COLORADO
Colorado Water Conservation Board
Department of Natural Resources

# ENGAGEMENT & INNOVATION GRANT FUND SUPPLEMENTAL APPLICATION

## Introduction & Purpose

Colorado's Water Plan calls for an outreach, education, public engagement, and innovation grant fund in Chapter 9.5.

The overall goal of the Engagement & Innovation Grant Fund is to enhance Colorado's water communication, outreach, education, and public engagement efforts; advance Colorado's water supply planning process; and support a statewide water innovation ecosystem.

The grant fund aims to engage the public to promote well-informed community discourse regarding balanced water solutions statewide. The grant fund aims to support water innovation in Colorado. The grant fund prioritizes measuring and evaluating the success of programs, projects, and initiatives. The grant fund prioritizes efforts designed using research, data, and best practices. The grant fund prioritizes a commitment to collaboration and community engagement. The grant fund will support local and statewide efforts.

The grant fund is divided into two tracks: engagement and innovation. The Engagement Track supports education, outreach, communication, and public participation efforts related to water. The Innovation Track supports efforts that advance the water innovation ecosystem in Colorado.

## Application Questions

*The grant fund request is referred to as "project" in this application.

| Overview (answer for both tracks) |
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| In a few sentences, what is the overall goal of this project? How does it achieve the stated purpose of this grant fund (above)? |
| The goal of this project is to provide the *Understanding Water Activity B*ook for statewide distribution. This helps achieve the education goal of Colorado's Water Plan by educating the next generation on the importance of this vital resource and develop in these students an understanding on why and how we should protect and conserve this resource. |
| Who is/are the target audience(s)? How will you reach them? How will you involve the community? |
| Target audience is third through sixth grade students. We will reach them by promoting the Understanding Water Activity Book to their teachers via email (we have 11,000 educators on our database), by attending educator conferences such as science conference, CCIRA (reading conference), promoting them at our three Food, Fiber & More Summer Institutes and at the social studies/science coordinators meetings and via social media. |
| Describe how the project is collaborative or engages a diverse group of stakeholders. Who are the partners in the project? Do you have other funding partners or sources? |
| Nearly everything developed by the Colorado Foundation for Agriculture (CFA) involves collaboration of diverse stakeholders. The development of the *Understanding Water Activity Book* had input and review provided by Children's Museum, Colorado Water Conservancy, Denver Regional Council, Sierra Club, Colorado Department of Public Health & Environment, Central Colorado Water Conservancy District, Colorado River Water District, Colorado Department of Agriculture, Colorado Department of Education, Denver Post Newspaper in Education, Fort Collins Water Utilities, Northern Colorado Water Conservancy, CSU Cooperative Extension and Poudre School District. We anticipate working |

| Overview (answer for both tracks) |
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| with the nine basins and the PEPO workgroup on this project. |
| Describe how you plan to measure and evaluate the success and impact of the project? |
| Success is measure several ways: first, will be in the number of *Understanding Water Activity Books* that are requested by educators for use with their students; second, will be through the return of an evaluation form that will be sent with the activity books. The online publication will be tracked by number of students using it or by the number of students downloading the e-pub. |
| What research, evidence, and data support your project? |
| There is specific documentation regarding the effects on third- and fourth- grade students – the age that the "Understanding Water" publication directly targets – in regards to education about water and the environment. Dr. Franz Bogner, a professor at the University of Bayreuth, in 2013 examined the implications of ages for environmental education and educators, through a program called "Water in Life – Life in Water." Dr. Bogner examined the impacts of the program on children ages 9 and 10 (third- and fourth-grade students) compared to children just slightly older, at 11-13 years old. Conclusions from the study were that the slightly younger pupils showed a stronger connectedness to nature and stronger pro-environmental attitudes than the older pupils, and it was also effective for the younger students six weeks after participation |
| Describe potential short- and long-term challenges with this project. |
| One challenge we face is that 1/3 of the teachers in schools change position every year, so we are always marketing the *Understanding Water Activity Book* to make sure new teachers know about this valuable resource. The second challenge is finding the funds to print and distribute these materials. The Colorado Foundation for Agriculture (CFA) is a not-for-profit organization that receives no public funding. For everything we produce, we need to find the funds to cover the cost. We have great support from the water community as they are already adopting classrooms, providing scholarships for teachers to attend our summer institutes or helping cover some of the costs for the water issues of the *Colorado Reader*. We would be unable raise additional funding to have 50% match for this grant. Thus we are asking for a waiver of that amount. We will have many hours of in-kind services provided by the educators who will be pilot testing the online interactive version. CFA has already invested over $20,000 for research, writing, design and illustrations in the development of this publication. |

Please fill out the applicable questions for either the Engagement Track or Innovation Track, unless your project contains elements in both tracks. If a question does not relate to your project, just leave it blank. Please answer each question that relates to your project. Please reference the relevant documents and use chapters and page numbers (Colorado's Water Plan, Basin Implementation Plan, PEPO Education Action Plan, etc.).

| Engagement Track |
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| Describe how the project achieves the education, outreach, and public engagement measurable objective set forth in Colorado's Water Plan to "significantly improve the level of public awareness and engagement regarding water issues statewide by 2020, as determined by water awareness surveys." |

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| This statewide project will provide a fun tool for educators to use with their students to educate about the importance of Colorado's water resource. The *Understanding Water Activity Book* and e-pub provides elementary students with a comprehensive foundation for beginning their journey to understanding the complexity of our water resource and it allows for multiple schools to utilize the same water education resource that will provide consistency and commonality of water education outreach messaging. It will also provide an easy way for the 9 basins and PEPO workgroup to add a 3rd – 6th grade educational component to their education/outreach efforts. |
| Describe how the project achieves the other measurable objectives and critical goals and actions laid out in Colorado's Water Plan around the supply and demand gap; conservation; land use; agriculture; storage; watershed health, environment, and recreation; funding; and additional. |
| This project helps achieve the Colorado's Water Plan K-12 initiative for education, specifically 3rd through 6th grades. We will easily be able to measure the use of the publication in the orders we receive from teachers. |
| Describe how the project achieves the education, outreach, and public engagement goals set forth in the applicable Basin Implementation Plan(s). |
| This is a statewide project. It would provide a comprehensive educational resource for K-6 educational efforts, specifically 3rd to 6th grades. This project will be very useful to basins that have a K-12 education outreach effort in their plan. For those basins that haven't include K-12 education in their plan, this provides an easy way to begin adding it. |
| Describe how the project achieves the basin roundtable's PEPO Education Action Plans. |
| Yampa, White, Green River Basin have no K-12 education goals in their plan, but this project could help with their outreach goals.<br>Colorado Basin Roundtable – this project will help the basin enhance their K-12 water education opportunities inside the classroom.<br>South Platte Basin & Metro Basin this project will help with their objective to integrate into statewide outreach initiatives.<br>North Platte Basin this project will provide K-6 educational materials to use in their educational efforts.<br>Arkansas River Basin and Rio Grande Basin this project will provide educational materials they could use in their community outreach. Arkansas has already requested copies for use going into classrooms prior to their water festivals.<br>Southwest Basin has no K-12 education goals in their plan, but this project could help with their outreach goals.<br>Gunnison Basin would like to provide field trips for youth this project would provide them a fun tool to reinforce the learning objective that are part of the tours. |

| Innovation Track |
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| Describe how the project enhances water innovation efforts and supports a water innovation ecosystem in Colorado. |
| N/A |
| Describe how the project engages/leverages Colorado's innovation community to help solve our state's water challenges. |

| Innovation Track |
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| The online interactive *Understanding Water Activity Book* allows for a tool to educate about Colorado's water resources that can be easily accessed via computer, I-pad, Galaxy Tab, smart phone and other devices. It can be easily updated with current information and resources. |
| Describe how the project helps advance or develop a solution to a water need identified through TAP-IN and other water innovation challenges. What is the problem/need/challenge? |
| The problem is "How do we engage today's youth in wanting to learn about water?" The online interactive *Understanding Water Activity Book* puts this information at their fingertips, which is where many of these youth enjoy spending their time. |
| Describe how this project impacts current or emerging trends; technologies; clusters, sectors, or groups in water innovation. |
| In Colorado schools there is a push to make sure students are technology literate. As such, many schools are providing I-pads, Galaxy tabs and other devices to their students. This gives us the opportunity to develop resources for these devices that achieve Colorado Education Standards and educate about water, conservation and protecting this vital resource. |