



# Climate Change and Water Security

flood	drought	wildfires	tropical storm	rising temperature	rising sea level
					

Water security in one part of the world can be impacted by events in other parts of the world. This is because the global water cycle connects all water. Ecosystems can be impacted if safe water is not available or accessible. Our water security is impacted by **natural events**, **human actions**, and **climate change**. Read below to learn some ways climate change and water security are connected:

## Impact on Earth's Ecosystems

### Weather

Rising temperatures cause the air to hold more water. This can lead some areas of Earth to get more rain. Too much rain leads to flooding. Rising temperatures can also dry out soil. Too little rain and dry soil can lead to drought and wildfires. Climate change also causes tropical storms to become more powerful.

### Animals and Plants

Changes to the global water cycle caused by climate change can harm Earth's ecosystems. Droughts may kill plants that animals depend on. Rising ocean temperatures may cause some animals to leave their natural habitats to find cooler water. Animals that cannot leave may not survive.



### Sea Levels

When temperatures rise, glaciers and ice sheets melt. This adds water to Earth's oceans. Warmer water also takes up more space than cooler water. The result is that sea levels are rising every year. Flooding from ocean water can damage freshwater sources. This threatens water security.

## Impact on Water Security



### Health

Droughts and floods make it difficult to access clean, safe water. Floods can spread diseases like cholera.



### Food Production

High temperatures or extreme weather can destroy crops. This can increase food prices.



### Economy

Harm to ecosystems affects people's jobs in industries such as tourism, fishing, and transportation.



### Infrastructure

Rising sea levels and extreme weather can damage city systems such as roads and railways. These are expensive to repair.

State if the following sentences are true or false. Justify your answer with sentences from the text:

- |  | True                     | False                    |
|--|--------------------------|--------------------------|
| 1. Rising temperatures may cause floods and droughts.                        | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Extreme weather does not affect animals.                                  | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Rising sea levels create more bodies of water and improve water security. | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. When access to safe water is difficult, there may be more diseases.       | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. When crops are destroyed by extreme weather, food becomes expensive.      | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. The health of ecosystems is related to a city's economy.                  | <input type="checkbox"/> | <input type="checkbox"/> |