



Delaware River Basin Facts

Drainage Area:

- ◆ Total: 13,539 square miles (35,066 square kilometers)
- ◆ In Pennsylvania, the Delaware River drains 6,422 square miles (16,632.98 square kilometers) which is about 50% of the basin's total land area.
- ◆ The Delaware River drains four-tenths of one percent of the total land area of the continental United States.

Length of River:

- ◆ Delaware River: 330 miles (530.97 kilometers)

Watershed Address from Headwaters to Mouth:

- ◆ The main stem of the Delaware River begins at Hancock, New York at the confluence of its East and West branches. The river is the common border for four states: New York, Pennsylvania, New Jersey, and Delaware. The Delaware River flows into the Delaware Bay, which empties into the Atlantic Ocean. The Delaware River becomes tidal at Trenton, New Jersey.

Major Tributaries in Pennsylvania:

- ◆ Schuylkill, Lehigh, and Lackawaxen Rivers

Population:

- ◆ Total: 7.8 million people
- ◆ In Pennsylvania: 4.9 million people

Major Cities in Pennsylvania:

- ◆ Allentown, Bethlehem, Easton, Philadelphia, Pottsville, Pottstown, Reading

Who Is Responsible for the Overall Management of the Water Basin?

- ◆ Delaware River Basin Commission which is a five-member interstate/federal government agency with offices in West Trenton, N.J. There are also responsible departments and agencies within each state: Pennsylvania, New York, New Jersey, and Delaware.

Economic Importance and Uses:

- ◆ Drinking water, agriculture, industrial, power generation, recreation, tourism, resource extraction, fishing, shipping, and treated waste water discharge are important uses for a river which serves about 15 million people with water, many of whom live outside the basin.



Industrial Uses:

- ◆ The basin has one of the nation's greatest concentrations of heavy industry, which includes chemical, oil refining, and others. The Delaware River Port Complex (including docking facilities in PA, NJ and DE) is the largest freshwater port in the world. Nearly 42 million gallons of crude oil are moved on the Delaware every day. It is home to the third largest petrochemical port and five of the largest east coast refineries. It is the largest North American port for steel, paper, meat imports as well as the largest importer of cocoa beans and fruit on the east coast. Energy plants, food processing industries, technology companies, paper mills, municipal and industrial sewage treatment plants, and agriculture are some of the industrial users of the river. It is valued as a freshwater port and major transportation waterway for the nation and the world.

Public Water Supply:

- ◆ Precipitation in the basin averages about 44 inches annually. The Delaware River drains only four-tenths of one percent of the total land area of the continental United States, but it serves approximately 5% of the total population of the U.S. or nearly 15 million people. About 736 million gallons a day are exported out of the basin to New York City and Northeastern New Jersey. Thermoelectric power generation, public water supply and agriculture are the top three consumptive users in the basin. For Example, thermoelectric power generation accounts for nearly 80%. While it has a relatively low consumptive loss rate of 1.6%, the sheer volume of water used ensures a substantial water loss to the hydrologic system through evaporation.

Agricultural Uses:

- ◆ The agricultural uses in the Delaware basin include dairy farming, poultry farming and related industries such as egg, milk, cheese, and ice cream production. Mushrooms are a major crop in Pennsylvania. Fruits, such as apples, pears, grapes, and cherries, are grown in the basin. Livestock include milk cows, cattle, and hogs. Pennsylvania has a dominant horticulture industry, which includes Christmas tree farming.

Historical Uses:

- ◆ For three centuries the Delaware River played a pivotal role in the industrial and economic development of the U.S. The river became a vital link to the growing industrial communities. Due to iron ore, forests, and limestone, the region became one of the great iron and steel manufacturing centers of the nation.
- ◆ The timber industry flourished and fed paper mills and shipyards. Iron built locomotives; ships were built at the yards in Philadelphia, Chester, and Wilmington; and cables for bridges came from the area. The Delaware Valley



became the heart of the industrial revolution in America and emerged as one of the great industrial areas of the world.

Recreational Uses:

- ◆ The economic impact of direct river recreation represents hundreds of jobs and millions in economic benefits. Above the Delaware Water Gap, the economic benefits for river recreation exceed \$70 million a year. Fishing, canoeing, tubing, hunting, camping, and swimming draw tourists and local residents. In the bay region, fishing, boating, water-skiing and sailing, birding, historical and cultural resources, and urban opportunities draw visitors and promote tourism.
- ◆ The Delaware is the longest un-dammed river east of the Mississippi. Three-quarters of the non-tidal Delaware River (about 153 miles) is now included in the National Wild and Scenic Rivers System. The tidal Delaware River and Delaware Bay are part of the National Estuary Program.
- ◆ As a haven for birders, it is one of the four major bird migration flyways in North America for raptors, waterfowl, shorebirds, and songbirds. It is an important stop in the spring and fall migration route used by over 250 species. Over a million birds stop and feed along the Delaware. The 120 mile stretch of the Delaware River from Hancock NY to the Delaware Water Gap is one of the largest and most important inland bald eagle wintering habitats in the Northeast. Numerous rare, threatened, and endangered non-avian species also reside in or are dependent upon the Delaware River.
- ◆ Four dozen fish species reside in the tidal river. American shad spawn in nontidal areas and shad fishing generates \$1.5 - 3.2 million in economic benefits annually.

Pennsylvania State Parks in the Delaware River Basin:

- ◆ 23 state parks are located in the basin:
Beltzville, Benjamin Rush, Big Pocono, Delaware Canal, Evansburg, Fort Washington, French Creek, Gouldsboro, Hickory Run, Jacobsburg, Lehigh Gorge, Marsh Creek, Neshaminy, Nolde Forest, Nockamixon, Norristown Farm, Promised Land, Prompton, Ridley Creek, Tobyhanna, Tuscarora, Tyler, White Clay Creek

Geological Information:

- ◆ The Delaware River Basin stretches across five physiographic provinces and a wide variety of geologic structures, each providing a distinctive perspective to the landscape. From its headwaters in the Appalachian Plateaus, the river flows southward crossing the Ridge and Valley Province, the Reading Prong, the Piedmont, and the Atlantic Coastal Plain where it reaches the Atlantic Ocean.



Unique Features:

- ◆ The Delaware River is recognized as one of the premier U.S. water pollution cleanup success stories according to Time magazine, August 1988. The clean up of the river resulted in a 100-mile (161 kilometer) expansion of the spawning grounds, and an increase in the populations of striped bass and American shad, migratory fish whose populations were greatly depressed earlier in this century.
- ◆ Pollution problems are caused by siltation, toxics released into the river, combined sewer overflows, stormwater runoff, depleted tributary stream flows, and other nonpoint source pollution.
- ◆ Delaware Water Gap is more than a mile wide and cuts through the Kittatinny Ridge. At the gap, the river is older than the mountains because it developed where present mountains were buried by rock that has since been eroded. The Delaware Water Gap National Recreation Area, over 67,000 acres, covers about 40 miles from below Port Jervis to southeast of Stroudsburg.
- ◆ In May and June each year, the Delaware Estuary becomes the gathering place for one of the largest populations of spawning horseshoe crabs in the world.
- ◆ The short-nosed sturgeon, a federally designated endangered species, is found in the lower Delaware.