

WHAT IS A WATERSHED?

Holston River Soil and Water Conservation District

AUDREY ROOT

What is a watershed?

A **watershed** is a region where all the water on the landscape drains into one body of water.

A watershed is also called a **drainage basin**.

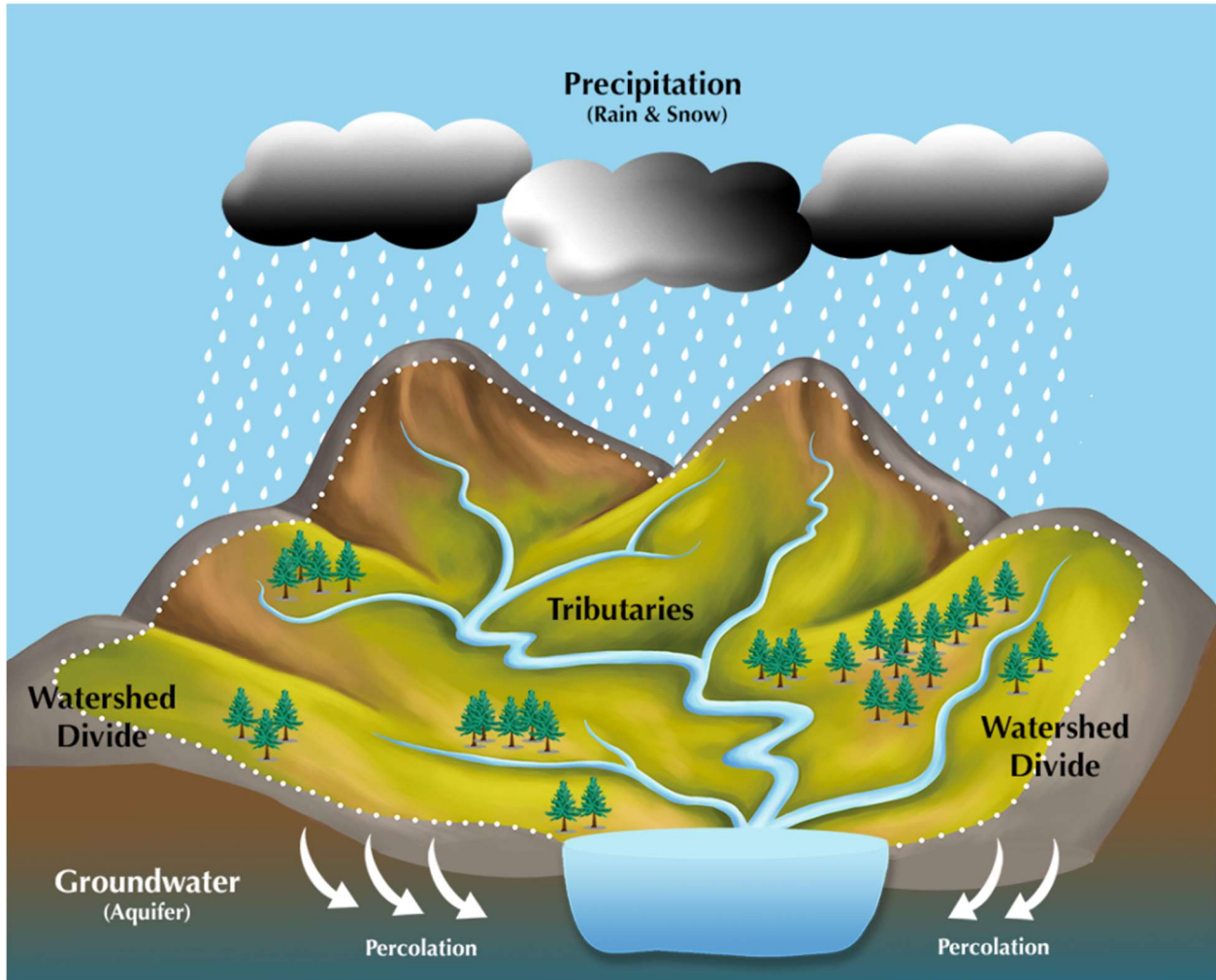


Figure 1: Water that enters within the watershed divide flows to a singular body of water. There are many different processes that bring water onto the landscape and bring water to its endpoint.

When precipitation falls on the land or water is discharged onto the landscape, it will flow into the body of water defined by the watershed region.

A **divide** separates two watersheds. They follow geographic features that prevent water from flowing across like mountains and ridges.

A **confluence** is the point where bodies of water come together, like when **tributaries** enter a river or an **estuary**, the area where a river combines with ocean water. This also marks a new drainage point for a larger watershed that includes the smaller ones that flow into it.

Watersheds are like Russian nesting dolls in that streams flow into rivers and all water eventually drains to the ocean.

You can understand watersheds on a **micro-scale**: the water in your neighborhood might flow into a stormwater retention pond.

Or on the **macro-scale**: the Mississippi watershed covers 1.2 million square miles!

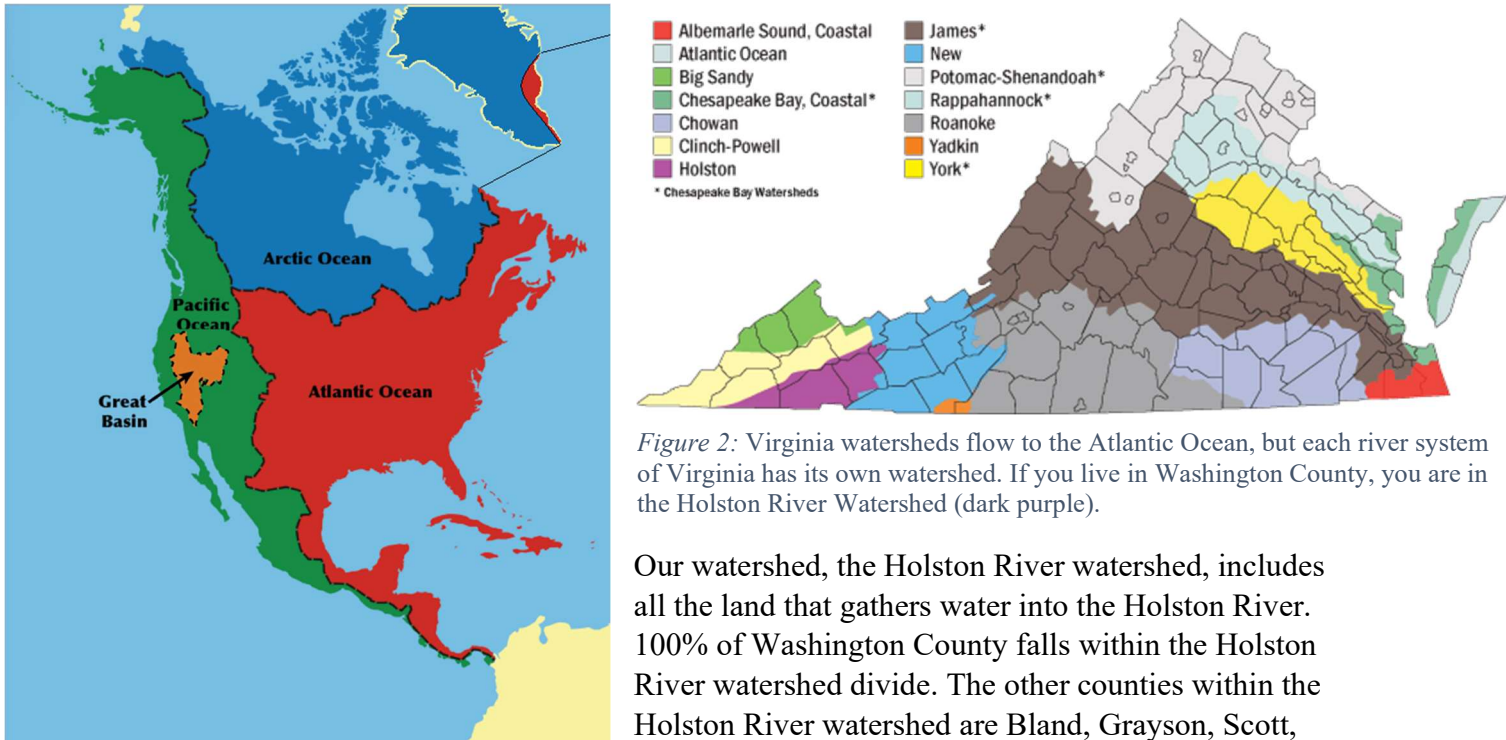


Figure 2: Virginia watersheds flow to the Atlantic Ocean, but each river system of Virginia has its own watershed. If you live in Washington County, you are in the Holston River Watershed (dark purple).

Our watershed, the Holston River watershed, includes all the land that gathers water into the Holston River. 100% of Washington County falls within the Holston River watershed divide. The other counties within the Holston River watershed are Bland, Grayson, Scott, Smyth, Russel, Tazewell, and Wythe Counties

Figure 3: North American watersheds all eventually drain to the ocean. In Virginia, all water flows to the Atlantic Ocean.



Environmental activity in Washington County can impact the Atlantic Ocean! We all live downstream of someone else, so remember to be mindful of your impact.

The water that is on Earth today is the same water that has been here for all of the planet's existence. Taking care of the water on Earth is a service to your community and the planet, but the impact will radiate across generations.

Even more important is the protection and conservation of freshwater systems, like the Holston River. You might think that because the Earth is covered in ocean, that we would never struggle to find usable water; however, only 2.5% of all water on Earth is liquid, fresh water. In Washington County, we get our water from the South and Middle forks of the Holston River, so your treatment of the watershed might just show up in your tap.



Figure 4: The tributaries of the Holston River are described at forks in the river: the North, Middle, and South Fork. They are all part of the same drainage basin. The Holston River's confluence with the French Broad River combine to make the Tennessee River. The Holston River watershed is just one drainage basin that makes up a huge system of watersheds that flow into the Atlantic Ocean.

Sources:

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