# Elementary School Watershed Education Programs

## ROARING FORK

### CONSERVANCY

Bringing People Together to Protect Our Rivers<sup>®</sup>

To schedule, please contact Megan Dean, Education Program Coordinator (970) 927-1290 - megan@roaringfork.org

### All our Programs are . .

- Inquiry based
- Correlated with 2020 CO Standards
- Hands-on, interactive
- Place-based walking field trips available
- Relevant
- Current Issues/Research-based
- Fun!!!



Teacher Workshops & Professional Development Opportunities: National Fishing in the Schools Program The GLOBE Program



### School Program Topics

BIOLOGY • ECOLOGY • CHEMISTRY Aquatic Insects, Wetlands, Riparian Ecology, Dichotomous Keys, Stream Health, Science and Art, Riparian Birds and Animals, Riparian Food Chains and Energy Transfer

#### SOCIAL STUDIES · GEOGRAPHY

Maps, Watershed, Colorado River Issues, Water Rights, Water Quantity, Debates, Ruedi Tour, Shoshone Tour, Headwaters Diversion Tour

#### EARTH SCIENCE · GEOLOGY

Snow Science, Landslides, Erosion, Stream Trailer, Groundwater, Weather, Climate, Surface Water, Non-Point & Point Source Pollution



<b>RFC Lesson</b> Grade Level Location	Program Description	Learning Target/Standard
<b>Erosion In Action - Stream Trailer</b> 3rd - 6th Grade Classroom or River Center	Get your hands wet creating rivers and watching geomorphology happen in a working stream trailer. Available May through October.	<ul> <li>Students use models to understand erosion and human impacts</li> <li>Earth's surface changes constantly through a variety of processes and forces</li> </ul>
<b>Macroinvertebrates</b> K - 6th Grade Classroom, River Center, or Field Trip	Explore and identify real aquatic river insects using identification guides and brock scopes.	<ul> <li>Organisms have structures with different functions</li> <li>Classification, interaction and interdependence</li> <li>Interaction between living and nonliving</li> <li>Life cycle and habitat</li> </ul>
<b>Busy Beavers</b> K - 3rd Grade Field Trip	Learn all about beavers through story telling, anatomy models and exploration of beaver signs and activity.	<ul> <li>Organisms have structures with different functions</li> <li>Classification, interaction and interdependence</li> <li>Interaction between living and nonliving</li> <li>Life cycle and habitat</li> </ul>
<b>Riparian Food Chains</b> 3rd - 6th Grade Classroom, River Center or Field Trip	Become part of the food chain and learn about energy transfer in ecosystems	<ul><li>Classification</li><li>Interaction</li><li>Interdependence</li></ul>
<b>Trout, Trout, Trout!</b> K - 3rd Grade Classroom, River Center or Field Trip	Enjoy a visit from Captain Cut- throat and learn about trout anat- omy and habitat needs.	<ul> <li>Organisms have structures with different functions</li> <li>Interaction between living and nonliving things</li> </ul>
<b>Dee Dee the Fryingpan River</b> <b>Dipper</b> K - 3rd Grade Classroom, River Center or Field Trip	Learn all about our favorite aquat- ic song bird through storytelling, dress up, and habitat exploration.	<ul> <li>Organisms depend on their habitat's nonliving parts to satisfy their needs</li> <li>Adaptations</li> </ul>
<b>Riparian Bird Olympics</b> 4th - 6th Grade Classroom, River Center or Field Trip	Compete in games using the adaptations of birds while exploring their habitat.	<ul> <li>All living things share similar characteristics</li> <li>Living things also have differences that can be described and classified</li> </ul>
<b>Art &amp; Science of Birds</b> 2nd - 4th Grade Classroom, River Center or Field Trip	Enjoy playing games using art to learn about bird anatomy and habitat needs.	<ul> <li>All living things share similar characteristics</li> <li>Living things also have differences that can be described and classified</li> </ul>

PLEASE NOTE: Our programs can be adapted to different grade levels and different seasons – just ask!

<b>RFC Lesson</b> Grade Level Location	Program Description	Learning Target/Standard
Weather Stations 4th - 6th Grade Classroom, River Center or Field Trip	Become a weather scientist by creating hypotheses and testing them with weather instruments.	• Weather changes are measured by differences in temperature, air pressure, wind and water in the atmosphere and type of precipitation
<b>Water Cycle Game</b> 4th - 6th Grade Classroom, River Center, or Field Trip	Become a drop of water and roll the dice to find out where you will land.	<ul> <li>Matter exists in different states such as solids, liquids, and gases</li> <li>Matter can change from one state to another by heating and cooling</li> </ul>
<b>Watery World</b> K - 2nd Grade Classroom, River Center, or Field Trip	Explore the properties and states of water through hands on activities and stories.	• Solids and liquids have unique properties that distinguish them
<b>Water History</b> 4th - 6th Grade Classroom or River Center	Explore real artificats from Colordao History while learning about how water shaped our past.	• Colorado History
Mapping and Seeing Watersheds 4th - 6th Grade Classroom or River Center	Use and create maps to understand earth systems and renewable resources.	<ul> <li>Earth and sun provide a diversity of renewable and non-renewable resources.</li> <li>Earth's surface changes constantly through a variety of processes and forces</li> </ul>
<b>Life Zones</b> 4th - 6th Grade Classroom or River Center	Use beautiful illustrations and activity guides to learn about the life zones in Colorado.	<ul> <li>Use geographic tools to research and answer questions</li> <li>Connect across human and physical systems</li> </ul>
<b>Sum of the Parts</b> 4th - 6th Grade Classroom or River Center	Design and plan your own piece of riv- erfront property while learning about human impacts on our watershed.	• Human impacts on the environment

PLEASE NOTE: Our programs can be adapted to different grade levels and different seasons – just ask!



#### CONSERVANCY

Bringing People Together to Protect Our Rivers<sup>®</sup>

Since 1996, Roaring Fork Conservancy has inspired people to explore, value, and protect the Roaring Fork Watershed. We bring people together to protect our rivers and work hard to keep water in local streams, monitor water quality, and preserve riparian habitat.

As one of the largest watershed organizations in Colorado, Roaring Fork Conservancy serves residents and visitors throughout the Roaring Fork Valley through school and community-based Watershed Education programs and Watershed Science and Policy Projects including regional watershed planning, water resource policy initiatives, stream management, and restoration.

Visit <u>www.roaringfork.org</u> to learn more.