

**Purpose:**

Students will learn about the importance of water in Colorado, including its sources, usage, and management. This Reader aims to educate students about the Colorado Water Plan and how individuals, particularly students and schools, can contribute to water conservation efforts.

**Cross Curricular Connections and  
Colorado Academic Standards:****4th & 5th Grade Reading, Writing, and  
Communicating:**

- Determine the meaning of words and phrases as they are used in a text, including figurative language such as metaphors and similes. (CCSS: RL.5.4)
- Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text. (CCSS: RL.4.1)
- By the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 4–5 text complexity band proficiently, with scaffolding as needed at the high end of the range. (CCSS: RI.4.10)

**3rd Grade Social Studies: Geography**

- The concept of region is developed through an examination of similarities and differences in places and communities. (GLE: 3.2.2)

**4th Grade Social Studies: Geography**

- Use geographic tools to research and answer questions about Colorado geography. (GLE: 4.2.1)

**5th Grade Social Studies: Geography**

- Use geographic tools and sources to research and answer questions about United State geography. (GLE: 5.2.1)

**4th Grade Science: Earth and Space Science**

- Energy and fuels that humans used are derived from natural sources and their use affects the environment in multiple ways. (GLE: 4.3.4)

**5th Grade Science: Life Science**

- Plants acquire their material for growth chiefly from air and water. (GLE: 5.2.1)

**5th Grade Science: Earth and Space Science**

- Most of Earth’s water is in the ocean and much of Earth’s freshwater is in glaciers or underground. (GLE: 5.3.4)

**How to use:**

Use this *Colorado Reader* during your reading, science, or social studies time. Another option is to send these items home with your students (or include in homework/enrichment packets) to complete at home on virtual learning days. Or use during substitute days. Pass out one copy of the *Colorado Reader* to each student. Ask students to read the *Colorado Reader*, completing the activities within the *Reader* as they go. Answers to the activities in the *Reader* are included, should you desire to collect and score responses. To further enhance learning, incorporate any of the additional lessons from the Curriculum Matrix that are identified on below.

**Vocabulary:**

**agriculture:** the science or practice of farming, including cultivation of the soil for the growing of crops and the rearing of animals to provide food, wool, and other products

**acre-foot/acre-feet:** a unit of volume of water in irrigation; the amount covering one acre to a depth of one-foot

**climate:** the prevailing weather conditions in a specific area over a long period of time

**cropland:** land used to cultivate plants that are grown and harvested, especially grains, fruits, and vegetables

**farming:** the activity or business of growing crops and raising livestock

**flood irrigation:** a method of irrigation where a field is flooded to a predetermined depth

**furrows:** small ditches, usually 2-6 inches deep, between the rows of plants used to convey water

**gallon (gal):** a unit of volume for liquid measure equal to four quarts

**irrigation:** artificial application of water to the land or soil to assist plant growth

**natural resource:** materials or substances such as minerals, forests, water, and fertile land that occur in nature and can be used for economic gain

**pasture lands:** land used for grazing livestock that is planted and maintained by farmers and ranchers

**water:** a transparent, odorless, tasteless liquid, a compound of hydrogen and oxygen

**watershed:** a watershed is the area of land where all of the water that falls in it and drains off of it goes into the same place

### **Lesson Plans to go with this Reader:**

The Agricultural Literacy Curriculum Matrix is an online, searchable, and standards-based database for K-12 teachers. The Matrix contextualizes national education standards in science, social studies, and nutritional education with relevant instructional resources linked to Common Core Standards. Below are a few lesson plans that could be used in conjunction with this *Colorado Reader*. Find these lessons and more by searching the key words on the Curriculum Matrix at CoAgClassroom.org.

**Wad-a-Watershed (Grades 3-5):** Students examine the basic geography of a watershed, how water flows through the system, and how people can impact the quality of our water. (<https://agclassroom.org/matrix/lesson/67/>)

**Water Supply (Grades 3-8):** Students observe the change of water states as it moves through the water cycle. (<https://agclassroom.org/matrix/lesson/225/>)

**Learn, Protect, and Promote Water (Grades 6-8):** In this lesson students learn about water sources, water pollution, and water protection. Students participate in an activity where they demonstrate the water cycle and see the potential for our water supply to become contaminated. (<https://colorado.agclassroom.org/matrix/lesson/498/>)

**The Water Footprint of Food (Grades 9-12):** Explore concepts of sustainability by evaluating the water footprint (WF) of food. Students are introduced to irrigation practices throughout

the world, consumptive and non-consumptive water use, and investigate the water requirements for various food crops. (<https://colorado.agclassroom.org/matrix/lesson/821/>)

**Journey 2050 Lesson 3: Water (Grades 6-12):** Students will discuss the limited amount of fresh water on earth, identify how best management practices can reduce water consumption, discuss the need for water conservation and protection, and compare and contrast methods of irrigation for water conservation. (<https://colorado.agclassroom.org/matrix/lesson/591/>)

### **Answers:**

#### **Page 3: What is an Acre-Foot of Water?**

Answer 1: 43,520 feet

Answer 2: 48,000 feet for the playing surface; difference of 4,480

Answer 3: 977,553

#### **Page 4: Water Geography**

California, Nevada, Utah, Wyoming, Arizona, Nevada, New Mexico, Colorado, Nebraska, Kansas, Oklahoma, Texas, Iowa, Missouri, Arkansas, Louisiana, Kentucky, Tennessee, Mississippi; Countries: USA and Mexico

#### **Page 4: Locating Your Watershed**

