

COWPASTURE RIVER WATERSHED: AN INVALUABLE RESOURCE

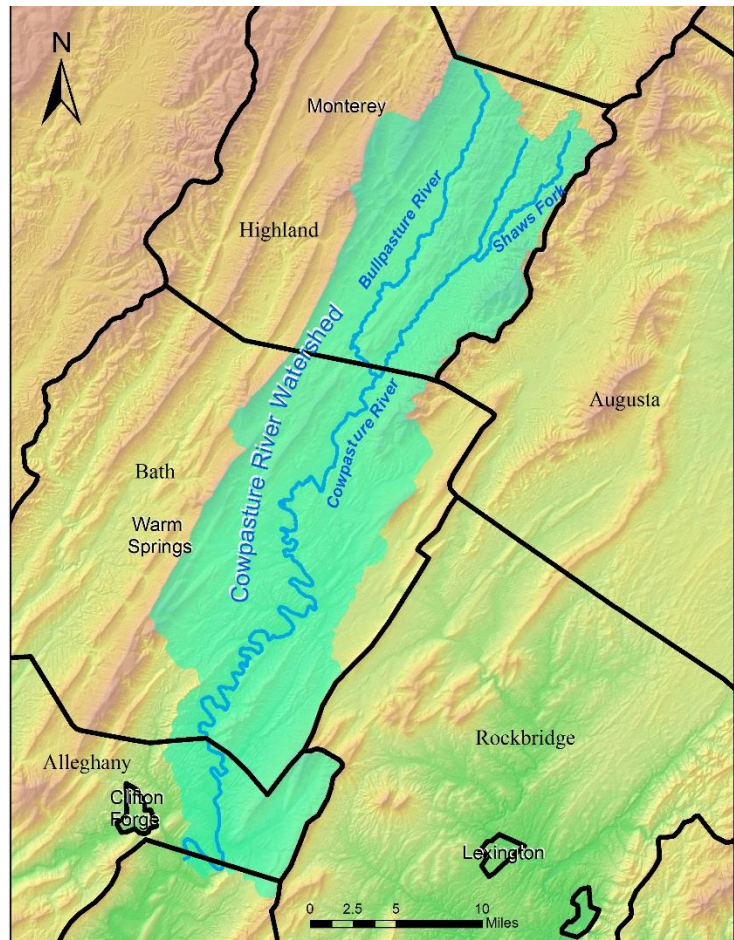
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Editor's note: The following essay is the first in a five-year series on water resources stewardship in the Cowpasture River Watershed, sponsored by the Cowpasture River Preservation Association and published by The Recorder. The goal of the series is to create awareness among students, citizens and officials of the critical need to protect our surface and groundwater resources, and to stimulate interest in progressive stewardship.

The Cowpasture River of Virginia is arguably the cleanest and most pristine river basin in the Commonwealth of Virginia. Nestled among the Allegheny Mountains and bulwarked against the influences of Washington and Richmond by the great Shenandoah Mountain, the Cowpasture River flows 84 miles southward through Highland, Bath, Allegheny and Botetourt Counties. The Cowpasture River joins the Jackson River near Irongate and together, these two rivers form the James River.

Geology – The Cowpasture River Valley is part of the valley and ridge province of Virginia and characterized by long parallel ridges and valleys underlain by sedimentary rock formations – limestone, shale and sandstone – repeatedly folded and faulted. The limestone formations underlying the Valley and its surrounding mountains, dissolved and eroded over geological time by water, create the fragile karst topography of the Cowpasture River Valley with many caves, sinkholes and losing streams. The Cowpasture River Watershed covers a land area of about 265,000 acres.

Tributaries – The primary tributary of the Cowpasture is the Bullpasture River with its headwaters north of Doe Hill, Virginia. The Bullpasture flows in a southwest direction for 26 miles between Jack Mountain on the west and Bullpasture Mountain on the east and it creates in between the Bullpasture Gorge before joining the Cowpasture River just below Williamsville. Simpson Creek joins the Cowpasture River in Allegheny County and several smaller native-brook-trout-quality runs and drafts join the Cow- and Bullpasture Rivers along the way.



Aquifers – Groundwater resources supply all of the domestic water for drinking, cooking and bathing in the four-county Cowpasture Watershed. In Bath County, the third largest spring in Virginia supplies the Coursey Springs Fish Cultural Station with cool, clear and potable water. Most water systems on small family farms depend upon wells or springs to supply potable water for beef or dairy cattle, sheep and poultry.

Forests – The globally unique Appalachian hardwood forests of the Cowpasture River Valley are composed of oak, hickory, maple and pine. Recognized as a biodiversity hotspot in the Appalachian region, the Cowpasture Valley features a continuous expanse of forested mountains and valleys with a remarkable collection of rare and endemic species, particularly in shale barrens and caves.

Indians – The American Indian name for the Cowpasture River was, Walatoola, which in English means "winding waters". The Cowpasture Valley in those times was a hunting and raiding territory that changed stewardship over the centuries among the Cherokee, Iroquois and Shawnee Nations. American Indians, long before the U.S. Forest Service was created by Gifford Pinchot and Theodore Roosevelt, practiced wildfire management of the Valley's grasslands to improve wildlife habitat for buffalo, elk and deer.

Settlers – Rangers explored the upper Cowpasture River Valley in the early 1720s and Irish settlers arrived in 1743 or 1744. Patrick Miller settled Donald McCaig's place northeast of Williamsville in 1750. The Cowpasture River Valley was the American frontier in the mid-1750s with scattered and isolated pioneer log cabins, small family farms carved from the forests, American Indian raiding parties, and the dawn of the French and Indian Wars. Pioneer cabins were often built close to all-season springs.

Forts – The Cowpasture River Valley in colonial times was defended by fortifications including several built by Col. George Washington. Fort Harper (1750's) was on the Bullpasture River near Doe Hill and garrisoned by 40 men. Fort George (1757) was on the Bullpasture River and featured an 80 square foot log fort about six miles south of McDowell. Fort Lewis (1756 – 1763) was on the Cowpasture River south of Williamsville and surrounded with a small stockade. Fort Dickinson (1756) was on the Cowpasture River south of Millboro Springs and garrisoned by 40 men.

Battles – The Battle of McDowell was fought on May 8, 1862 in what some historians view as the beginning of Thomas J. "Stonewall" Jackson's legendary Valley Campaign. The Union forces, under the command of General Robert H. Milroy, attacked the Confederates on Sitlington's Hill in fierce combat, but at days end the Union forces withdrew first to McDowell and later to Monterey. Seven hundred and thirty-seven Americans were killed, wounded or missing.

Farming – American Indians and early frontiersmen of the Cowpasture River Valley hunted buffalo, elk, bear, deer and wild turkey. The Scotch and Irish who settled in the Valley were livestock farmers raising cattle, hogs and sheep. The German pioneers who settled the Cowpasture were tillage farmers growing corn, oats, squash, wheat and potatoes.

Milling – Gristmills were common along the Bullpasture and Cowpasture Rivers in colonial times, during the civil war era and into the mid-1900s. Millers ground barley, buckwheat, corn and rye for local farmers in return, perhaps, for a share of the harvest. In Highland and Bath counties, there were at least three mills: Simmons Gristmill in McDowell (1900s), Mackey Gristmill in Williamsville (1900s)

and Fort Lewis Plantation Gristmill (1850). Gristmill sites often included a sawmill.

Logging – Between 1890 and 1920, loggers felled the old growth timber of the Cowpasture watershed and pulled huge timbers from the forest with teams of powerful draft horses. American beech, American chestnut, Eastern hemlock and sugar maple were the predominant Appalachian timber species. Drier hardwood sites yielded magnificent black oak, scarlet oak, Northern red oak, white oak and chestnut oak. Moister cove sites produced basswood, sugar maple, tulip poplar, and cucumber magnolia. Eastern hemlock, Eastern white pines, and American sycamores thrived along rivers and drafts.

Mining – The Longdale Iron Furnace, in the early 1800s, was built in the Cowpasture River Valley along Simpson Creek. The Appalachian Mountains produced the essential raw materials – iron-rich ore for smelting, limestone as a flux and hardwood trees for fuel. The iron mining and smelting industry was critically important to the growth of the young nation through the Civil War for the manufacture of hand tools, nails and spikes, and cannon balls.

The U.S. Corps of Engineers proposed in 1972 to dam the Cowpasture River near Padds Creek in what is now the Rough Mountain Wilderness area. In response, the Cowpasture River Preservation Association was formed by concerned citizens for the dual purposes of protecting water quality and quantity of the Cowpasture Watershed, and for fending off uninvited and unwanted federal and state government intrusions within the watershed. The Corps of Engineers gave up their quest to flood the Cowpasture River Valley in 1987.

“Here is your country. Cherish these natural wonders, cherish the natural resources, cherish the history and romance as a sacred heritage, for your children and your children's children. Do not let selfish men or greedy interests skin your country of its beauty, its riches or its romance.” – Theodore Roosevelt

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Internet Research URLs:

WIKIPEDIA: http://en.wikipedia.org/wiki/Cowpasture_River

Virginia Forest Watch: <http://www.virginiaforestwatch.org/docs/ourland.pdf>

Virginia DEQ: <http://www.deq.virginia.gov/Programs/Water.aspx>