When a drop of rain falls in Milton, VT, where does it go?

0-0:48

First, the drop of water enters the nearby Winooski River. The Winooski River is the largest tributary watershed of Lake Champlain and includes almost 10% of the land area in Vermont. The river begins in the town of Cabot and flows 90 miles to Lake Champlain in Colchester. The drainage area is about 1,080 square miles and is primarily forested with a notable amount of agriculture and urban area.

0:48-1:23

Now the rain drop enters Lake Champlain. The lake is 435 square miles and 120 miles in length. It's 12 miles wide at the widest point. How long this rain drop stays in Lake Champlain depends on where it ends up in the lake. It can vary from less than two months to as long as three years. The lake drains 8,235 square miles in Vermont, New York, and Quebec and at any time, the lake averages 6.8 trillion gallons of water. The average lake depth is 64 feet and the deepest part of the lake is 400 feet.

1:23-1:52

Once the rain drop makes its way through Lake Champlain, it enters the Richelieu River in Quebec. The Richelieu River has a drainage area of 9,160 square miles and measures 77 miles in length. The river includes 40 tributary rivers and streams in Quebec. As you can see while we fly over the area, the population density (of 140 people per square km) is very high compared to most of Quebec. Just over 70% of the drainage area is used for agricultural purposes

1:52-3:02

From there, our rain drop enters the Saint Lawrence River, which flows through Quebec and Ontario. From its headwaters, the river drains about 519,000 square miles and runs for 1,900 miles from its headwaters. This river also drains the Great Lakes and runs for 744 mi from the outflow of Lake Ontario. The Saint Lawrence River has the highest annual discharge of any Canadian river at 447 cubic kilometers per year. The basin covers parts of the provinces of Ontario and Quebec, and the states of Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania, Vermont, and Wisconsin.

3:02-end

The rain drop eventually drains into the Atlantic Ocean at the Gulf of St. Lawrence.