The River and the Bay

From its headwaters, the Susquehanna River travels 448 miles through three states — New York, Pennsylvania, and Maryland — before reaching the Chesapeake Bay. With a watershed of 28,000 square miles, the Susquehanna is the longest commercially non-navigable river in North America and the bay’s largest tributary.

On its way to the Chesapeake, thousands of rivers, creeks, and streams drain into the Susquehanna. In turn, the river supplies the Chesapeake Bay with fifty percent of its fresh water (24 billion gallons) on a typical day.

The river and its valley offer clues to the area’s natural history. Two mighty forces are at work here. For millions of years, tectonic forces have been uplifting the landscape while the river and its tributaries have been eroding valleys and gorges into the uplands.

Below the surface are the “deep”s or submerged chasms on the eastern side of the river, a few miles south of here. These underwater canyons descend as much as 200 feet below the surface.

Although the forces that created the deeps remain a mystery, some geologists hypothesize that they were formed when ice jams concentrated the river flow against the east bank of the river. They suggest that the powerful drilling action of hydraulic vortices caused by confining the flow of the river into a narrow channel resulted in the formation of the deeps.