



Friends of the St. Clair River Opt Outside Quest #2 – Imagine a Water Drop



Hills, 0.9 miles, some uneven terrain. The numbers correspond with the numbers on the wooden posts along trail and on the map attached. You will also see additional blue arrows along the way to keep you on the right path.

This quest will take you on a quick loop as you imagine how a water drop might move through Columbus County Park. Begin at the highest point of the park, work your way down to the river then quickly end up back where you started, very much like water in the water cycle!

#2 – Precipitation

Close your eyes and imagine a late fall, steady rain. Drops are falling all around, at your feet, on the pavement behind you, dripping through the trees; but where are they going next? Look around and point to some places where water might go.

As you continue on to the next stop, think about the forces that make water move.

#7 – Infiltration and Transpiration

Sometimes water hits the ground and soaks in. This is called **infiltration**. The roots of the trees and grasses you see around you can then suck some of that water up into the plant. One of the major forces that moves water through a plant is called **transpiration**. The power of the sun pulls the water through the plant and out through the leaves. The water is then returned to the atmosphere as water vapor.

As you round the corner and head down the hill, imagine you are a water drop that didn't infiltrate the ground, you are still surface water or **run off**. Gravity is about to take you down the hill. Move slowly, it's a gentle rain.

#8 – Surface Run Off

Water that flows down the hill and ends up here in the Belle River will flow downstream and leave the park. Use your hands to indicate the way the water is flowing. If it is safe, touch the water. Is it warm or cold? Can you feel the power of the water as it flows over your hand? Water drops that end up here in the river are important to many of the

animals that live in this park. Imagine that a raccoon stopped here briefly to search for freshwater mussels and take a drink, you are now a drop of water in his belly. You slosh around as he scampers down the path to the next stop.

#9 – Evaporation

What goes in must come out and in the case of water, what comes down must go up! Our raccoon friend paused at the bottom of the hill to relieve himself in the grass, leaving you in a puddle. The sun comes out and you are whisked up into the air through a process called **evaporation**. The sun produces a tremendous amount of energy, enough to heat water to over 100 degrees Celsius from 90 million miles away! Run up the hill as you are evaporated back into the clouds.

Your water drop journey has come full circle. Some drops of water will make their journey through the water cycle quickly, like you did, while others may spend decades or even centuries locked up in glaciers or deep underground. The water cycle has been functioning on our planet for billions of years, and all life depends on it! To learn more about watersheds and to discover how you can protect water, visit our website www.scriver.org.

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