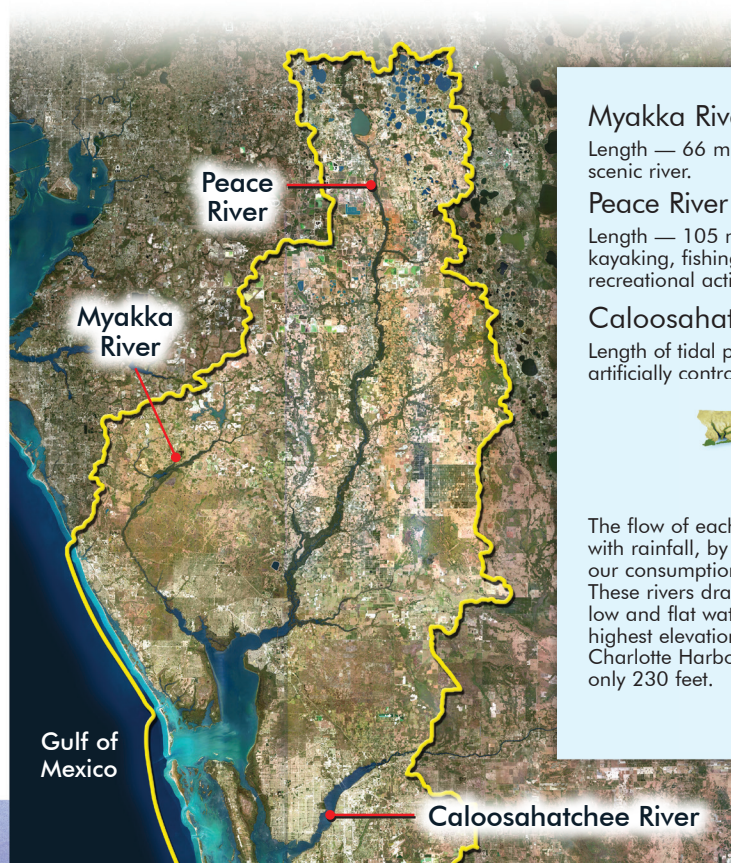


# The Charlotte Harbor Watershed

The Charlotte Harbor watershed covers a land area of 4,700 square miles in portions of seven counties. Approximately 1.34 million people live within its boundaries. Throughout this living space, water flows in sheets over the land, seeps underground through sandy soil, trickles into streams, rushes through man-made ditches and is carried by three major rivers into the Charlotte Harbor estuary.

## What is a watershed?

A watershed is an area of land that water flows across as it moves toward a common body of water, such as a stream, river, lake or estuary. Watershed boundaries in southwest Florida are not distinct. They vary depending on locations and intensity of storms. For example, Lake Trafford is sometimes in the Estero Bay watershed. All living things within a watershed share the water within it and are inextricably linked by a common drainage. As part of this system, humans have both a great need for water and a unique capacity to purposefully and inadvertently alter its course and quality.



### Myakka River

Length — 66 miles. A state designated wild and scenic river.

### Peace River

Length — 105 miles. A popular river for canoeing, kayaking, fishing, fossil-hunting and other recreational activities.

### Caloosahatchee River

Length of tidal portion — 30 miles. All water flow is artificially controlled by a series of locks and dams.



The flow of each river varies with rainfall, by season and by our consumption of water. These rivers drain a relatively low and flat watershed. The highest elevation within the Charlotte Harbor watershed is only 230 feet.



## Natural features that are modified by man:

### 1 Rivers, Streams and Lakes

Before humans altered the landscape, rainwater flowed from tiny streams into larger rivers and lakes. Now, much of that water flows within artificial ditches and large canals.

### 2 Sheetflow

During heavy rains, water flows in broad sheets over flat ground. This flow transports pollutants, makes seemingly dry ground into temporary streams and directly connects uplands to the sea.

### 3 Groundwater Flow

Water flows underground through sandy soil and porous limestone. This water supplies tributaries and shallow wells. It also carries septic tank effluent, lawn fertilizer and other pollutants.

### 4 Wetlands

These water-holding areas filter out pollutants that would reach rivers and estuaries, and they allow water to percolate into the ground. Wetlands are also habitats for diverse plant and animal species.

### 5 Reservoirs and Lakes

Artificial lakes store water by blocking or diverting the flow of waterways. This water storage controls flooding and provides water for household use and agriculture. Lakes are also dug to mine phosphate and gravel.

### 6 Roads, Ditches and Canals

Roads are raised surfaces that act like dams to interrupt sheetflow. Ditches lining roads permit fast, direct flow without time for the water to seep underground or for pollutants to be filtered.

### 7 Stormwater Ponds

These ponds are dug to retain water and to detain water during heavy flow. Artificial ponds store water like a wetland, but they require maintenance and lack diverse plant and wildlife habitat.

## Just add water...

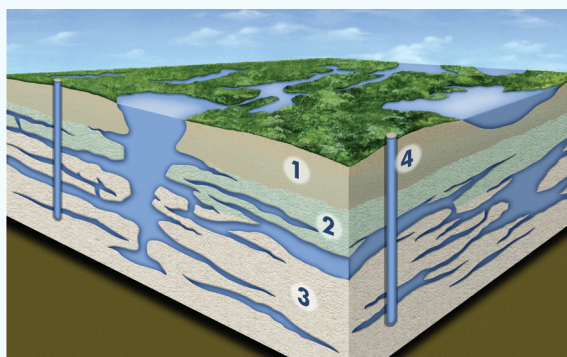
Water drives the ecological system we fit into, our economic activity and the quality of life we enjoy. These functions rely not just on some water, but on sufficient water of good quality delivered at the right time. We use water flowing over our watershed to drink, irrigate and wash away waste. To supply ourselves with just enough water—but not too much—we've engineered a complex plumbing system for our watershed. Within this system, a balance is needed to provide flows and levels that are required for the living things that share our neighborhood and make us want to live here.



Sharing water is vital. Water provides for the living things in our neighborhood, which in turn provide economic value and enhance our quality of life. Wetland forests, clean rivers, wading birds and abundant healthy fish populations contribute significantly to our overall happiness.

## The Aquifer System

Our aquifer is recharged by surface water, as long as the water is not forced to rush across our watershed. The aquifer that supplies us with clean drinking water is made of porous limestone, which soaks up water like a rocky sponge. Our aquifer water levels are falling, which means we are using more water than we are allowing to recharge.



1. Sandy soils allow water recharge
2. Impermeable soils seal off groundwater
3. Porous limestone holds water
4. Wells extract water

## How to help

Reduce your use — irrigation. Use native landscape plants that require little or no additional water. Collect water in rain barrels for watering plants.

Reduce your use — household. Install water-conserving faucets, showerheads, toilets and washing machines.

Reduce your use — electricity. One kilowatt hour takes 42 gallons of water to produce. Use less.

Support businesses that voluntarily conserve water through programs such as Florida Water Star<sup>SM</sup>.



A partnership working to protect the natural environment of Florida from Venice to Bonita Springs to Winter Haven.

[www.CHNEP.org](http://www.CHNEP.org)