### FY 2025 Request for Proposals Colorado Water Conservation Board Seed Research Program

**CLOSING DATE: March 28, 2024** 

Proposals are invited for the Colorado Water Conservation Board (CWCB) Seed Research Program, administered by the Colorado Water Center (CoWC) at Colorado State University.

The CWCB Seed Research Program was established in 2012 to support the development of water resources research, outreach, and education programs that aid the CWCB in fulfilling its mission. The Seed Research program is open to Faculty, Extension personnel, and Researchers at any institution of higher education in Colorado that has the capacity to support research, information dissemination, and graduate training programs that can address Colorado's most pressing water resource challenges.

#### **Priority Research Topics:**

For the FY 2025 Seed Program, the CWCB has identified the highest priority needs for knowledge development that leads to actionable science and implementable solutions. In general, these priorities focus on Supporting the Implementation of the Colorado Water Plan and Improving Water Management and Operations across Colorado, with specific high priority topics described below.

#### Priority Areas for Funding:

- 1. Development of methods to update the CSUFlows18 model to include new data from 2001 through 2023. This will include assessments of model performance compared to StreamStats. Funding for proposals addressing this topic may be contingent on Streamstats releasing an updated model, which is expected in 2024. Proposals should address how project objectives will be met or modified if a Streamstats update is not released before the end of CY 2024.
- 2. Research to improve management and operations of Pond Freshening Flows. Colorado Water Law allows applicants to request water rights associated with the filling and "freshening" of off channel ponds. The current accepted standard for a freshening flow rate is turning over the total pond volume every five days. This likely oversimplifies the processes and can result in high flow rates for larger ponds. It would be helpful to better understand what freshening flow rates are necessary to support piscatorial life in ponds of different sizes, and how much recirculation/aeration systems reduce the necessary flow.

3. Assessment of the veracity of Salt Slug investigations for measuring streamflow rates. Proposals should include discussions of existing best practices for performing salt slug streamflow investigations, how methodologies will be developed to improve their accuracy for site specific use, and how the accuracy of salt slug streamflow investigations compare to other streamflow measurement methodologies such as ADCP or Flowtracker®.

#### **Funds Available:**

The FY2025 CWCB Request for Proposals is supported by the use of Severance Tax revenues, and it is anticipated that up to \$350,000 in funds will be available for this year's funding cycle. The CWCB research funds are awarded through a process using peer review of both the scientific credibility and water management relevancy of the proposals. Proposals that leverage new or on-going activities are strongly encouraged.

#### **Proposal Review Process:**

All proposals are due to the Colorado Water Center Director by 5:00 PM (MDT) March 28, 2024. The scientific merit of each proposal will be evaluated through a peer review process, overseen by the Colorado Water Center Faculty Technical Staff. The proposals receiving the highest scientific merit will then be reviewed by the Colorado Water Conservation Board to determine the projects that will be funded based on the relevancy of each project to practically address Colorado's top water management challenges, as identified above. The general criteria used for proposal evaluation includes: (1) justification of proposed research and/or outreach program; (2) technical merit; (3) responsiveness to RFP priority areas; (4) qualifications of investigators; and (5) extent to which Colorado water managers and users are engaged with project activities.

#### **Eligibility:**

The competition is open to regular, full-time faculty, researchers, and extension personnel at Colorado's colleges and universities.

#### **Project Budget Amount and Duration:**

The total life of the project cannot exceed 12 months in duration, with the project start date being on or after July 1, 2024. The total budget request must not exceed \$50,000. Projects of shorter duration and/or budgets less than \$50,000 will be equally considered.

#### **Proposal Submission:**

Proposals, in electronic copy, are to be submitted no later than 5:00pm MDT, March 28, 2024.

#### **Electronic Submission:**

e-mail to: john.tracy@colostate.edu and karen.schlatter@colostate.edu

#### **Proposal Preparation Guidelines:**

The proposal 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)

The 10-page limit does not include title page, budget pages or CVs (items 12-15). The proposal must be sent electronically as an Adobe PDF file. Please note the abstract (item 14/Exhibit "D") is required as a Word .doc file, in addition to including the abstract within the proposal (Adobe PDF file). Proposals exceeding the 10-page limit will not be considered in the competition. The indirect cost is limited to no more than 15%. See additional itemized requirements below.

#### **Proposals must include the following items:**

- 1. **Title.** Concise but descriptive.
- 2. **Project duration** (month/year to month/year). Indicate the actual beginning date for the project and the estimated end date for the project.
- 3. FY 2025 funds requested.
- 4. **Principal Investigator name(s) and university.** Provide name, academic rank, university, email address, phone number, fax number, street address, city, state and zip code of the Principal Investigator, Co-Investigator(s), and/or Collaborator(s).
- 5. **Abstract.** (Include within the proposal PDF.) Provide a brief (one-page or less) description of the problem, methods, objectives, and expected outcomes in the proposal. Use the format provided in Exhibit "D".
- 6. **Keywords.** Provide three keywords, of your choice, descriptive of the work.
- 7. **Statement of regional or State water problem.** Include an explanation of the need for the project.
- 8. **Statement of the results or benefits.** Specify the type of information that is to be gained, who will benefit from the information, and how it will be used. Include here any ongoing partnerships you are involved in with relevant water-related groups.
- 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. **Related research.** Show by literature and communication citations the similarities and dissimilarities of the proposed project to completed or on-going work on the same topic.
- 12. **Budget.** Provide a brief preliminary budget using the formats provided in Exhibits "A" and "B". Indirect costs must not exceed 15% of total direct costs.

- 13. **Budget justification.** Breakdown and justify expenses using the format provided. See Exhibit "C".
- 14. **Abstract.** Provide a brief (one-page or less) description of the problem, methods, objectives, and expected outcomes in the proposal. The abstract must be submitted as a separate Microsoft Word 2003 (.doc) compatible document. Use the format provided in Exhibit "D".
- 15. **Investigators' qualifications.** Include resume(s) of the Principal Investigator(s), and key personnel. Resumes should not exceed two pages or list more than 15 pertinent publications.

#### **Deliverables:**

Funded projects will be required to submit semi-annual reports addressing the description of the problem, research objectives, methodology, principal findings, and significance. In addition, the PI will be required to aid in the development of an article describing the work performed and its impacts on Coloradans if needed. Principal Investigators may also be asked to provide oral briefings to the CoWC Advisory Committee, the Colorado Water Conservation Board, Colorado Legislature, and the Colorado Water Congress.

#### **Questions:**

Please contact John Tracy (john.tracy@colostate.edu) or Karen Schlatter (Karen.Schlatter@colostate.edu) if there are questions about this solicitation.

# **Budget – Category Based**

# Exhibit "A" Project Title:

J_	Cost Category	Rate	Amount	Total
14	Academic Faculty			
- <u>-</u>	Administrative Professional			
- <u>*</u>	State Classified			
-]	Post-Doctorates			
-]	Non-Student Hourly			
- 1	Student Hourly			
- <u>(</u>	<u>GRAs</u>			
T	Total Salaries and Wages			
2. F	ringe Benefits-Provide % of effort for each			
e	mployee category & amount			
3. S	Supplies			
4. E	Equipment			
5. S	ervices or Consultants			
6. T	ravel			
7. C	Other direct costs			
8. T	Total direct costs			
9. Iı	ndirect costs (limited to no more than 15%)			
10. Total Project Costs				\$

# **Budget – Activity Based**

### Exhibit "B"

**Project Title:** 

Activity	Description	Time Period	Cost	Deliverable
Activity 1				
Activity 2				
Activity 3				
Activity 4				
Total				

# **Budget Justification**

# **Exhibit "C" Project Title:**

<b>Salaries and Wages.</b> Provide estimated hours and the rate of compensation proposed for each individual. (Tuition remission and other forms of compensation paid as or in lieu of wages to students performing necessary work are allowable provided that the tuition or other payments are reasonable compensation for the work performed and are conditioned explicitly upon the performance of necessary work.)
<b>Fringe Benefits.</b> Provide the rate (%) and amount for fringe benefits applicable to each category of employee proposed in the project.
<b>Supplies.</b> Indicate separately the amounts proposed for office, laboratory, computing, and field supplies.
<b>Equipment.</b> Identify non-expendable personal property having a useful life of more than one (1) year and an acquisition cost of more than \$5,000 per unit. If fabrication of equipment is proposed, list parts and materials required for each, and show costs separately from the other items.
<b>Services or Consultants.</b> Identify the specific tasks for which these services, consultants, or subcontracts would be used. Estimate amount of time required and the hourly or daily rate.
<b>Travel.</b> Provide purpose and estimated costs for all travel.
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).
Indirect Costs. Provide negotiated indirect ("Facilities and Administration") cost rate.

## **Abstract**

### Exhibit "D"

Project# (To be completed by the CoWC)
Title:
Project Duration:
FY 2025 Funds Requested:
Principal Investigator Names(s) and University:
Abstract: