



What's a Watershed

The Delaware Bay is the second largest estuary on the east coast and is very important to fisheries.

What is a watershed? It is essentially a drainage basin. Folks often think that they only live in a watershed if their property borders a stream or river or lake. In fact, if you live anywhere on the land in North America, or on any landmass for that matter, you live in a watershed. Our country is divided into a few major watersheds and thousands of smaller ones.

Maurice River Watershed



Southern New Jersey's Leading Watershed Organization

P.O. Box 474 • Millville, NJ 08332
www.CUMauriceRiver.org

Higher topography separates drainage basins or watersheds and rain seeks the lowest point. North America's most famous division between watersheds is the Continental Divide—the top ridge of the Rocky Mountains. Water on the west side of the divide flows to the Pacific Ocean and on the east to the Atlantic Ocean. Here in southern New Jersey our topography isn't as dramatic but nevertheless rainwater still seeks lower areas, coming together to form our rivers.

In Cumberland County there are two major watersheds—the Cohansey and the Maurice.

These rivers flow into the Delaware Bay and ultimately the Atlantic Ocean. The Maurice River draws from a drainage area of about 385 square miles, meandering 50 miles primarily through Cumberland County, with its beginnings in Gloucester and Salem counties. The Cohansey runs 30 miles and drains 105 square miles, primarily in Cumberland County and originating in the eastern part of Salem County. The Maurice is the largest source of fresh water to Delaware Bay other than the Delaware itself. And the bay is the second largest estuary on the east coast and is very important to fisheries.

These two rivers and their tributaries are coastal rivers and their southern sections are tidal. There is a six-foot tide in their downstream portions where waters rise and recede twice daily. The head of tide on each of these rivers is defined by dams that do not permit the tidal waters to flow further upstream. The tidal sections are known as estuaries, where salt and fresh waters mix. The tidal waters come up over the marsh plain and deposit nutrients on the wetlands. The decaying marsh plants also provide sustenance to small invertebrates. Worldwide, this tidal exchange creates the most productive ecosystems on earth; these are the nurseries for fish.

Many species of fish use spawning strategies that involve migrations between salt and fresh water. Anadromous fish are born in fresh water but live most of their life at sea. And catadromous fish live in fresh water and return to the ocean to spawn. The young fish seek shelter and food in the smaller rivers and on the marsh plain. On these wetland expanses they can stay in pooled water that won't easily support larger predatory species. Furthermore, some young fish can't survive the higher

salinity levels present in oceans until they mature. Examples of local species that are dependent on these migration strategies are herring, striped bass, American eel, shad, and sturgeon, to name a few.

Ultimately, many of these fish end up on our dinner plates. According to the U.S. government, in 2015 Americans ate 15.5 pounds of fish a year, up nearly a pound from the previous year, representing the biggest increase in seafood consumption in two decades.

Wetlands provide lots of other miraculous benefits for us beyond producing fish. Their vegetation cleans our waters, protects the shoreline from erosion, reduces flooding, offers recreational opportunities and provides lovely vistas.

Now consider the fact that every drop of water in our watershed eventually ends up in our rivers and streams. Water is recycled continually on Planet Earth. In fact, environmental educators sometimes tell children to consider that a dinosaur bathed in the very same water we bathe in or drink each day. It is a finite resource that circulates

between the clouds and the land on a continual basis.

When it comes to water no adage is more accurate than "What comes around goes around." So whenever you use water, treat it with respect because ultimately it will end up in your drinking water supply, your river, your bathtub, and in your food. And not only now but for many generations to come.