

NATURE DETECTIVES

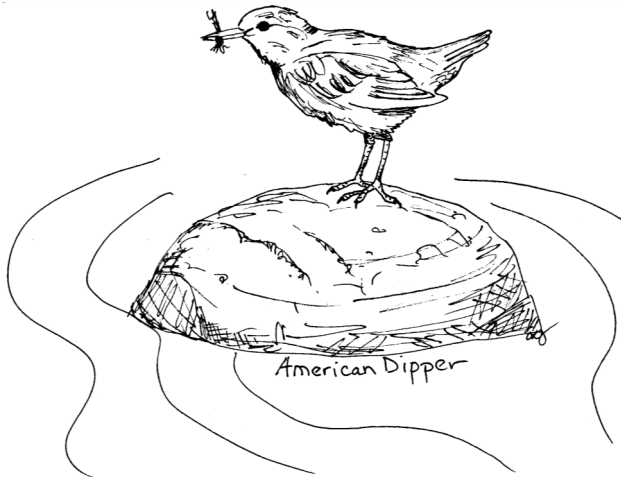
Spring
2009



Spring Brings Snowmelt

Drip! The rosy finch cocked its head, listening to the sweet sound of fresh water. Where was it? Drip! Drop! Over there. The sound was snow melting off the branch of a gnarled willow bush high in the mountains. The finch flitted over for a sip of water then settled on a willow branch, shaking its feathers with satisfaction in the warm spring sunlight.

The sun was melting snow everywhere, except on the highest peaks. Further downhill, a mule deer smelled water seeping from under a snowdrift and wandered over for a drink. The deer splashed his hooves in the icy flow as he stepped across to nibble new spring growth that had emerged with the longer days.



The rivulet trickled on, around boulders and plants, always running downhill by the shortest path, until it poured over a small mossy bank into a fast-moving stream. The stream tumbled down a gravelly bed and dropped over the edge of a steep cliff. A dipper heard the water splashing onto a rock and flew to the sound. She dove into the water to look for insects along the bottom. Soon she flew up to investigate the cliff behind the little waterfall. This is where she would build her nest this year.

Our Water Flows Downhill

The water that didn't get swallowed by the finch or caught in the dipper's feathers or splashed onto the grass by the mule deer continued to flow downhill. Some might have trickled all the way to the creek or reservoir that is the source of your drinking water. Maybe you used some of that water to brush your teeth last night.

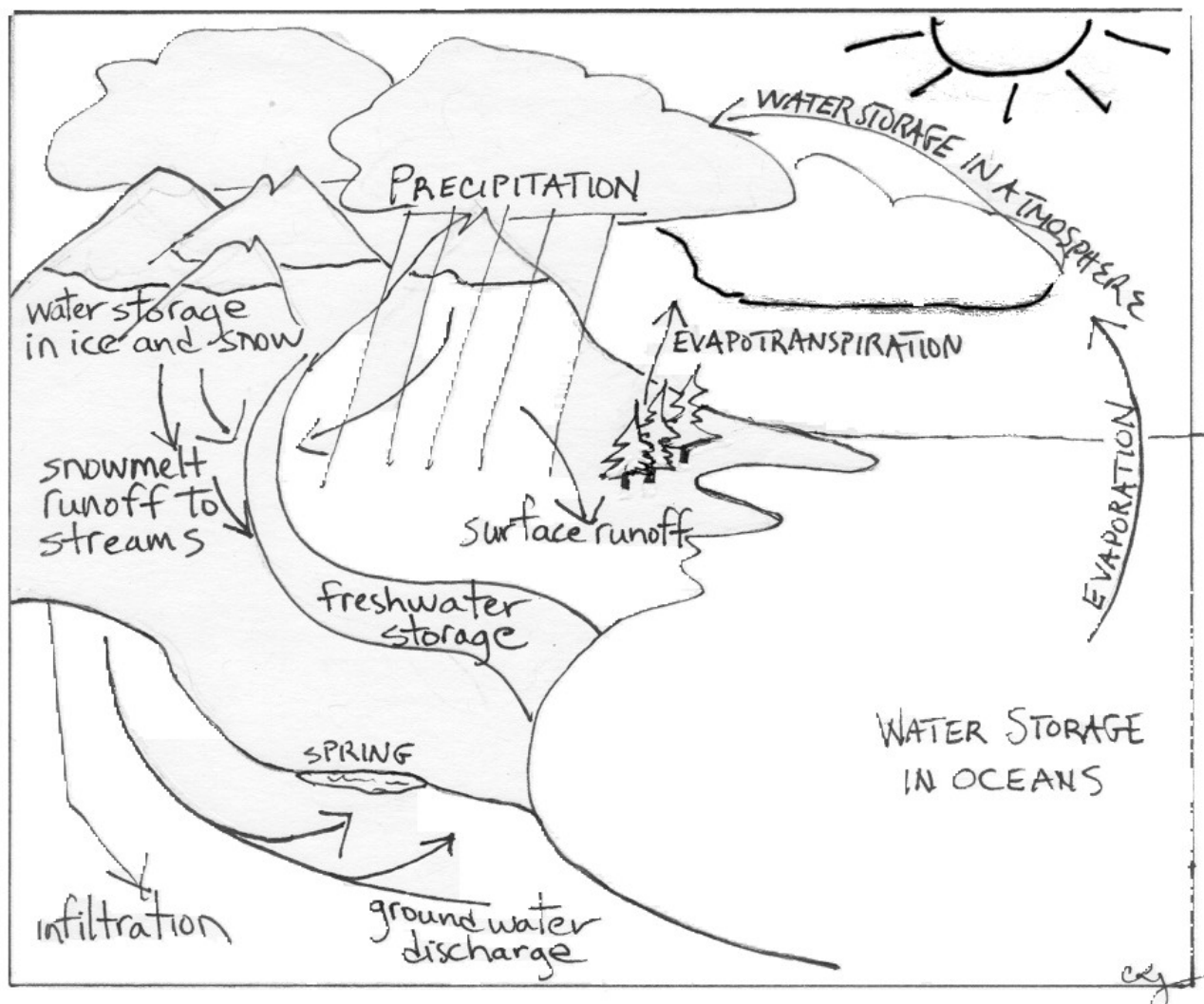
We depend on the snow that falls high in the mountains each winter for the water we use all year long in Boulder County. Sure we get rain and snow here, but with our semi-desert climate, those storms do not add up to the amount of water we need for drinking, cooking, bathing and watering our lawns, gardens and farms. Our pure mountain water is more valuable than sparkling diamonds.

Water On the Move

The amount of snow that falls in the high country depends entirely on the weather. Some years more snow falls and some years there is less. Some years it melts early and quickly and some years it melts more slowly. When there is less snowfall, there is less water available for people and animals and plants in Boulder County. Snowfall is part of the natural movement of water around our earth. This continuous movement is called the **water cycle**.

There has always been a certain amount of water on earth. Our planet's water moves around in the water cycle from the clouds to the ground, where it flows downhill toward the oceans. When the water evaporates back up into the atmosphere, it forms clouds again. Some water in the cycle is stored underground. Plants and animals take up some of the water, but they release water back into the cycle, too. We do not really use up water on our planet nor do we make more water. The water is always somewhere in the water cycle, but sometimes there might not be as much water for us to use as we would like to have available.

The Water Cycle



Every Living Thing Depends on Water

When you look at a globe, it is easy to visualize that the surface of the earth is mostly water. When you look at yourself in the mirror, it is hard to imagine that your body is mostly water. It is even harder to imagine that the water in your body was somewhere else in the water cycle at one time.



Living things need water to survive, and we've all been sharing the same water since creatures first appeared on earth. In fact, maybe the very same water you used to brush your teeth last night was once lapped up ages ago by a Diplodocus dinosaur.

Life Surrounds Water

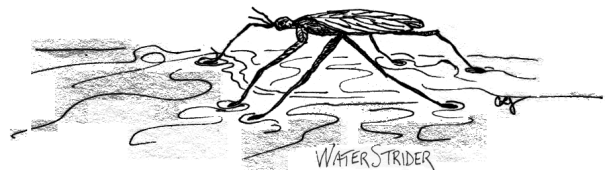
A great variety of plants and animals make their homes wherever there is available water, such as around streams, ponds and marshes. In these habitats they easily find the space, shelter and food they need as well as fresh water. Having more plant types creates more places for animals to hide from predators and find shelter from sun and wind. Thick vegetation near water also provides safe routes for animals traveling from one habitat to another. Leafy habitats make good places to build dens, nests and burrows. A variety of plants means more kinds of food, too. No wonder most animals live close to water.

When we are careful not to waste water, less water has to be taken out of streams and reservoirs for people and more water is left for the plants and animals that depend on it downstream.

Clean, Clear Water

Clean water appeals to all our senses. Most people enjoy hearing water trickling over rocks. Some folks travel to see it cascade over a waterfall or shoot out of a fountain. Have you ever run through a sprinkler to feel it spray on your skin on a hot day? Have you craved the taste of it cool and clean out of a drinking fountain? Or, stopped to smell the sweet scent of it during a summer rain shower? Mmmmm, clean, clear water.

When we are careful not to poison our water with toxic runoff, water stays pure and healthful for us and for all the other living creatures that depend on clean water for life.

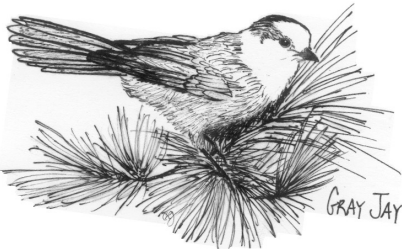


Do an Experiment with Water

Sometimes animals seem to enjoy water as much as people do. Have you watched a robin taking a puddle bath? See if you can attract birds to the sound of dripping water. With a grown-up to help you, poke a very small hole in the bottom of a plastic milk jug and hang it outdoors over a shallow dish.

Hang the jug where it is easy for you to see but where you are not so close you would make birds nervous. Fill the jug with water.

Does the sound of the water dripping into the dish attract any birds to drink or take a bath? You may have to repeat the experiment a few times before you see birds.



Observe Animals Using Other Water

Watch for birds or other wildlife using the lawn sprinkler water in your yard or at a local park. You might see a squirrel lapping up water with its tongue or spot a hummingbird zipping through the spray for a bath on the fly.

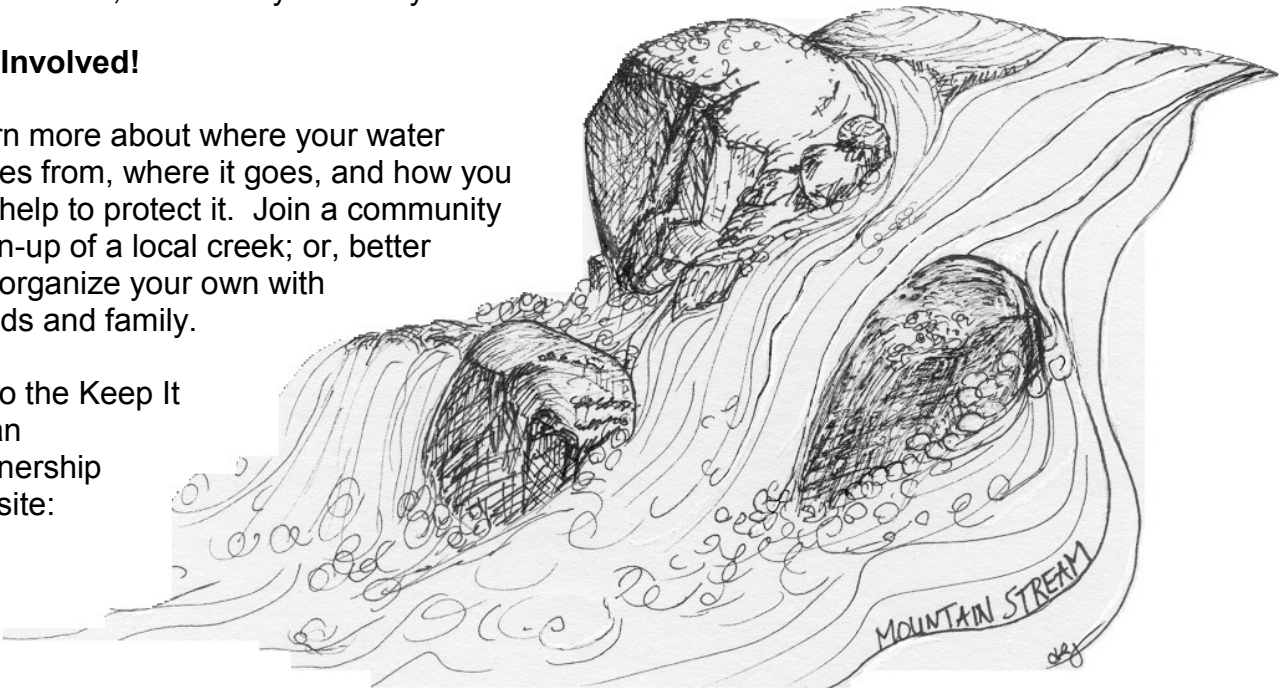
Make A Water Use List

Make a list of every use of water in your family in one day. Then brainstorm some ways that your family could cut down on the amount of water that you use. Put this list somewhere that it can be seen, to remind you of ways to save water.

Get Involved!

Learn more about where your water comes from, where it goes, and how you can help to protect it. Join a community clean-up of a local creek; or, better yet, organize your own with friends and family.

Go to the Keep It Clean Partnership website:



http://bouldercommunity.net/basin/kicp//kicp_education.htm to learn about upcoming events and ways you can help conserve water, including forming a Stream Team of your own to “adopt” and care for a section of a local stream.