

**COLORADO WATER CENTER
CSU COMPETITIVE GRANT PROGRAM
2023-2024 REQUEST FOR PROPOSALS**



Converging social, political, and cultural changes gave rise to the creation of land-grant institutions. CSU's land-grant mission provides the framework to advance our ability to address a myriad of water issues impacting the quality of life in Colorado, the U.S., and the world. To that end, the Colorado Water Center (CoWC) invites proposals for Water Research, Extension, and Education projects and Graduate Student Water Projects that address these issues.

Proposals should support inclusive and innovative transdisciplinary research, outreach, and educational projects that lead to positioning CSU as a leading institution in water resources planning and management. Proposals are invited from a broad range of disciplines, including the biological and physical sciences, the social and human sciences, and engineering fields. Proposed projects should integrate both diverse perspectives on understanding our water systems and innovative mechanisms to transfer this understanding to students and water resource professionals.

PRIORITY FUNDING AREAS

The CoWC seeks to support 2023-2024 CSU Competitive Grant Projects and Graduate Student Water Projects that advance knowledge and lead to actionable science in the following priority areas:

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1. Implementation of the Colorado Water Plan (<https://cwcb.colorado.gov/colorado-water-plan>)
 2. Sustainable Agricultural and Municipal Water Management
 3. Household, Community, and Ecological Water Security
 4. Hydro-equity in both rural and urban environments
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GRANT CATEGORIES

Water Research, Extension, and Education Projects

The purpose of this portion of the grant program is to invest in transdisciplinary/transfunction collaborations that develop a more holistic understanding of water resource issues, and to integrate translation of this understanding into the water resource profession, as well as educate the future water resource workforce.

- The maximum funding for this grant category is \$75,000, where it is anticipated that two projects will be funded.
- Proposals are required to demonstrate how the project supports high-priority water topics by developing water scholarship, outreach, and education programs at CSU addressing these topics.
- Projects should expand CSU's presence in the water community, be led by both research faculty and extension personnel, include students, foster equity, and develop new external collaborations.
- This project funding is expected to lead to the development of integrated research and extension project teams, and eventually result in the development of large transdisciplinary/transfunction external proposals and grants.

- Proposals are encouraged to include CSU faculty and staff new to the university, new to water-related research, education, and engagement, or those considered to be early career.

Graduate Student Water Projects

The purpose of this type of grant is for individual graduate students to enhance their water resource scholarship and information transfer activities through collaboration with the Office of Engagement and Extension (OEE) personnel.

- The maximum funding for this grant category is \$10,000.
- Proposals are required to demonstrate the interests and goals of the applicant and how the work will position the applicant as a future leader in water resources.
- Proposals should develop capacity that benefits CSU graduate educational programs and strengthens inclusive partnerships among the water community.
- Funding is only available to support Graduate Student activities, which can include graduate student salary, tuition and fees, materials, and travel costs.

APPLICANT ELIGIBILITY

This RFP targets all CSU faculty, staff, and graduate students whose scholarly, outreach, or educational contributions will be significantly enhanced by receiving the award.

- **Water Research, Extension & Education Projects:** PI and co-PIs must be current CSU faculty members or technical staff. Each proposal must include at least one Academic Faculty Member and one PI eligible Engagement or Extension staff as PI or co-PI. The PI must be eligible to serve as a PI on an external grant. Early career CSU faculty and staff or those who are new to the university or new to water-related research are encouraged to apply.
- **Graduate Student Water Projects:** Applicants must be current CSU Graduate Students working towards a water resource related degree program.

Previous applicants and awardees are eligible to apply. However, applications submitted by a PI who has not met reporting requirements on a previous grant administered or awarded by CoWC are not eligible for funding.

PROPOSAL SUBMISSION INSTRUCTIONS

Water Research, Extension & Education Projects

A. Project Eligibility and Collaboration Requirements

- All proposals must include at least one academic faculty and one Office of Engagement and Extension PI eligible staff in the project leadership team (PI or Co-PI).
- Special consideration will be given to projects that engage new water faculty and staff, including those that are new to CSU, new to the field of water-related research, and/or early career. However, previous applicants and awardees as well as senior faculty and staff are eligible to apply.
- It is anticipated that two (2) Water Research, Extension & Education Projects will be funded under this program, subject to the availability of funds.

B. Proposal Preparation Guidelines

The proposal (items D. 7-13 below) shall not exceed 10 single-spaced pages.

Format guidelines for the proposal including tables, pictures, graphs, figures, and appendices, are as follows:

- 12-point font size
- Times New Roman font
- 1-inch margins (all sides)
- Budget not to exceed \$75,000

C. Proposal Summary (Limited to 1 page)

- Project details and collaboration
 - Project title
 - Amount requested (max award \$75,000)
 - Proposal abstract
 - Project Co-PI(s) and other collaborators' information: names, affiliation, experience, expertise, and role
 - Student participants

D. Detailed Proposal (Items 7 – 13 limited to 10 pages)

1. Title. Concise but descriptive.
2. Keywords. Provide three keywords, of your choice, descriptive of the work.
3. Start Date. July 1, 2023
4. End Date. May 31, 2024
5. Budget Breakdown. Provide a brief preliminary budget using the format provided (see Attachment A).
6. Budget Justification. Breakdown and justify expenses.
It is mandatory that you follow the format as exemplified in Attachment C.
7. Statement of importance of water resource issue being addressed. Include an explanation of the need for the project - who wants it and how it will increase our knowledge of water resource systems and/or improve the knowledge available to water resource managers.
8. Statement of the results or benefits. Specify the type of information that is to be gained and how it will be used. Please include any ongoing or planned partnerships with external collaborators.
9. Nature, scope, and objectives of the project, including a timeline of activities.
10. Methods, procedures, and facilities. Provide enough information to permit evaluation of the technical adequacy of the approach to satisfy the objectives.
11. Outreach and Engagement plan. Provide a concise description of the collaborations with CSU Extension Faculty or OEE Professional Staff that will lead to the information created in this project being disseminated to water users, water managers, or water policy makers.
12. Related research and outreach activities. Show by literature and communication citations the similarities and dissimilarities of the proposed project to completed or ongoing work on similar topics.

13. Potential for sustaining collaborative teams and potential for developing external proposals. Include brief description of the ability to develop and sustain transdisciplinary research and extension collaborations and for submitting large transdisciplinary proposals to external funding agencies.
14. Training potential. Estimate the number of graduate and undergraduate students, by degree level, who are expected to receive training in the project (see [Attachment D](#)).
15. PI and Co-PI qualifications. Include resume(s) of the Principal Investigator(s) and Co-PIs. Resumes should not exceed two pages, list no more than 10 pertinent publications, and identify no more than 5 synergistic activities.
16. Data Management Plan (DMP). Provide a supplementary paragraph labeled "**Data Management Plan**" (DMP), that is limited to one page. This supplementary document should describe how the proposed project will disseminate and share research results and associated data. This supplementary paragraph may include:
 - the types of data, samples, physical collections, software, curriculum materials, and other materials to be produced in the course of the project;
 - the standards to be used for data and metadata format and content (where existing standards are absent or deemed inadequate, this should be documented along with any proposed solutions or remedies);
 - policies for access and sharing including provisions for appropriate protection of privacy, confidentiality, security, intellectual property, or other rights or requirements;
 - provisions for re-use, re-distribution, and the production of derivatives; and
 - plans for archiving data, samples, and other research products, and for preservation of free public access to them.

E. Proposal Submission:

Proposals must be submitted via email to John Tracy and Karen Schlatter (john.tracy@colostate.edu; karen.schlatter@colostate.edu) as pdf files by 5 PM on March 31, 2023. Proposals must include the Project Summary (Item B) as a pdf attachment, and the Detailed Proposal (Item C) as a pdf attachment.

Graduate Student Water Projects

A. Project Eligibility and Collaboration Requirements

- Funding is only available to support Graduate Student activities, which can include graduate student salary, tuition and fees, materials, and transportation costs.
- Applicants must be current CSU Graduate Students working towards a water resource related degree program.
- Graduate Student Fellows must identify a collaborator within the Office of Engagement and Extension (Extension Faculty or professional staff) as an element of their project.
- It is anticipated that two (2) Graduate Student Projects will be funded under this program, subject to the availability of funds.

B. Proposal Preparation Guidelines

The proposal (items D. 9-14 below) shall not exceed 6 single-spaced pages.

Format guidelines for the proposal including tables, pictures, graphs, figures, and appendices, are as follows:

- 12-point font size
- Times New Roman font
- 1-inch margins (all sides)
- Budget not to exceed \$10,000

C. Proposal Summary (Limited to 1 page)

- Project details and collaboration
 - Project title
 - Amount requested (max award \$10,000)
 - Proposal abstract
 - Faculty Advisor(s) and Graduate Student information: names, affiliation, experience, expertise, and role

D. Detailed Proposal (Items 9 – 14 limited to 6 pages)

1. Title. Concise but descriptive.
2. Keywords. Provide three keywords, of your choice, descriptive of the work.
3. Start Date. July 1, 2023
4. End Date. May 31, 2024
5. Graduate Student Information. Provide name, academic rank, major, email address, phone number, street address, city, state and zip code.
6. Faculty Advisor Information. Provide name, academic rank, department, email address, phone number, and CSU address for faculty advisor(s)
7. Budget Breakdown. Provide a brief preliminary budget using the format provided. (see Attachment B) Indirect costs are not allowed.
8. Budget Justification. Breakdown and justify expenses.
It is mandatory that you follow the format in Attachment C.
9. Statement of importance of water resource issue being addressed. Include an explanation of the need for the funding support - who wants it and how it will increase our knowledge of water resource systems and/or improve the knowledge available to water resource managers.
10. Statement of the benefit. Specify the type of information that is to be gained through this fellowship, and how the graduate student will use this knowledge to enhance their education at CSU.
11. Nature, scope, and objectives of the project, including a timeline of activities.
12. Methods, procedures, and facilities. Provide enough information to permit evaluation of the technical adequacy of the approach to satisfy the objectives.
13. Outreach and Engagement plan. Provide a concise description of the collaborations with CSU Extension Faculty or OEE Professional Staff that will lead to the information created in this project being disseminated to water users, water managers, or water policy makers.
14. Related research and outreach activities. Show by literature and communication citations the

similarities and dissimilarities of the proposed project to completed or on-going work on similar topics.

15. Faculty Advisor(s) and Graduate Student qualifications. Include resume(s) of the Faculty Advisor(s) and Graduate Student. Resumes should not exceed two pages, list no more than 10 pertinent publications, and identify no more than 5 synergistic activities.

E. Proposal Submission:

Proposals must be submitted via email to John Tracy and Karen Schlatter (john.tracy@colostate.edu; karen.schlatter@colostate.edu) as pdf files by 5 PM on March 31, 2023. Proposals must include the Project Summary (Item B) as a pdf attachment, and the Detailed Proposal (Item C) as a pdf attachment.

APPLICATION REVIEW

Water Research, Extension, and Education Projects

Applications will be pre-reviewed by the CoWC leadership to ensure that each proposal meets the administrative requirements of the RFP. All proposals meeting the administrative requirements will then be evaluated through a peer review process, overseen by the Colorado Water Center Faculty Advisory Committee. The criteria used for evaluating each proposal include: (1) justification of proposed research, outreach, or education program addressing critical gaps in water resource knowledge; (2) feasibility of achieving project objectives and technical merit; (3) responsiveness to RFP priority areas (identified in Application Guide); (4) qualifications of investigators; (5) potential for developing and sustaining transdisciplinary research and extension collaborations; and (6) potential for submitting large transdisciplinary proposals to federal funding agencies (particular focus on USDA-NIFA and NSF).

Graduate Student Water Projects

Applications will be pre-reviewed by the CoWC leadership to ensure that each proposal meets the administrative requirements of the RFP. All proposals meeting the administrative requirements will then be evaluated through a peer review process, overseen by the Colorado Water Center Faculty Advisory Committee. The criteria used for evaluating each proposal include: (1) justification of proposed fellow activities in addressing critical gaps in water resource education and/or knowledge; (2) responsiveness to RFP priority areas (identified in application guide); (3) progress towards meeting graduate degree requirements; and (4) efficacy of outreach and engagement plan.

PROJECT DATES

For both the Water Research, Extension, and Education Projects, and the Graduate Student Water Projects, awards will begin on July 1, 2023, and end on May 31, 2024.

PROJECT BUDGET

For both the Water Research, Extension, and Education Projects, and the Graduate Student Water Projects:

- All expenses must be finalized by the project end date. No extensions will be granted. Timely drawdown is expected, or funds will be withdrawn.
- The PI is expected to work with their departmental budget office to ensure their award is spent according to the approved budget. The PI's budget office is responsible for all project accounting and the department is responsible for any spending deficit.
- Funds may be used for:
 - Faculty, staff, and student salary including summer salary, but supplemental pay is not allowed
 - Travel and conference expenses
 - Development of instructional or training materials
 - Equipment up to \$5,000
 - Additional expenses directly related to research, extension, or education activities
- All awards are contingent on available funding.

PROJECT DELIVERABLES

For both the Water Research, Extension, and Education Projects, and the Graduate Student Water Projects:

- Funded projects will be required to submit a mid-year report, a year-end report, and be willing to work with OEE Communications to produce articles and impact statements on the importance of their projects.
- Funded applicants will be asked to present their results and accomplishments at events, such as CSU Hydrology Days, campus seminars, or state and national conferences.

- A plan for publication of suitable results in top tier journals (Water Research, Extension, and Education Projects only)

ADDITIONAL REQUIREMENTS

- Projects should support the mission and goals of the Colorado Water Center.
- Projects should integrate CSU's Principles of Community and the mission and vision of the university's Diversity Statement.
- Funded applicants must comply with applicable University research integrity and compliance regulations and guidelines.

MORE INFORMATION

- Interested applicants are encouraged to learn about previously funded projects at watercenter.colostate.edu/grants/
- For general questions related to the RFP contact John Tracy (john.tracy@colostate.edu), Director, or Karen Schlatter (karen.schlatter@colostate.edu), Associate Director, of the Colorado Water Center.

ATTACHMENT A – Budget Sheet for Research, Extension, and Education Projects

BUDGET BREAKDOWN	Project Year: July 1, 2023 to May 31, 2024		
PROJECT TITLE:			
PI (College or OEE Unit):			
Co-PI (College or OEE Unit):			
Co-PI (College or OEE Unit):			
OEE Project Lead:			
	CSU Competitive Grants Program		
	Rate	Amount	Total
PERSONNEL SALARIES			
Faculty:			
Administrative Professionals:			
Post Docs, Interns:			
Classified Staff:			
Fringe Benefits:			
Student Hourly:			
Fringe Benefits:			
GRA's:			
Fringe Benefits:			
TOTAL SALARY:			
TOTAL FRINGE BENEFITS:			
TOTAL PERSONNEL:			
DOMESTIC TRAVEL:			
MATERIALS AND SUPPLIES:			
OTHER DIRECT COSTS			
Publications:			
Equipment Use Fees:			
Consultants:			
Other:			
TOTAL OTHER DIRECT:			
TOTAL DIRECT COSTS:			
TOTAL PROJECT COST:			

ATTACHMENT B – Budget Sheet for Graduate Student Projects

BUDGET BREAKDOWN	Project Year: July 1, 2023 to May 31, 2024		
PROJECT TITLE:			
Faculty Advisor (College):			
Graduate Student (Degree Program):			
OEE Collaborator:			
	CSU Competitive Grants Program		
	Rate	Amount	Total
PERSONNEL SALARIES			
Post Docs, Interns:			
Classified Staff:			
Fringe Benefits:			
Student Hourly:			
Fringe Benefits:			
GRA's:			
Fringe Benefits:			
TOTAL SALARY:			
TOTAL FRINGE BENEFITS:			
TOTAL PERSONNEL:			
DOMESTIC TRAVEL:			
MATERIALS AND SUPPLIES:			
OTHER DIRECT COSTS			
Publications:			
Equipment Use Fees:			
Consultants:			
Other:			
TOTAL OTHER DIRECT:			
TOTAL DIRECT COSTS:			
TOTAL PROJECT COST:			

BUDGET JUSTIFICATION EXAMPLE

Project Title: [Type project title here]

Salaries and Wages for Faculty, Administrative Professional, Post Docs, Interns, GVR's, and GRA's. Provide personnel, title/position, estimated hours and the rate of compensation proposed for each individual.
Salaries and Wages for Undergraduate Students. Provide personnel, title/position, estimated hours and the rate of compensation proposed for each individual.
Fringe Benefits for Faculty, Administrative Professional, Post Docs, Interns, GVR's, and GRA's. Provide the overall fringe benefit rate applicable to each category of employee proposed in the project.
Fringe Benefits for Undergraduate Students. Provide the overall fringe benefit rate applicable to each category of employee proposed in the project.
Domestic Travel. Provide purpose and estimated costs for all travel. A breakdown should be provided to include locations, number of personnel, number of days, per diem rate, lodging rate, mileage and mileage rate, airfare (whatever is applicable).
Materials and Supplies. Indicate separately the amounts proposed for laboratory, computing, and field supplies. Provide a breakdown of supplies in each category.
Services or Consultants. Identify the specific tasks for which these services, consultants, or subcontracts would be used. Provide a detailed breakdown of the services or consultants to include personnel, time, salary, supplies, travel, etc.
N/A
Other Direct Costs. Itemize costs not included elsewhere, including publication costs. Costs for services and consultants should be included and justified under "Services or Consultants" (above). Please provide a breakdown for costs listed under this category.
Indirect Costs
Total Federal Funds Request
Total Non-Federal Matching Funds
TOTAL PROJECT FUNDS

ATTACHMENT D – Student Support

Project Title: [Type project title here]

Please provide the following information for students that will be involved in this project:

Student's Name	Degree Level (Undergrad, Masters, Ph.D.)	Area of Study (Discipline)	Thesis or Dissertation to be completed? Yes/No