

FY23 Salazar Center Request for Proposals: Urban Climate Resilience in Denver

CLOSING DATE: AUGUST 5, 2022, AT 5:00 PM (MOUNTAIN TIME)

Background and Purpose

The Salazar Center for North American Conservation (the Center) is based out of Colorado State University's Office of Engagement and Extension. The Center was founded in 2017 by former Secretary of the Interior and current Ambassador to Mexico Ken Salazar. The mission of the Center is to accelerate the pace and scale of equitable, innovative, and durable solutions for nature and all people by connecting diverse leaders, communities, and resources across the North American continent. We know that healthy natural systems support climate adaptation and resilience, protect biodiversity, and support long-term human health. Our intersectional approach builds bridges that connect academic research, community practice, and policy development.

In 2020, the Salazar Center announced a new intergovernmental agreement with the City and County of Denver to advance Denver Parks and Recreation's efforts in climate resilience, habitat, and equitable access to green space. One goal of this partnership is to leverage climate-related expertise at CSU to create actionable research that supports the city's climate resilience management needs and decision-making, and in 2021, the Center received funding to launch a pilot Request for Proposal program for this research effort.

For the pilot year of this program, the Center is partnering with Denver Parks and Recreation (DPR) staff. Equitable climate change mitigation, adaptation, and resilience is an integral strategy for DPR's planning. Core strategic planning efforts that inform DPR's climate work include the [Game Plan for a Healthy City](#), its [Resiliency Program](#), and its [2019 Landscape Typology Manual](#).

Priority Research Themes

The Center and DPR staff worked collaboratively to develop research themes to be address by the RFP, including urban landscape/habitat resilience in the face of projected climate scenarios for Denver, urban tree canopy research, soil carbon sequestration capacity in Denver Parks areas, and native pollinator habitat needs. In alignment with the Center and Denver's programmatic priorities, proposals should also address how the research will support climate change solutions that are equitable for all of Denver's communities.

Project work must be located in the City and County of Denver. Proposals can address one or more sub-themes from each thematic area. Teams that are interdisciplinary and cross-sector in nature, and proposals that include a spatial component and/or utilize GIS data, are encouraged.



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Theme 1. Climate Impacts to Landscapes: Provide actionable research to support DPR efforts to implement climate mitigation and adaptation efforts in its managed areas (urban parks and open spaces, Denver Mountain Parks, and Denver’s urban forests). Using existing climate projections for the region, propose a research project for one or more of the following themes:

- a. How will projected climate scenarios for temperature and water change Denver’s existing landscape types, and how does this impact DPR’s current landscape assessment approach (for example, see DPR’s [Landscape Typology](#))?
- b. What are the co-benefits (ecological, social, equity, and/or economic) gained by converting DPR lands to more climate resilient ones? What spatial scale and distribution offers greatest climate resilience cost benefits for ecosystems, communities, and/or economy?
- c. What is the role that soils in DPR-managed lands can play in carbon sequestration and carbon mitigation/capture?
- d. How can the benefits of climate-resilient landscapes/green spaces be more equitably distributed to Denver communities? Should certain landscape types be prioritized to deliver more benefits to underserved communities?

Theme 2. Native Pollinators and Climate Change: Pollinators play an important ecological role in urban areas, but pollinator species have declined significantly over the last decade due to loss of foraging habitat, pesticides, lack of biodiversity, and climate change. Increasing the number and variety of native pollinators is a key focus area for DPR’s resiliency efforts. Develop research/tools/spatial models or GIS data/baseline monitoring to support one or more of the following:

- a. What is the optimal habitat spacing and size for implementing green infrastructure/habitat conversions that will support native pollinator species?
- b. How does habitat fragmentation impact pollinators (foraging ability, resting, reproduction, fly patterns, etc.)?
- c. Can native pollinator habitat restoration be optimized to also improve other social co-benefits such as equitable access to climate resilient landscapes/green space?

Theme 3. Urban Tree Canopy and Climate Change: Expanding tree canopy cover is a common tactic for improving urban climate resilience. How can DPR expand its urban tree canopy to help improve climate resilience? Provide proposals that develop actionable research outputs/tools/GIS models for one or more of themes:

- a. How can DPR better identify and prioritize where to expand tree cover in right of ways to maximize net benefits for climate resilience?
- b. Denver’s Office of Green Infrastructure has estimated that 10% tree cover within right of ways is sufficient to reduce urban heat impacts. What level of other co-benefits would be expected (e.g., stormwater, carbon, biodiversity, property value, etc.) for the city with different levels of tree canopy expansion in DPR right of ways? Can those co-benefits be optimized to increase equitable access to climate mitigation benefits?
- c. Given current projections for future water availability (20-30 year horizon), how much water will be needed to maintain, expand, and ensure the survival of tree canopy in this same time frame?



Funds Available

This pilot round of funding from the Center is supported by a regional philanthropic grant and does not include state or federal funds. The program will make up to \$150,000 available and award one to two research teams. Project budgets must not exceed \$150,000. No cost extensions are allowed.

Eligible Budget Items

- Salary, including student salaries and summer salary (not in excess of 12-month salary) for researchers
- Submitted budgets must include salary fringe
- Supplies (<\$5,000 per item)
- Printing
- Travel/mileage

Proposal Submission

Proposals are to be submitted electronically and are to be received no later than **5:00 PM (MT) on August 5, 2022**. All proposals must be submitted via the [online application form](#).

Proposal Review Process

Research funds will be awarded through a competitive review and ranking process guided by the Selection Committee for Urban Climate Research (Selection Committee), comprising staff from the Salazar Center and DPR, as well as CSU experts.

The general criteria used for proposal evaluation include: (1) scientific merit; (2) responsiveness to RFP; (3) qualifications of investigators; (4) impact of the research on, and relevance to, City of Denver Parks and Recreation climate management needs; (5) Consideration of equity in the proposal; and (6) budget and timeline feasibility.

Applicant Eligibility

Any researcher affiliated with CSU may apply as a principal investigator (PI), whether they are pre- or post-tenure, affiliates, or staff with any of the relevant centers, institutes, departments, extension offices, or other campus entities. While non-affiliates may not serve as PI, non-PI members of the research team may come from partner entities external to CSU.

All PIs are required to work with their departmental finance personnel prior to submitting their proposal to the Center by the August 5, 2022, deadline. The proposal must be reviewed and approved the PI's home unit.

Expected Project Timeline

- Applicant pre-proposal webinar: July 18, 2022
- Proposal submission: August 5th, 2022
- Anticipated Award Notification: August 31, 2022
- Anticipated Award Contract Approval: anticipated mid-September 2022 (note: funds may not be



expended on work completed prior to award approval and signing)

- Team kick-off meeting: mid-October 2022 (*note: kick-off meeting may also include development of a team communications plan*)
- Interim report: six months post award approval
- Project completion and final report: December 15, 2023

Proposals must be submitted in full via the [online application portal](#).

A full proposal will include:

1. **Title:** Concise but descriptive.
2. **Project Team:** Provide the name, academic rank, department, CSU unit, university phone number, and email address of:
 - a. Principal Investigator name(s)
 - b. Other research team members name(s) and affiliation, if external to CSU
3. **Describe your team** and why it is the best group to solve the problem. (*limit 1750 characters*)
4. **Project Theme:** Identify which of the themes and sub-themes the proposal addresses.
5. **Keywords:** Provide three keywords of your choice, descriptive of the work.
6. **Abstract:** Provide a brief description of the problem, methods, objectives, and expected outcomes of the proposal. (*limit 2000 characters*)
7. **Statement of climate problem:** Include an explanation of the need for the project and how the research addresses the problem. (*limit 2250 characters*)
8. **Describe the nature, scope, and objectives of the project**, including a timeline of activities. (*limit 2250 characters*)
9. **Statement of the results or benefits:** Specify the type of information that is to be gained and how it could be applied to, and benefit, DPR's climate change management needs. (*limit 2250 characters*)
10. **Methods, procedures, sites/location, and output:** Provide enough information to permit evaluation of the technical adequacy of the approach to satisfy the objectives. Include a brief description of anticipated outputs and deliverables. (*limit 1000 characters*)
11. **Equity and Inclusion:** Describe how your research proposal addresses and supports equitable climate solutions. (*limit 2250 characters*)
12. **Budget:** Provide a brief preliminary budget, [using the template provided](#).
13. **Budget Justification:** Breakdown and justify expenses, [using the template provided](#), not to exceed one page.
14. **Investigator Qualifications:** Include resume(s) of the principal investigator(s). No resume shall exceed two pages or list more than 15 publications.
15. **Department Accounting Contact Information:** Provide name, phone number, and email.
16. **Department Head Contact Information:** Provide name, phone number, and email.



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Deliverables

Funded projects will be required to submit a draft report in September 2023 and final report and any other project deliverables by December 15, 2023 addressing the description of the problem, research objectives, methodology, principal findings, and project accomplishments including training provided, publications, and impact. The PI will be required to submit any datasets (GIS or otherwise) to DPR upon the completion of the research period.

Principal Investigators will also work with the Center and DPR to develop a communications plan, and may be asked to contribute to the development of materials such as press releases, social media, and blog posts. PIs may be asked to provide oral briefings to the Center and DPR. PIs will notify and submit publications, awards, and other impacts of the projects that occur after the reporting period to the Center.

More information on these deliverables will be provided to the awarded team(s).

Financial Policy

The PI and the PI's department or administrative unit are ultimately responsible for the funded accounts. If the budget is over expended or expenditures were improperly charged, the PI and their department or college are responsible for providing funds for the unauthorized spending. The PI's department is responsible for all administration of funds after award and for the disbursement of funds to team members. Funding for tuition is not allowed. Funds can rollover from one fiscal year (FY23) to the next (FY24).

Questions

Interested applicants are encouraged to review [this FAQ](#) before applying. The Salazar Center will also host [an optional informational webinar July 18](#). Additional questions may be directed to Jennifer Kovecses: jen.kovecses@colostate.edu.



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