

**NAUs CEFNS Colorado Plateau CESU Strategic Plan**

**COLORADO PLATEAU COOPERATIVE ECOSYSTEM  
STUDIES UNIT**

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**STRATEGIC PLAN: 2024-2028**

January 2024



To ensure a logical approach to a new strategic plan and tracking for future self assessments and annual internal reviews, our strategic plan mirrors the section required in the self-assessment.

### **Category A: Federal Responsibilities**

#### ***Did each federal agency in the CESU...***

1. Provide opportunities for coordinated, collaborative scientific and scholarly activities (i.e., research, technical assistance, and education) that inform stewardship of, and education about, public trust heritage resources in alignment with CESU, agency, and partner mission goals, programmatic objectives, and authorities? *Provide details, including reference to agency-support (or lack thereof) and activities over the current five-year term (e.g., number of projects; types of projects; management issues, topics, or subject matter areas).*

*To improve reporting and tracking, NAU aims to conduct planning communications to all partners at minimum 3 times per year. Communications will aim to ensure current contacts, to gather project activity, and to foster methods to expand opportunities. This may include connecting faculty to proposals available or adding additional partners, etc.*

2. Provide funds for basic support and salary for CESU host university (or other nonfederal partner institution) faculty/personnel, as appropriate? How have federal partners provided support to the host university over the current five-year term (both financial and in-kind) specifically to support CESU operations? *Provide details regarding support (e.g., support by agency, fiscal year, instrument/mechanism) and associated expenditures.*

*Northern Arizona University (NAU) has hired an Associate Dean for Research and Inclusive Opportunities. Dr. Diana Elder will start February 12<sup>th</sup>, 2024. She will serve as our new CPCESU Director as an in-kind contribution from the CEFNS College Office. We intend to leverage her networking to federal partners to expand our engagement and establish the connections we lost when Dr. Todd Chaudry departed NPS and NAU. If the CESU's expand the support beyond the current \$20,388, we plan to hire a coordinator (CPCESU Research Coordinator or Internship Coordinator) to plan conferences and meetings for our partners as well as expanding the internships we offer students with our partners as part of our mission to ensure graduates are career ready.*

3. Make available federal personnel to serve on the CESU Federal Managers Committee? Did all federal technical representatives actively participate in CESU Federal Managers Committee activities, CESU partner meetings, and other CESU activities (e.g., communication, planning, reporting)? *Provide details, including reference to consistent agency participation (or lack thereof) over the current five- year term (identified by agency, as appropriate).*

*Individual turnover across partner agencies can be challenging in gathering requested information. However, we are planning a more regular time frame of connection so we will hopefully maintain consistent contact with our partners.*

4. Comply with CESU Network, host university, and nonfederal partner institution rules, regulations, and policies (e.g., professional conduct; health and safety; use of services and facilities; use of animals, recombinant DNA, infectious agents or radioactive substances) and ensure its employees follow the Code of Ethics for U.S. Government Employees? *Provide details, including examples of best practices or areas of concern (identified by*

agency, as appropriate).

*To further ensure our partners and associated employees, within reason, are aware of and following best practice related to regulations, ethics, and policies, Jamie Baxter work closely with Diana Elder in the contractual arrangements with our CPCEU partners. Jamie is the colleges Assistant Director of Operations.*

5. Did federal agency employees actively participate in the activities of the host university and nonfederal partner institutions, including serving on graduate student committees or teaching courses? *Provide details, including examples of courses or other service activities.*

*The college has recently hired Chase Kurbat, Career Development Coordinator. We plan to have her work collaboratively with Jamie Baxter and Diana Elder in inviting seminar and guest speakers from our partners to NAU to share their professional experiences. At the moment these invitations are being referred to as 'Career Hacks and Snacks with CEFNS'. The last Biennial Conferences of Science & Management on the Colorado Plateau & Southwest Region took place in September of 2022. Upon completion of this self-assessment, we will initiate parts of this strategic plan by engaging and inviting partners to the 2024 conference.*

6. Take responsibility for their respective agency's role in administering the CEU agreement, transferring funds, and supervision of agency employees? *Provide details, including examples of best practices or areas of concern (identified by agency, as appropriate).*

*As we meet the prior objectives of our strategic plan, the understanding of rolls and expectations will become clearer. The college aims to engage in discussion and understanding of the funding mechanism to hire a CEU coordinator and fund the Biennial Conference NAU has historically hosted.*

7. Provide administrative assistance, as appropriate, necessary to execute the CEU agreement and subsequent amendments or modifications (e.g., timely processing, signatures)? *Provide details, including reference to consistent and/or effective assistance (or lack thereof) over the current five- year term (identified by agency, as appropriate).*

*During the prior 5 years, the School of Forestry hosted the CPCEU. In this time, the School of Forestry had three Executive Director changes with an untimely and painful loss of Yeonsu Kim. We also all navigated through Covid. We are now moving the CPCEU to the college to remove the burden off taxed units and provide broader administrative support. The CPCEU offers opportunities broader than the School of Forestry and from a college level we hope to leverage more engagement across the college and institution. We aim to use this shift in alignment to work with partners in an administrative capacity.*

8. **Federal Agency Response Only:** What percentage of projects were conducted successfully (e.g., project tasks completed, products/outputs accepted by the sponsoring agency)? What percentage of projects were unsuccessful (e.g., project tasks incomplete, products/outputs not accepted by the sponsoring agency)? *Provide details (e.g., what factors influenced/contributed to project success or failure)?*

## Category B: Host University Responsibilities

### *Did the host university...*

1. Allow and encourage its faculty to engage in participating federal agency sponsored research, technical assistance and education activities related to the CESU objectives? *Provide details, including description of faculty engagement and two highlighted/example projects.*

*We are aiming to expand faculty engagement and grant submissions and activity. This will include more internship opportunities for our students and career ready transitions to national partners.*

2. Provide basic administrative and clerical support over the current five-year term (i.e., in support of CESU operations)? *Provide details (e.g., nature and level of support).*
  - a. How much did it cost the host institution to support the CESU over the current five-year term? *Provide details (e.g., CESU-specific costs, Director and/or staff time, % FTE, travel, facilities, administrative services, equipment, supplies, communications, printing, web hosting).*

*The CPCESU had major leadership transitions. In 2019 the School of Forestry had several clerical staff that the CPCESU Director, Dr. Jim Allen, could assign to complete required task. In 2020 as NAU took steps to survive the financial impact of Covid, we non-renewed employees responsible for this type work assignment and lost institutional knowledge. When Jim stepped down from being the Executive Director for the School of Forestry, Dr. Yeonsu Kim took over and also assumed the role of CPCESU Director. As she wrapped her head around this and started to plan, she was unfortunately lost to an accident. Again, NAU lost institutional knowledge. The third CPCESU Director during this review period was Dr. Dave Auty who similarly to Yeonsu, was short the clerical support staff from 2019 and needed to focus on being the Executive Director of the School of Forestry. MS. Sanoma Boynton was hired to assist but as she was learning, she also accepted a full-time position and moved away from her role at NAU. Moving the CPCESU to the CEFNS Deans office will provide long range planning and support. It will also enable us to consistently track expenses. This will be important since we aim to hire a person to serve as a research coordinator and also host the Biennial Conference.*

- b. Where is the CESU Director's office officially stationed within the host institution (e.g., Office of the President, School of Natural Resources, Department of Forest Resources)? *Provide details (e.g., location relative to other departments, schools, greater organization), as appropriate.*

*To increase college and university engagement, we are moving the director to the CEFNS Deans office. Our new Associate Dean of Research and Inclusive Opportunities will serve as the CPCESU Coordinator.*

3. Provide access for CESU federal agency personnel (e.g., CESU Research Coordinator) to campus facilities, including library, laboratories, and computer facilities? *Provide details and examples.*

*NAU as the CPCESU host will continue to provide access as requested by our partners.*

4. Provide suitable office space, furniture and laboratory space, utilities, computer network access and basic telephone service for CESU federal agency personnel (e.g., CESU Research Coordinator) to be located at the Host University? *Provide details (e.g.,*

*challenges, successful approaches, examples).*

*Our new Director, Dr. Diana Elder will have all access to NAU and CEFNS Facilities afforded to faculty and staff in the dean's office.*

5. Offer educational and training opportunities to participating federal agency employees, as appropriate? *Provide details (e.g., number of trainings, number of people, course dates, course descriptions).*

*As we expand our routine communication with partners and invite those that are interested in speaking to 'Career Hacks and Snacks with CEFNS', and other events, we will also inform partners of these opportunities. We will also invite them to the Biennial Conference of Science & Management on the Colorado Plateau & Southwest Region hosted by NAU.*

6. Coordinate activities, as appropriate, with the CESU federal, tribal, and nonfederal partners and develop administrative policies for such coordination? *Provide details.*
  - a. Was a CESU Managers Committee maintained and convened, at least annually? *Please provide details (e.g., meeting dates, meeting agendas, number/affiliation of participants, meeting minutes).*

*We will establish communications with the managers and aim to maintain a current contact list. Our first anticipated meeting will be at the 17<sup>th</sup> Biennial Conference of Science & Management on the Colorado Plateau & Southwest Region. In between those meetings we will establish an early fall meeting (likely digitally using MS Teams or Zoom for logistical concerns and financial considerations).*

- b. Were periodic meetings of the CESU partners convened, at least annually, for the purpose of collaboration and coordination of CESU activities? *Provide details (e.g., meeting dates, meeting agendas, level of participation, affiliation of participants, meeting minutes).*

*We will establish a method to ensure we meet with partners at a minimum annually. Leadership transitions and Covid impacted our annual tracking.*

- c. What efforts were made to communicate each tribal and nonfederal partner institution's strengths and expertise to the federal partners (e.g., listing investigators on the CESU website, expertise database, meetings)? *Provide details (e.g., challenges, successful approaches).*

*We aim to revamp the current CPCEU website (<https://in.nau.edu/cpesu/>) to ensure the most current relevant information is available. We will also share this website with partners and reach out to partners in the launch of the revisions and then inform them when an important update is made.*

- d. How were federal funding announcements and/or other opportunities communicated to partners across the CESU? *Provide details (e.g., challenges, successful approaches).*

*We will continue to send out announcements received from federal partners to the CPCEU listserv and post on the CPCEU website. Will also review access and management of the listserv and attempt to maintain current contacts.*

### **Category C: Participation of all Partners**

1. What efforts did the host university, tribal, nonfederal, and federal partners undertake to engage students in projects and other activities of the CESU?

*Provide details (e.g., challenges, best practices, statistics for graduate and undergraduate student involvement, example projects).*

*We will expand our notices to students about CPCEU opportunities. We would like to expand the PLIP to a point over the next 5 years that we average at minimum 20 interns placed per year.*

2. Did all partners actively participate in CESU activities (e.g., meetings, phone calls, signing amendments, strategic planning, reporting)? *Provide details (e.g., if not, why not? participation statistics, challenges to participation, successful approaches, best practices).*

*We will take steps to place meetings on calendars early enough to allow for participant planning. We will also communicate reminders and emphasize the importance of participation to meet our mission.*

3. What percentage of partners received funding through the CESU over the current five-year term? *Provide details (e.g., partner funding statistics, notable barriers, successful approaches).*

*There was a decrease in funding opportunities between the 2019 reporting and 2024 reporting. Part may be attributed to Covid but it not clear. With the realignment of the CPCEU to the Deans office with increased dedicated administrative support will aim to increase the number of total awards during the next reporting period.*

4. What efforts were made to encourage and broaden participation in the CESU by all partners (e.g., HBCUs, tribal colleges, small academic institutions, state and local government agencies)? *Provide details (e.g., participation statistics, challenges to participation, successful and/or novel approaches).*

*The loss of D. Chaudry was significant and could contribute to decreased activities. CEFNS will establish similar practice of visits to partners and national parks from Diana Elder and/or Chase Kurbat.*

5. What is the date of the most current version of the CESU's strategic plan? How well do the activities of the CESU reflect the priorities and objectives outlined in the plan? *Provide details (e.g., challenges, best practices, example projects).*

*The attached CPCEU strategic plan (appendix 5) is dated January 2024 and is designed to cover the five-year period from 2024 through 2028. It was reviewed and approved in the CEFNS office. It will be re-examined yearly as well as serving as a road map for progress and objectives. It will be shared and open to feedback from partners at the 17th Biennial Conference of Science and Management on the Colorado Plateau and Southwest Region meeting.*

6. Did the participating federal agencies, host university, tribal, and nonfederal partners develop and follow annual work plans to guide the activities of the CESU? *Provide details (e.g., challenges, successful approaches, example projects).*

*The host institution has reviewed the CPCEU workplan and devised the attached strategic plan (appendix 5) which includes organizing the CPCEU in the college office. This work plans will be presented to the partners and serve as a basis for discussion about what the host institution could do to serve its partners more effectively and how partners can work with the host university.*

7. Have partners successfully obtained the tribal, federal, state, or local government permits and/or permissions from private landowners necessary to execute projects under the CESU agreement over the current five-year term? *Provide details (e.g., challenges, successful approaches, examples).*

*NAU intended to take an active role in expanding tribal, state, local government, and private landowner opportunities through active outreach and communication. Throughout this process we will ensure open communication related to permits and permissions.*

8. What instances exist where projects, programs, or partners have derived benefit as a result of the established CESU relationship, independent of federal awards administered through the CESU (i.e., where simply being a partner in the CESU aided furtherance of other efforts; without/outside direct funding through a CESU project award)? *Provide a brief description of any such examples.*

*Between Dr. Elder and Chase Kurbat we will put in place a process to track student internships available through partners associated with the CPCEU as well as those that find employment with a partner agency. We will include an effort to track students benefiting from research opportunities at the undergraduate and graduate levels.*

## Appendix 6. Colorado Plateau CESU Structure

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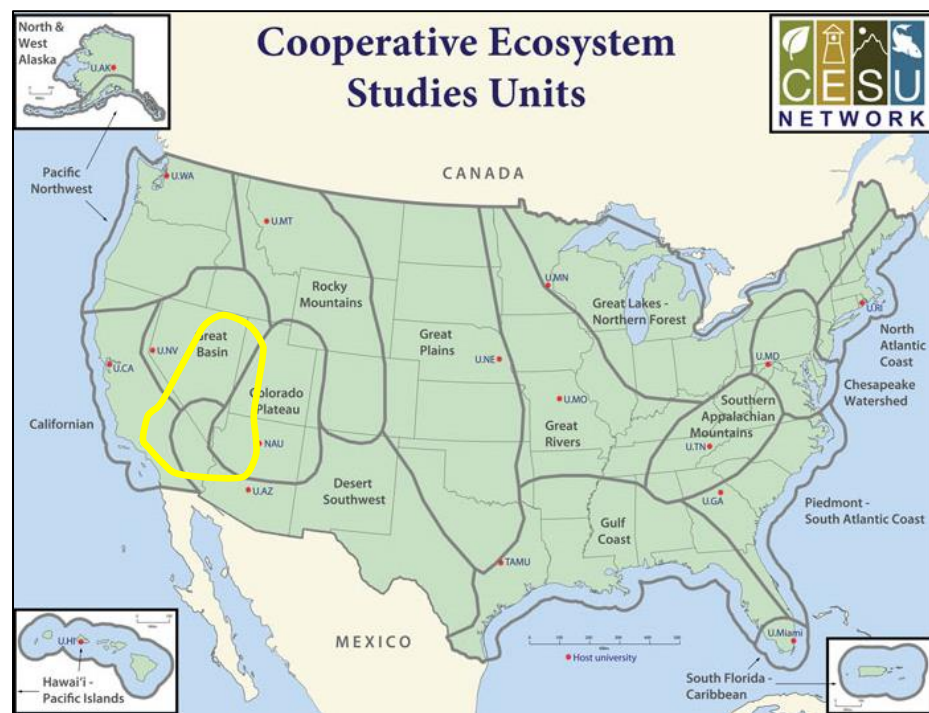
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## Introduction: The CESU National Network and the Colorado Plateau

Cooperative Ecosystem Studies Units (CESUs) are partnerships among federal agencies, academic institutions, tribes, and non-governmental not-for-profit organizations. Seventeen CESUs have been established across the U.S., each focusing service on a single, albeit loosely defined, bioregion. The goal of the CESUs is to create innovative opportunities for research, education, and technical assistance in support of the management and stewardship of natural and cultural resources on federal lands. CESU projects range across many disciplines and may be focused on ecological, cultural, educational or social issues.

The **Colorado Plateau Cooperative Ecosystem Studies Unit (CPCESU)**, outlined in yellow in the figure below, encompasses a region extending into parts of seven states: Arizona, Colorado, Idaho, New Mexico, Nevada, Utah, and Wyoming. It is hosted by Northern Arizona University in Flagstaff, Arizona.



The CPCESU has facilitated the matching of federal partner science and information needs with principal investigators at the appropriate academic institutions, non-government, or tribal organizations. It has also focused on key natural and cultural resource issues on the Colorado Plateau such as drought, large

carnivores in the urban/wilderness interface, cultural heritage, archaeological resources, and riparian restoration. The CPCESU has been a key partner in the Biennial Conference of Research on the Colorado Plateau and has sponsored other symposia, workshops, and conferences. The CPCESU adapts to changes in priority issues on the Colorado Plateau and uses the CPCESU structure to foster effective communication and collaboration among partners and beyond.

### **The CPCESU Structure**

The CPCESU was established as one of the four pilot CESUs in 1999. It began with five federal partners and thirteen original non-federal partners, including the Navajo Nation. The CPCESU was most recently approved for five more years of operation in 2019.

Representatives of member agencies and institutions serve on the CPCESU Executive Committee, which meets annually to discuss the Strategic Plan and Annual Work Plan, to identify key issues affecting federal land management, explore ways to expand student involvement in CPCESU activities, and to address key operational issues. Federal agency representatives make up the CPCESU Manager's Committee, which may occasionally meet separately, mainly to discuss operational issues, such as the five-year evaluations.

## **Current CPCE SU Partners**

### **Federal Agencies (10)**

Bureau of Indian Affairs (BIA)  
Bureau of Land Management (BLM)  
Bureau of Reclamation (USBR)  
Department of Defense (DOD)  
National Park Service (NPS)  
USDA Natural Resource  
Conservation  
Service (NRCS)  
U.S. Forest Service (USFS)  
U.S. Army Corps of Engineers-Civil  
Works (USACE)  
U.S. Fish and Wildlife Service  
(USFWS)  
U.S. Geological Survey (USGS)

### **Tribes (1)**

Navajo Nation

Dixie State University  
Fort Lewis College  
New Mexico State University  
New Mexico Tech  
Northern Arizona University  
Oregon State University  
Prescott College  
Southern Utah University  
University of Arizona  
University of Texas at San Antonio  
University of Utah  
University of Cincinnati  
University of Nevada, Reno  
University of New Mexico  
University of Pennsylvania  
Utah State University  
Utah Valley University  
Weber State University

### **Non-Governmental Organizations (8)**

The Arboretum at Flagstaff  
Archaeology Southwest  
Conservation Science Partners  
Crow Canyon Archaeological Center  
Desert Research Institute  
The Institute for Bird Populations  
Museum of Northern Arizona  
Bird Conservancy of the Rockies  
(formerly Rocky Mountain Bird  
Observatory)

### **Academic Institutions (22)**

Arizona State University  
Colorado Mesa University  
Colorado State University  
Diné College

## **CPCESU Mission Statement**

The CPCESU creates opportunities for research, education, and technical assistance to support stewardship of natural and cultural resources by federal agencies on the Colorado Plateau and beyond. We ensure that the expertise of our non-federal partners is made available to assist federal resource managers in accomplishing their agency missions. The federal partners allocate funding to a wide variety of projects and to non-federal partners in support of their research, education, and outreach missions.

Five broad goals are identified below, along with objectives and action items that will help us to achieve each goal over the next five years.

### **1. Improve communication among all partners**

- Maintain, update and enhance the CPCESU website; *look for ways to make the website a more valuable and frequently used resource for our partners*
- Maintain an up-to-date Listserv of all partner representatives and partner administrative contacts, *and use it more frequently to communicate with partners*
- Convene an annual meeting (in-person or via phone) of the CPCESU partner representatives; *have a well-conceived agenda for each meeting to maximize its effectiveness*
- Play a lead role in planning and convening the Colorado Plateau Biennial Research Conference in odd years; *ensure that CPCESU projects are featured, ideally including a CPCESU-themed session*

### **2. Strive for excellence and broad engagement in delivery of research, technical assistance, and education products to the federal agency partners**

- Ensure that agency needs are matched as effectively as possible with the appropriate expertise among the non-federal partners; *implement a web-accessible expertise database*
- Work with technical representatives to ensure timely reporting on projects; *showcase one project per year on the CPCESU website to provide a more detailed example of research*
- Work with technical representatives to ensure that federal partners are obtaining good quality results from their projects
- Encourage federal partners to support a mix of research, technical assistance and education projects

- Encourage federal partners to pursue a balance of natural, cultural, social, and integrated projects
- Strive for active participation of all partners in projects; *consider developing a policy for the removal of inactive and unresponsive partners*
- Encourage multiple partner collaborations; *clarify to partners how this can be achieved*

### **3. Increase tribal and minority institution, faculty, and student involvement in projects**

- Increase the linkages between minority-serving institutions and federal partners; *host institution staff will make site visits to help facilitate these linkages and report on these visits during annual meetings*
- Increase the awareness of CPCESU-related opportunities among minority faculty, scientists and staff at other non-federal partner organizations; *technical representatives will have the primary responsibility for this within their respective organizations*
- Encourage principal investigators to provide learning and earning opportunities for a diversity of students; *technical representatives will have the primary responsibility for this within their respective organizations*

### **4. Facilitate opportunities for student research, education and internships**

- Encourage federal partners and principal investigators to build opportunities for students into their projects
- Highlight student participation on the CPCESU website and via other means, including facilitating student participation in the Biennial Conferences

### **5. Maintain an effective and efficient organization**

- Maintain up-to-date list of partners' technical and administrative representatives
- Ensure that national guidelines for CESU management and that best practices recommended by the national office are followed
- With Executive Committee guidance, create and implement annual work plans
- Promote timely reporting of projects by all partners
- Respond promptly to inquiries regarding CPCESU membership; ensure that applications for membership are reviewed in a timely and thorough manner
- Consider developing a policy for the removal of inactive and unresponsive partners

## **Key Issues for the CPCESU**

Although many projects arise based on short-term needs and opportunities, a number of key issues, needs and opportunities have been identified that might help guide the CPCESU's partners over the longer term, including:

- Ecological and economic sustainability
- Water resources management
- Fire management
- Habitat restoration
- Threatened and endangered plant and animal species management
- Invasive species management
- Climate change effects on natural and cultural resources
- Sustainable energy development
- Tribal natural and cultural resource issues
- Educational and internship opportunities
- Archaeological resource protection and preservation
- Nexus of social sciences and resource management
- Support of the American Disabilities Act

### **Monitoring of the Strategic Plan**

The goals and objectives outlined in this plan will be reviewed by the partners periodically (no less than every other year) to assess progress and continuing relevance. Also the list of key issues will be reviewed on the same schedule, with the goal of identifying emerging issues or possible new directions that may be driven by changing federal agency priorities or budgets.

An adaptive management approach will be taken, which strives to be data-driven and may result in changes to the goals, objectives and/or key issues. All partners will be notified of any updates to the strategic plan and revised plans will be posted to the CPCEUS website.

## **Appendix 7. Colorado Plateau CESU Annual Work Plan**

### **Colorado Plateau CESU: Work Plan – Fiscal Years 2024 and 2025**

1. Conduct partners' meeting at Biennial Conference on Colorado Plateau (September, 2024).
2. Conduct at least two additional partners' meetings, most likely as conference calls.
3. Review current strategic plan and revise as needed.
4. Increase number of contacts with partners via listserv, website, and personal communications.
5. Maintain CPCEU website; add new photos, project spotlights, and other features.
6. Process any new member applications received in a timely fashion.
7. Review CPCEU materials (e.g., brochure, poster) and update as needed.
8. Develop CPCEU PowerPoint presentation, post on website for possible use by technical representatives.
9. Conduct site visits, especially to partners who have not been active participants recently.
10. Work with partners to ensure timely reporting on their projects.
11. Implement best practices for CESU administration as provided by the National CESU Network Office.
12. Participate in National CESU Networks meeting.