



Image credit: NASA

[Download Image Here](#)

Niagara Falls

The waters of Lake Erie drain into Lake Ontario via the Niagara River, which cuts across a 25-mile-wide stretch of land along the US/Canada border separating the two Great Lakes. The peaceful serenity of the river is interrupted, to say the least, about halfway toward its destination. I'm guessing the first word spoken after its discovery was either "wow", or "oops".

Torrents of rushing water liberated by collapsing glacial dams first reached the edge of the Niagara Escarpment - a long, steep cliff that runs from Illinois to New York - some 12,000 years ago. The river's powerful erosive forces have caused the falls to slowly migrate upstream. It currently sits about seven miles back from its original location.

Niagara Falls is ground zero for the world's electrical grid system. The first big hydroelectric power plant was built here in 1895. Unfortunately it was designed to produce direct current (DC) electricity, which had a maximum transmission distance of about 300 feet. One year later the great inventor Nikola Tesla, with help from George Westinghouse, built an alternating current (AC) power plant and successfully delivered electricity from the falls all the way to Buffalo, NY, a distance of about 20 miles.

