



## Adaptation

- A 4-point adaptation plan for Boston and other cities around the US (1:38)  
<https://www.tpl.org/services/climate-smart-cities>

Even if we stopped emissions tomorrow, temperatures will remain higher because existing greenhouse gases will persist in the atmosphere for thousands of years. The climate has already changed, and more change is coming. Greenhouse gas levels are still rising and the planet is still warming.

Adaptation means anticipating the adverse effects of climate change and acting to minimize the damage they can cause. We will have to adapt to the changes. How can we adapt? Since sea levels will rise, we need to adapt our buildings and streets to handle regular flooding. We also need to build higher sea walls as the sea continues to rise. We might need to start the expensive process of pulling our cities back from the water's edge and moving them to higher ground.



The flood barrier on the river Thames near London, England  
Source: Andy Roberts - Flickr.com,  
<https://commons.wikimedia.org/w/index.php?curid=341229>

Other examples of adaptation measures include:

- using scarce water resources more efficiently
- adapting building codes to future climate conditions and extreme weather events
- building barriers against floods and rising storm surges
- developing drought-tolerant crops
- choosing tree species less vulnerable to storms and fires.

None of these options is easy or cheap, but action now will be less costly than delay.

Other impacts may be harder to predict. We expect more droughts and more fresh-water floods in a warmer climate, but we're not sure where or when those will happen. Adapting to uncertain changes like this means storing water in case of a drought, and changing our storm sewers, canals, and other infrastructure to be able to handle bigger floods.

Adaptation means taking action to reduce the harm to humans done by future disasters that we know will come at some point. It's a form of insurance that means we will be better able to protect human populations in a warmer future.



### *More information*

- Current impacts of climate change, and mitigation and adaptation measures to deal with them (12:04)  
<https://www.youtube.com/watch?v=jMIFBJYpSgM>