP CESU. The combined funding from our federal partners and the IANR has allowed us to continue our management of the GP CESU office.

The GP CESU has marked several notable accomplishments over the past 5 years. Four new non-federal partners were added to our ranks over this time period: Southwestern Oklahoma State University (2020), Colorado State-Pueblo (2019), University of Wisconsin-Extension (2017), and Western Association of Fish and Wildlife Agencies (WAFWA)(2017). Further, we've added an annual graduate student award that shines a spotlight on the efforts of our students in their research projects that were funded through the GP CESU.

Strategy Formulation

Decisions: The GP CESU has a few decisions to make. Decisions largely involve how the Director and NPS Research Coordinator allocate their time and energy to specific tasks. The School of Natural Resources decides every 5 years whether to contribute faculty time and office space needed to serve as the home department to the GP CESU. We, in conjunction with our stakeholders, decide the capacity in which we hold our annual shareholders meeting. Finally, UNL has opted to continue as host university since the creation of the GP CESU in 2000.

Vision: Effective stewardship of cultural and natural resources in the Great Plains region.

Mission: The GP CESU supports partnerships to provide scientific research, technical assistance and education on the natural and cultural resources within the context of a predominantly agricultural landscape in the Great Plains region.

Critical Issues within the Great Plains

- Climate change impacts and mitigation
- Invasive species management
- Cultural and natural resource management
- Land use management in an agriculturally productive landscape
- Water resource management

National CESU Network Objectives:

- Provide research, technical assistance and education to federal land management, environmental and research agencies and their potential partners.
- Develop a program of research, technical assistance and education that involves the biological, physical, social, and cultural sciences needed to address resources issues and interdisciplinary problem-solving at multiple scales and in an ecosystem context at the local, regional, and national level.
- Place special emphasis on the working collaboration among federal agencies, nonprofits and universities and their related partner institutions.

Strategic Goals for 2021-2025

Our Strategic Plan is based on analysis and assessment of external and internal environments that control and define possible actions, and our vision and mission within the context of the Objectives

of the CESU system. Our strategy includes the following goals to effectively improve the GP CESU during the next five years:

- (1) **Explore ways to improve the effectiveness of our annual GP CESU Partners and Stakeholders Meeting.** In 2020 we held a virtual meeting, and that model seemed to be effective in engaging our partners. Future meetings will likely be held virtually, but when possible we will seek opportunities to couple our meeting with another local meeting that attracts members of our federal partners and our stakeholders.
- (2) We aim to pursue adding additional federal, academic and NGO partners to the GP CESU. One specific goal is to engage with tribal colleges in the Great Plains region to showcase the advantages of participating in and joining the GP CESU. At present we do not have a tribal college as a member. Also recruit academic institutions that fall outside of the Great Plains region.
- (3) **Improve the methods by which we interact with our partners and other stakeholders.** This will include re-designing the GP CESU website as well as re-envisioning the way in which we engage with our stakeholders via our social media offerings, specifically Facebook and Twitter. Specifically, we aim to find better ways to highlight the research efforts that are being conducted with GP CESU funding, and especially those projects involving student activities.
- (4) **Better engage with members of stakeholders in both academic institutions and NGOs.** Improving our communication with our stakeholders is expected to increase the effectiveness of our operation and our ability to identify researchers for advertised projects. This will include improving our engagement with local researchers in the area and those in the Nebraska University system.