

Rising Water: How Climate is Affecting Coastal Areas

Picture yourself having to leave the place you call home because it has flooded. Rising ocean water floods your town, swallowing your family's home, your neighbor's home. For many people around the world who live in low-lying coastal areas, this nightmare is a reality. Rising ocean levels have forced them to leave their homes behind and build their lives elsewhere. This brings us to a very important question: why is the ocean level rising? Many scientists strongly believe it has to do with the world's changing climate.

The world has been getting warmer since the late 1800s. As the ocean waters get warmer, the water expands and takes up more space. The rising global temperatures also cause the polar ice sheets to melt. This releases more water into the oceans, causing the sea level to rise. The world has experienced periods of climate change for millions of years. During certain periods, the Earth has gotten cooler. Other times, the earth has gotten warmer. But many scientists are alarmed about this current period of global warming. The reason is that it is getting warmer at a much faster pace than it has in the past. Many of these scientists believe that human activity is the cause of this rapid warming. This activity includes burning fossil fuels such as coal and oil, which releases gases like carbon dioxide into the air. Gases like carbon dioxide trap heat in the earth's atmosphere, making the earth hotter.

In the last century, the sea level rose by over 7 inches. Scientists are not sure how much the sea level will rise this century. One organization of scientists working to learn more about this problem is the Intergovernmental Panel on Climate Change (IPCC). The IPCC released a report in 2013. It said that the sea level could rise by more than 3 feet by 2100. This might not sound like a lot. But it could cause large areas of land to fall underwater.

Predicting what exactly will happen is difficult. Scientists are trying to learn more about this problem in order to understand it better. For example, they're trying to figure out how quickly and how far the polar ice sheets will melt. This will help scientists tell how much the sea level will rise.

Understanding what will happen is very important. Millions of more people could lose their homes to rising sea levels. For example, the country of Bangladesh could lose 17 percent of its land by 2050 due to rising sea water caused by climate change. This means 20 million

people in Bangladesh could lose their homes. Bangladesh is unfortunately very familiar with this danger. In 1995, 500,000 people on one of its islands lost their homes due to rising sea levels.

