

CO State Standards

 8th grade lessons	description & topics covered	field (f) classroom (c)	season	Life Science 1	Life Science 2	Earth Systems 2	History 2	Geography 1	Geography 2	Civics 1
Plumbing the Colorado River	<p>In this hands-on activity, we visualize the Colorado River as a whole from source to sea. We create our own map showing where water is added to and withdrawn from the system. We discuss how water users balance water supplies and what role government plays in the allocation of this scarce natural resource. We also learn the difference between renewable and nonrenewable resources. Participants gain a better understanding of the interconnected nature of the world and the way in which populations depend on abiotic factors (such as water) in an ecosystem.</p>	c	any							
Water Quality Field Study	<p>This activity gets kids out on the water observing various water quality characteristics that can tell us about the overall health of the waterway. It will give them a chance to utilize the scientific method in the field making observations with real world implications. Participants will observe the interaction between various land-uses and the river and begin to hypothesize about ways in which human activities affect the waterway. <i>Please note: your school may need to provide transportation for this lesson.</i></p>	f	fall/ spring							
Eagle & Upper Colorado Watershed Threats	<p>This lesson looks at the threats to and problems with our local watersheds. We will define point and non-point source pollution and use maps to understand where in our watershed we might expect to find these sources of pollution. We discuss how human activities can inadvertently or deliberately alter watershed ecosystems and their resiliency. We also discuss how these threats and problems have evolved over time as have the entities trying to protect and restore these watersheds. We try to understand the conflict and cooperation that might arise through the allocation of scarce natural resources.</p>	c	any							

CO State Standards

 8th grade lessons	description & topics covered	field (f) classroom (c)	season	Life Science 1	Life Science 2	Earth Systems 2	History 2	Geography 1	Geography 2	Civics 1
Macroinvertebrate Sampling ("Bug Kicking")	This activity focuses on macroinvertebrates and their role in watersheds. Studies of macroinvertebrate populations are often used as proxies for other water quality characteristics. We learn about the various organisms (plants, fish, birds, and mammals in addition to the macroinvertebrates) that we might expect to encounter and what and what their genetic characteristics and specific tolerances tell us about the watershed. <i>Please note: your school may need to provide transportation for this lesson.</i>	f	fall/ spring							
First Come, First Served: Colorado Water Law	This lesson introduces students to the concepts of water rights, water law and the value of water. We discuss the impact that human activities can have on water resources and ecosystems. We use maps to understand the natural distribution of water in the West as well as the infrastructure through which we transport water from one place to another. We discuss the 1922 Colorado River Compact: how it governs water use and water rights; it's historic roots and relevance; how it has inspired conflict and cooperation over the past 90 years; and future implications of this complicated system.	c	any							