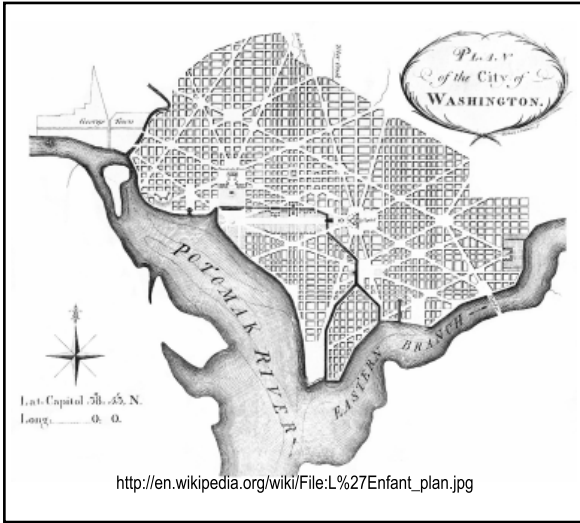


# Land Changes

Level H/I



by **Kathy Staugler**

Illustrated by **Amanda Noss**

Bind This End

For many years, scientists have studied the Earth we live on. Scientists have seen many changes to the Earth. Many of these changes happen because of weathering and erosion. Weathering and erosion cause slow changes to the Earth. Over time, this causes changes to rivers, mountains and land.



[http://en.wikipedia.org/wiki/File:River\\_eroding\\_volcanic\\_ash\\_flow\\_Alaska\\_Southwest\\_Valley\\_of\\_Ten\\_Thousand\\_Smokes.jpg](http://en.wikipedia.org/wiki/File:River_eroding_volcanic_ash_flow_Alaska_Southwest_Valley_of_Ten_Thousand_Smokes.jpg)

**River Erosion**

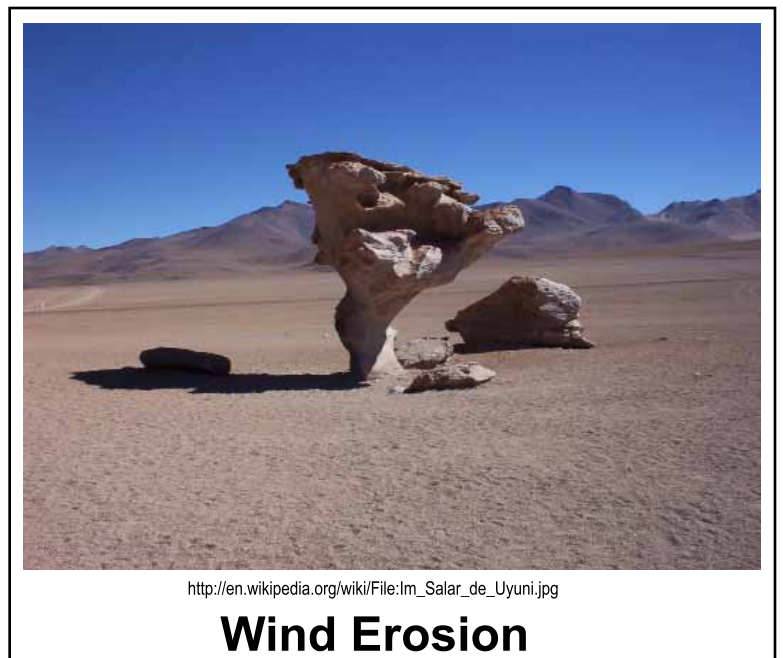
**Learn more about weathering and erosion here:**

<http://www.youtube.com/watch?v=lyysL02ZvQ8>

**Weathering** happens when the weather breaks down rocks. The weather might come from rain, wind and ice. Rain may get into the cracks of a rock. The rain might freeze. The ice may crack the rock. Plants and trees may also grow in the rocks. The roots from the plants and trees may break the rocks. Weathering happens very slowly. Weathering can even break down a mountain.



**Erosion** moves the rocks to a new place. When the rocks break from weathering, erosion can move the rocks. Erosion might come from rain, wind and ice too. Wind may blow the small rocks to a new place. Water from the rain may move the small rocks to a river. Erosion happens very slowly too. Weathering and

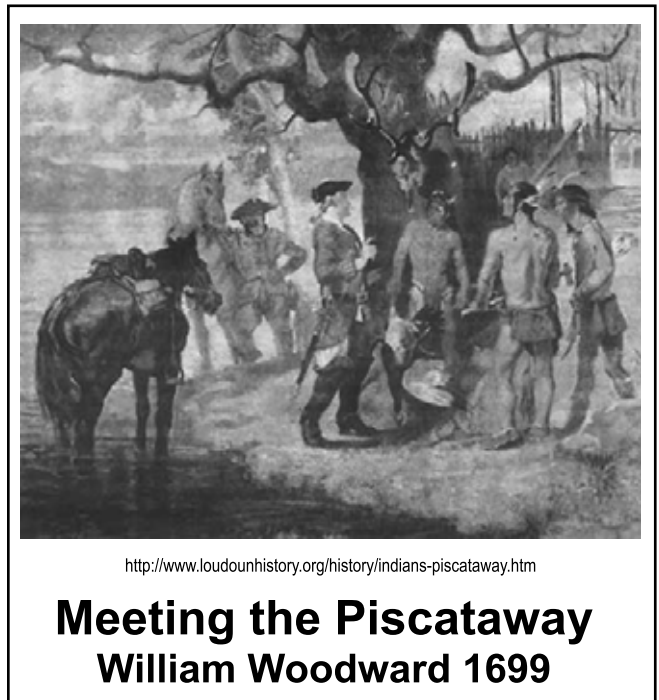


erosion have made changes to our Earth for a long time.



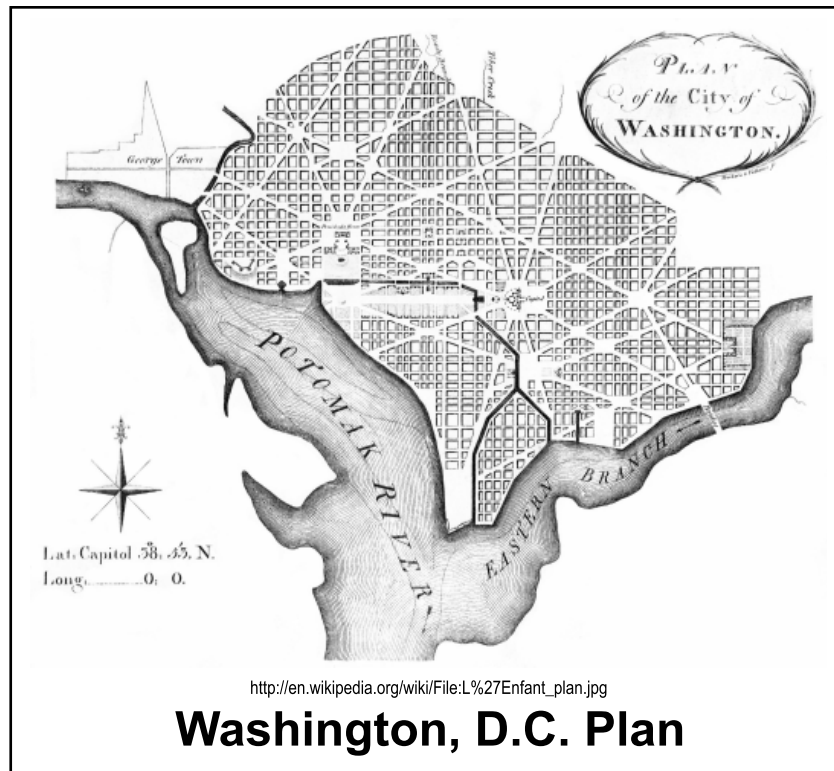
Weathering and erosion can change the Earth. But people can also change the Earth. The changes that people make can happen very quickly. Let's look at the way people made changes in Washington, D.C.

In 1600, the Piscataway Indians lived where Washington, D.C. is today. They lived in small tribes. The Piscataway Indians hunted for food in the wooded areas. They fished in the Potomac River. People began to come to America from Europe and traveled to the land around Washington, D.C. Captain John Smith sailed up the Potomac River from Jamestown to the land where the Piscataway Indians lived.





The land began to change because of people. In 1790, this land was picked to be our nation's capital. The new city was to be named Washington. The leaders of our country wanted to build this city on the Potomac River. How would the land change when people moved to this land?



In 1792, Charles L'Enfant made a plan for Washington, D.C. The city would have buildings and roads. Trees would need to be chopped down to make room for the new buildings. The plan said that the Capitol building would be a place for leaders to meet. A house would be built for the president to live in.





[http://en.wikipedia.org/wiki/File:Washington\\_Monument\\_circa\\_1860\\_-\\_Brady-Handy.jpg](http://en.wikipedia.org/wiki/File:Washington_Monument_circa_1860_-_Brady-Handy.jpg)

**Washington Monument  
1860**



[http://en.wikipedia.org/wiki/File:Washington\\_Monument\\_Dusk\\_Jan\\_2006.jpg](http://en.wikipedia.org/wiki/File:Washington_Monument_Dusk_Jan_2006.jpg)

**Washington Monument  
Present Day**

The land changed very quickly. In 1848, workers started to build the Washington Monument. More land needed to be made ready for this monument. Many people moved to Washington, D.C. and built houses.



In 1872, people built train tracks and a train station in Washington, D.C. Parks were built in the area. Even the Potomac River was changed for the city. Many new streets were made in the city. These streets were named by the letters of the alphabet. Later, more streets were built, with numbers.

Today the land is very different in

Washington,

D.C. than

when the

Piscataway

Indians lived

there. Over



[http://en.wikipedia.org/wiki/File:Lincolnmemorial\\_by\\_dusk.jpg](http://en.wikipedia.org/wiki/File:Lincolnmemorial_by_dusk.jpg)

**Lincoln Memorial**

600,000 people live in Washington, D.C.

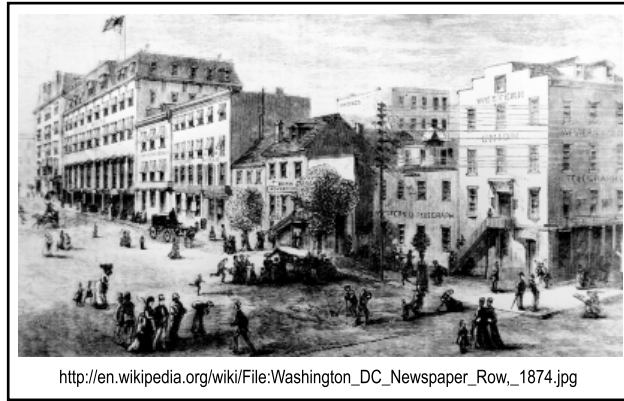
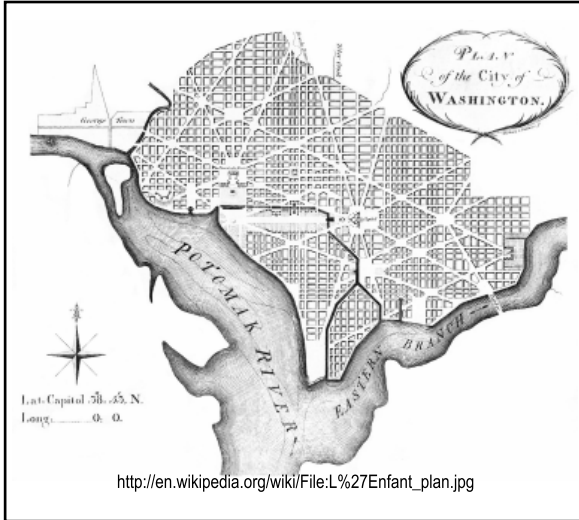
There are many government buildings.

Many people live in tall apartment

buildings. There are also 1,000 fast food

restaurants. People travel on highways,

subways and airplanes.



Changes to the land from weathering and erosion happen very slowly. Changes made by people happen very quickly.

Washington, D.C. is an example of a city that was changed quickly by people.

yes



# Land Changes

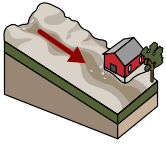
no



<p>change</p>	<p>slowly</p>	<p>Earth</p>	<p>weathering</p>	<p>erosion</p>	<p>rocks</p>
<p>break</p>	<p>quickly</p>	<p>people</p>	<p>Washington, D.C.</p>	<p>Piscataway Indians</p>	<p>Europe</p>
<p>move</p>		<p>Potomac River</p>	<p>capital/ Capitol</p>	<p>plan</p>	<p>buildings</p>
<p>travel</p>		<p>roads</p>	<p>leaders</p>	<p>house</p>	<p>president</p>
<p>live</p>		<p>Washington Monument</p>	<p>train</p>	<p>streets</p>	<p>government</p>

# Glossary

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**erosion** - moves rocks from one place to another; can be caused by water, wind or ice



**weathering** - rain, wind or ice that breaks down rocks