



COTTONWOOD INSTITUTE

→ Colorado Watershed Project





COLORADO WATERSHED PROJECT

From the summits of mountains to the bottom of canyons, water connects everything in the American west. During this action-packed 5-day, 4-night trip, we'll take a deep dive into learning about our watersheds here in Colorado, and the increasingly critical role they play in our lives. We'll explore riparian ecosystems, evaluate river health, and complete a river-based Action Project to help support a healthy watershed. We'll also build our confidence outside as we practice low-impact camping skills, develop fun outdoor skills, and engage in place-based activities that connect us with the natural world.



PROGRAM GOALS

Through Cottonwood Institute's unique blend of service learning, hands-on experience, and intentional group development, Colorado Watershed Project inspires students to:

- Understand basic content-related concepts including: the function of the water cycle, the interconnected role of watersheds, and the complex and dependent relationships that make up riparian ecosystems
- Deepen their understanding of local and global environmental issues
- Build perceptions of personal agency to create change in their communities
- Build skills and tools to feel comfortable exploring outdoors
- Develop strong and supportive relationships with peers and adults
- Develop a sense of belonging and personal connection to the natural world

GROUP DETAILS

- Group size: 12-30 students
- School chaperones: 3-4
- Grades: Middle and High School
- Length: 5 days, 4 nights minimum

Program Description

COLORADO WATERSHED PROJECT



PROGRAM OVERVIEW

Sample Scope & Sequence



	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5
Objectives	<ul style="list-style-type: none"> • Orient students to the land and each other • Prepare students with skills to comfortably navigate camp life • Develop strong routines and rituals 	<ul style="list-style-type: none"> • Explain how water moves through a watershed • Analyze challenges facing our water systems and design solutions 	<ul style="list-style-type: none"> • Explain biotic and abiotic factors affecting water quality and ecosystem health • Test hypotheses and evaluate qualities of a healthy river ecosystem 	<ul style="list-style-type: none"> • Understand the role of humans in maintaining healthy waterways • Execute a service project to give back to our river ecosystems 	<ul style="list-style-type: none"> • Reflect on our collective experience • Acknowledge and appreciate our peers • Identify key takeaways for personal action
Overview	<p>Our first day will set the tone for the week by building connections between students and place. We'll focus on activities that promote relationship building and positive group identity, while also orienting students to the amazing land where we'll be spending the next week.</p>	<p>Today, we'll explore the big picture of water in the American west to set context for the rest of our week. We'll engage in hands-on experiments that help us understand the geography, politics and culture of water to answer the question: what makes water in the west so complex?</p>	<p>On our third day, we'll get into the field to investigate water for ourselves! We'll talk about water ecosystems and evaluate the health of our rivers through hands-on citizen science. We'll then learn from how we can read the river to catch our own fish!</p>	<p>On day four, we'll build connections with nature through our relationship with water and water ecosystems. How can we be stewards of our rivers and waterways? We'll explore the concept of reciprocity by engaging in and reflecting on a service project.</p>	<p>On day five, we'll end our program by reflecting and making meaning of our experience as a group. We'll talk about ways that we can be thoughtful stewards of water in our own lives, and close with an appreciation circle before heading back to school!</p>
Key Activities	<ul style="list-style-type: none"> • Teambuilding • Comfort zones • Camp set up • Outdoor skills rotations • Camp craft relay 	<ul style="list-style-type: none"> • Teambuilding • The World's Water lab • Watershed modeling • Engineering challenge 	<ul style="list-style-type: none"> • Teambuilding • Water quality testing • Macroinvertebrates • Fishing clinic 	<ul style="list-style-type: none"> • Teambuilding • Service project • Group hike • Nature games 	<ul style="list-style-type: none"> • Teambuilding • Camp take down • Closing & appreciation circle

CURRICULUM ALIGNMENT



High impact curriculum utilizes best practices in education, 21st Century Skills, Environmental Education, Service Learning, & Leadership Development.

The Colorado Watershed Project can be tailored to meet curriculum needs through use of a custom student journal and guide, including exercises for before, during, and after the program. Curriculum reinforces Colorado academic standards, such as:

-
- ✔ **SC10-GR.8-S.2-GLE.1:**
Human activities can deliberately or inadvertently alter ecosystems and their resiliency

 - ✔ **RWC10-GR.12-S.1-GLE.2:**
Effective collaborative groups accomplish goals

 - ✔ **PE09-GR.7-S.3-GLE.:**
Demonstrate inclusiveness in and out of classroom settings

 - ✔ **PE09-GR.HS-S.1-GLE.3:**
Apply rules, principles, problem-solving skills, and concepts to traditional and nontraditional movement settings