

2024 Jefferson County Open Space Small Research Grants

Jefferson County Open Space (JCOS) is pleased to offer Small Research Grant support to qualified individuals or groups to conduct applied studies on JCOS lands in 2024. The goal of this program is to fund research that will inform management of natural, cultural, and recreational resources on JCOS park lands.

JCOS has budgeted \$40,000 for small grants in 2024, with awards typically in the \$10,000 to \$15,000 range, although smaller awards will be considered. All research must be completed within the 2024 calendar year unless multi-year work is approved by JCOS. Multi-year projects may receive funding for up to two years. Researchers may propose interagency projects to JCOS, Boulder County Parks & Open Space (BCPOS), City of Boulder Open Space & Mountain Parks (OSMP), or other front range Open Space agencies.

Priority will be given to applications that address topics identified in this solicitation (below). Applicants may, however, propose an alternative topic if it relates directly to natural resource management or visitor experience. All projects or portions of multi-agency projects funded by JCOS must be conducted on JCOS property. Final reports must be submitted using JCOS report formatting by 5:30 p.m., Monday, December 9, 2024.

Applicants are encouraged to discuss the eligibility of their project with JCOS staff prior to submitting a proposal. Please contact Julie Liggett, JCOS Grants and Special Projects Coordinator, at jliggett@jeffco.us, or 303.271.5924, and you will be connected to the appropriate JCOS staff with whom to discuss your project.

Proposals are due by 5:30 p.m., Tuesday, January 16, 2024.

Following are application details for the JCOS Small Research Grants Program including important dates, proposal requirements, and a list of priority research topics.

We look forward to receiving your proposals.

Sincerely,

Jefferson County Open Space

JEFFERSON COUNTY OPEN SPACE SMALL RESEARCH GRANTS PROGRAM

Jefferson County Open Space (JCOS) seeks to fund scientific investigations, inventories, and monitoring projects that will inform the management of JCOS lands. Important deadlines for the 2024 Small Research Grant Cycle are listed below.

| Date | Component/Task |
|-------------------|--|
| October 30, 2023 | 2024 Call for Proposals announced |
| December 18, 2023 | Last day to discuss project eligibility |
| January 16, 2024 | Proposals due |
| February 29, 2024 | Award announcements |
| August 29, 2024 | Mid project check-in with assigned staff advisor |
| October 31, 2024 | Final report drafts due |
| November 18, 2024 | Review comments returned to researcher |
| December 9, 2024 | Final report due |

Guidelines and Instructions for Researchers:

- Grant proposals must be submitted in PDF format and emailed to OSSRgrants@jeffco.us with "Small Research Grants Program Proposal" in the subject line. If your proposal is found to be missing information, you will have 24 hours to correct it after being notified.
- Award winners: You will not be able to begin your project immediately after award notification; Purchase Order processing may take 2-3 months. Please keep this in mind when developing your project timeline. Notices to Proceed will be issued between April and May 2024.
- Draft reports are expected to be complete, clean, and in JCOS report format. Draft reports needing more than minor revisions will be returned for corrections before a review is completed.
- Awards will range from \$10,000 to \$15,000, although smaller awards may be considered. Multi-year projects may receive funding for two years.
- Researchers may propose interagency projects involving Boulder County Parks & Open Space (BCPOS), City of Boulder Open Space & Mountain Parks (OSMP), or other front range Open Space agencies. Project coordination will be the responsibility of the research PI.
- Awards are reimbursement funds, available upon successful project completion.
- All research conducted on JCOS property requires a Research & Collections permit, available here: [JCOS RC permit](#). Permits must be obtained by 10 days prior to beginning research.

- Collection of specimens or artifacts and placement of objects or markers are strictly regulated. Researchers are responsible for contacting the appropriate agency for specific regulations regarding these activities. Researchers are also required to obtain all necessary permits before initiating their project. All specimens and artifacts collected are the property of Jefferson County.
- If this research culminates in a scientific publication, JCOS is to be acknowledged as a funding source. JCOS reserves the right to review the manuscript prior to submission for publication.
- Researchers are responsible for knowing and adhering to all applicable policies and regulations set forth by JCOS.
- JCOS caps overhead expenses at 10%.
- Researcher names, affiliations, and research topic may be posted on the JCOS website. Final reports may also be posted publicly at the discretion of JCOS. Researchers may not make reports public without first obtaining JCOS permission in order to protect sensitive resource information (e.g., rare plant locations).
- No-fund proposal requests will be accepted throughout the year with a four- to six-week review period. This includes class projects. For projects with a simple scope, review time may be shorter.

Proposals must adhere to the following format guidelines:

- Figures and tables must be embedded in the text
- 1-inch page margins all around (“Normal” layout in Word)
- 12-point Arial font
- Double line spacing
- 8-page maximum, excluding cover page, references, budget, and personnel qualifications.
- All content combined into a single Adobe PDF document. Please use the file naming format: Abbreviated project name_P I Last name.

Proposals must include the following information:

Cover Sheet (Administrative Information)

- Using correct, full name
 - Applicant PI name and institution name
 - Contract office, if applicable (individual name, email and phone)
 - Please note if you organization does business under another name
- The name(s) and title(s) of the person(s) signing for the entity. This must be someone with signature authority per your organization’s regulations. If your project is awarded, the Jefferson County Attorney’s office will require documentation showing that this person has the authority to sign the grant agreement on behalf of their organization (e.g. articles of incorporation, bylaws, or board resolution).
- Applicants at academic institutions must coordinate proposal submittal with their institution’s sponsored research department (or equivalent) and provide written verification from said department stating that this requirement has been met prior to the submission deadline.

Section 1: Abstract, Objective, Hypothesis, Anticipated Value

- Abstract: Provide a one-paragraph proposal summary that describes objectives, general methods, and anticipated value to JCOS.
- State the research study objective.
- State a null hypothesis related to the objective.
- Explain how the proposal will contribute to JCOS management goals.
- Describe how the proposal expands on completed or ongoing studies concerning JCOS resources. Cite relevant existing literature.
- Describe the anticipated value of the proposal for scientific knowledge and for educating the public. Cite relevant existing literature.

Section 2: Methods. Explain the following:

- Project requirements (including logistics), required permits, and anticipated levels of coordination with JCOS staff.
- Data collection methods, citing source information, where needed.
- Data analysis techniques.
- Detailed project schedule.
- Map of research activity's location.
- Explanation of any potential negative impacts to JCOS resources.
- Proportion of work expected to be conducted in the field, in the lab, and by computer (e.g. modeling; please describe).
- Whether driving on JCOS property is required and whether you can meet Jefferson County's auto insurance requirements.

Section 3: Budget

- If requesting funding, provide an itemized annual budget that includes salary, equipment, travel, supplies, report preparation, overhead, and other costs as applicable. Note that overhead is capped at 10%.
- Provide information about sources of cooperative funding or assistance-in-kind (i.e., match), including supporting documentation. Match is not required but proposals with matching contributions will be viewed favorably.
- For multi-agency proposals, state funding amounts being requested from each agency.

Section 4: Researcher Qualifications

- Provide a resume or curriculum vitae of all investigators and identify a principal (PI). Student projects require a signed statement from a faculty advisor validating the nature of the proposal and describing the degree of faculty involvement and supervision. Faculty advisors are responsible for final report submission to JCOS should the student fail to do so. Future requests by students of a faculty advisor who has not provided required reports may not be processed.

Reporting

Reports must include the following sections:

- Abstract
- Introduction, objectives, hypothesis
- Methods
- Results
- Discussion
- Conclusion, including a description of the value of the results to JCOS and management recommendations based on study results
- Bibliography

Student reports must be reviewed by their faculty sponsor prior to the final submittal. Final reports may be published on the JCOS website or in other materials produced by JCOS. An oral presentation of the research may be requested.

Disclaimers

- All successful applicants are required to abide by JCOS park rules and regulations.
- A JCOS Staff Advisor will coordinate project logistics with each grant recipient.
- Payment of grant funds prior to project completion will be determined on a case-by-case basis. Final payment ($\geq 10\%$ project costs) will not be made until deliverables are received, reviewed, and accepted by JCOS.
- Successful applicants must provide proof of insurance per the terms of the grant agreement. Coverage requirements vary depending on your organization type. Please contact the Program Coordinator if you have any questions about the insurance requirements.
- JCOS employees are not eligible for grants directly related to their primary job duties.

2024 Priority Research Topics

Proposals that address the topics listed below will be prioritized. Researchers may suggest alternative topics, but all topics must support the JCOS Mission to **preserve open space and parkland**; **protect park and natural resources**; and **provide healthy, nature-based experiences**.

A JCOS system map of park locations is available here:

<https://www.jeffco.us/947/JCOS-System-Map>.

Research Priorities:

- Evaluating grass/forb regeneration following forest thinning treatments in Colorado Front Range forests
 - Focus on *Pinus ponderosa* (ponderosa pine) and mixed conifer forests
- Grasslands at the greatest risk of loss due to invasive species
 - Conversion to ruderal vegetation association from native vegetation association
 - Which invasive species are the biggest threats at each grassland property?
- *Cypripedium parviflorum* var. *pubescens* (yellow lady's slipper) habitat modeling
- *Erythranthe gemmipara* (Rocky Mountain monkey-flower) habitat modeling
 - Occurs in Jefferson County but no known populations on JCOS land.
 - G1, S1. Other statuses: SWAP Tier 1, USFS
- *Barbarea vulgaris* (yellow-rocket) effects and threats to native vegetation
 - What JCOS wet meadows/riparian areas are at the highest risk of being affected?
 - What plants are being displaced by yellow-rocket (sedges, grasses, forbs, all)?
- Abert's squirrel presence/absence in suitable habitat, with an emphasis on parks with planned fire mitigation work (ELK, ALD)
- Mapping northern leopard frog habitat in Deer Creek and/or Coal Creek
- Mapping reptile hibernacula in urban and semi-urban parks
- Nesting raptor survey in Blue Mountain Preserve – identify raptor nest locations, with an emphasis on cliff-nesting raptors
- Inventory of pollinator diversity in recently thinned forested parks
- Investigate native bee species diversity, response to disturbance (chemical, physical, noise), and land management options to support native bee population diversity and health
- Modeling areas of optimal maternity colony habitat for fringed myotis and/or tricolored bats (preferred), and/or little brown myotis or Townsend's big-eared bats.
- Small mammal community composition in relation to woody debris in forested ecosystems (how much woody debris is beneficial to a diverse community/species of conservation concern?)
- Efficacy of prairie dog birth control (Gonacon) at preventing population growth
- Are elk using Blue Mountain Preserve for calving. If so, where?
- Butterfly/Skipper project – Inventory butterfly and skipper populations in the Coal Creek region
- Evaluating soil seed banks where indaziflam (Rejuvra) treatments have been conducted

- Compare seed banks on native soil in non-treatment sites vs. treatment sites
- Assess composition, germination and survival rates by species;
- Lab/greenhouse study is recommended