



FY23 USGS 104 B Graduate Student RFP Guidelines

Closing Date: March 24, 2023 5:00 PM (Mountain Time)

The Colorado Water Center (CoWC) seeks to support graduate water resource student activities which advance our knowledge and leads to actionable science in the following priority areas:

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. Increase our understanding of Hydro-inequity in both rural and urban environments
5. Adaptation of water management practices in a changing climate

Program Description

This program, funded by US Geological Survey/National Institutes for Water Resources (USGS/NIWR), encourages and supports graduate student research in disciplines relevant to water resources issues, and assists Colorado institutions of higher education in developing student research expertise and capabilities. It is intended to help students initiate research projects or to supplement existing student projects in water resources research. Proposals must have a Faculty Advisor from the applicant's institution, and students must be enrolled fulltime in a degree program at one of Colorado's public 4-year universities. The faculty sponsor is responsible for ensuring that the proposal has been processed according to their university's proposal submission policies and procedures.

Funding

Budgets requesting federal funds may include, but are not limited to, expenditures for student salaries, fringe benefits, supplies, services, travel, and other direct costs. Federal funds will not be approved for faculty salaries, student tuition, or equipment. All awards are limited to a maximum of \$10,000 of federal funds, and a minimum of 7 projects will be awarded for the FY 2023 program. Only direct costs (0% indirect costs (IDC)) are allowed for these research grants and require a 1:1 cost-share from non-federal sources. Non-federal cost share can include faculty salaries, fringe benefits, tuition and fees, forgiven IDC, as well as other expense categories normally associated with research activities. Research must be relevant to water resources issues that Colorado is facing and be conducted within the state of Colorado. Research projects should begin September 1, 2023 and be completed by August 31, 2024.

Proposal Submission:

Proposals are to be submitted electronically in PDF format and are to be received no later than 5:00 PM (MDT) on March 24, 2023. Submit materials to John Tracy (john.tracy@colostate.edu) and Karen Schlatter (karen.schlatter@colostate.edu).

All CSU Proposals Must Provide a KR# With Proposal Submission to CoWC

Application Review

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 CoWC Faculty Advisory Committee. The criteria used for evaluating each proposal includes: (1) justification of proposed student activities in addressing critical gaps in water resource education and/or knowledge; (2) responsiveness to RFP priority areas; (3) technical quality of the proposed study plan; (4) training potential for graduate and undergraduate students; and (5) effectiveness of knowledge dissemination plan.

Announcement of Awards

The student applicant and Faculty Advisor will be notified regarding the status of their application via email, *pending availability of federal funds*. ***Projects may not be started until official notification from USGS/NIWR is received by the Colorado Water Center.**

Proposal Preparation Guidelines:

The proposal 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

Deliverables

Upon completion of the project, recipients will be required to submit a final project report (**due no later than October 31, 2024**), which will include:

- Narrative on research activities and project results for a general audience.
- High-resolution photos of students and faculty advisor actively conducting research of the project.
- Financial accounting of all expenditures.
- Data Management Plan (please see number 13 below).
- Faculty & Student will be required to provide information that CoWC is mandated to include in its NIWR Annual Report and may be contacted up to five years following the completion of the project.
- Final project reports may be published in the *Colorado Water* newsletter. Students or Faculty Advisors may be asked to present an oral report on their work to the CoWC Advisory Committee for Water Research Policy.
- Projects must be completed by August 31, 2023. No-cost extensions are not allowed.

Financial Policy:

The designated Faculty Advisor is ultimately responsible for CoWC-funded accounts. If the budget is over expended or expenditures were improperly charged, the Faculty Advisor and his/her department or college are responsible for providing funds for the unauthorized spending.

Questions:

Please contact John Tracy or Karen Schlatter by e-mail at: john.tracy@colostate.edu or karen.schlatter@colostate.edu for questions about this RFP.

Detailed Proposal Requirements

The proposal (items 1-18) shall not exceed 6 single-spaced pages. Items 19-24 are not included in the 6-page limit.

Proposals must contain the following elements:

1. **Title.** Concise but descriptive
2. **Project Type.** Choose from the following: Research, Information Transfer, Information Management System, Education, or Other (please specify).
3. **Focus Categories.** Maximum of three – See Attachment A.
4. **Research Category.** Choose one category from the following categories that most closely applies: Water Scarcity and Availability; Water Hazards and Climate Variability; Water Quality; Water Policy, Planning, and Socioeconomics; Watershed and Ecosystem Function; Water Technology and Innovation; or Workforce Development and Water Literacy.
5. **Keywords.** Provide three keywords, of your choice, descriptive of the work.
6. **Start Date.** September 1, 2023
7. **End Date.** August 31, 2024
8. **Student Information.** Provide name, academic rank, major, university, email address, phone number, fax number, street address, city, state and zip code.
9. **Faculty Advisor Information.** Provide name, academic rank, university, email address, phone number, fax number, street address, city, state and zip code of the Faculty advisor(s).
10. **Faculty Advisor Departmental Accountant.** Provide name, email address and phone number.
11. **Congressional District** of the university where the work is to be conducted.
12. **Abstract.** Provide a brief (one-page or less) description of the problem, methods, objectives, and expected outcomes of the proposal.
13. **Statement of regional or State water problem.** Include an explanation of the need for the project - who wants it and how it benefits Colorado.
14. **Statement of the results or benefits.** Specify the type of information that is to be gained and how it will be used.
15. **Nature, scope, and objectives of the project, including a timeline of activities.**
16. **Methods, procedures, and facilities.** Provide enough information to permit evaluation of the technical adequacy of the approach to satisfy the objectives.
17. **Dissemination of findings.** Provide a brief statement on how the results of this work will be disseminated to water professionals.
18. **Related research** (Research projects only). Show by literature and communication

citations the similarities and dissimilarities of the proposed project to completed or on-going work on the same topic.

19. **Data Management Plan (DMP):** Provide a supplementary paragraph labeled "**Data Management Plan**" (DMP). This supplementary document should describe how the proposal will conform to USGS policy on the dissemination and sharing of research results and associated data. A valid DMP may include only the statement that no detailed plan is needed (e.g. "No data are expected to be produced from this project"), as long as the statement is accompanied by a clear justification. 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.
20. **Budget Breakdown.** Provide a brief preliminary budget using the format provided (see Attachment B). Indirect costs are not allowed and a 1:1 fund match from non-federal sources is required. Federal funds will not be approved for faculty salaries, student tuition, or equipment, but these can be used as matching funds.
21. **Budget Justification.** Breakdown and justify expenses (Attachment C).
22. **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).
23. **Faculty Advisor (PI) and Graduate Student Qualifications.** Include CVs of the Major Advisor and Graduate Student. CVs should not exceed two pages or list more than 15 pertinent publications (these do not count against page limit).
24. **Student and Faculty Advisor Signature Page.** It is mandatory that the student and their Faculty Advisor complete the form in Attachment E.

Research must be relevant to Colorado and be conducted within the state of Colorado.

ATTACHMENT A

ACID DEPOSITION
AGRICULTURE
CLIMATOLOGICAL PROCESSES
CONSERVATION
DROUGHT
ECOLOGY
ECONOMICS
EDUCATION
FLOODS
GEOMORPOLOGICAL PROCESSES
GEOCHEMICAL PROCESSES
GROUNDWATER
HYDROGEOCHEMISTRY
HYDROLOGY
INVASIVE SPECIES
IRRIGATION
LAW, INSTITUTIONS, AND POLICY
MANAGEMENT AND PLANNING
METHODS
MODELS
NITRATE CONTAMINATION
NON POINT POLLUTION
NUTRIENTS
RADIOACTIVE SUBSTANCES
RECREATION
SEDIMENTS
SOLUTE TRANSPORT
SURFACE WATER
TOXIC SUBSTANCES
TREATMENT
WASTEWATER
WATER QUALITY
WATER QUANTITY
WATER SUPPLY
WETLANDS

ACD
AG
CP
COV
DROU
ECL
ECON
EDU
FL
GEOMOR
GEOCHE
GW
HYDROGEO
HYDROL
INV
IG
LIP
M&P
MET
MOD
NC
NPP
NU
RAD
REC
SED
ST
SW
TS
TRT
WW
WQL
WQN
WS
WET

BUDGET BREAKDOWN	Project Year: September 1, 2023 to August 31, 2024		
PROJECT TITLE:			
Faculty Advisor:			
Graduate Student:			
	USGS 104B	Non-Federal Matching	TOTAL
PERSONNEL SALARIES			
Faculty			
Post Docs, Interns, GVR:			
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:			
INDIRECT 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

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

Financial Policy:

The designated faculty advisor is ultimately responsible for CoWC-funded accounts. If the budget is over-expended or expenditures were improperly charged, the Faculty Advisor and his/her department or college are responsible for providing funds for the unauthorized spending.

By Signing This Document:

- You acknowledge that you have read the Student RFP Guidelines.
- You meet the requirements to submit a proposal.
- The information you have provided on this form is accurate.
- You agree to the Deliverables and Financial Policy outlined above.

Student Signature

Faculty Advisor Signature

Date _____

Date _____