

## **Ecosystem Impacts**

Climate change will affect our ecosystem in many ways.

### **On Coastlines**

We could experience flooding and erosion in coastal regions. As temperatures increase, sea levels could rise around the world. Buildings, roads and sewage systems in low lying coastal regions could be threatened.

### **Forests**

Our forests could be at risk from pests and drought. A warmer climate could allow pests and diseases to migrate north. These same forests would become drier and more likely to catch fire.

### **Plants and Animals**

Warmer temperatures and changes in moisture levels could also affect plant and animal life. If these changes occur too quickly, many species may not have time to adjust.

### **Crops**

Impacts on Canada's agriculture will be seen in the response of crops, livestock, soils, weeds and insects to the warmer conditions. An estimated three- to five-week extension of the frost-free season could be of some benefit to commercial agriculture in Ontario, Quebec and the Prairies – however, it is also expected that dry soil conditions will intensify, especially in Ontario, and may result in reduced yields.

### **Wells**

The quality and quantity of drinking water might decrease as water sources are threatened by drought.

### **Harsh Weather**

Harsh weather conditions – such as droughts, winter storms, floods, heat waves and tornadoes – could be more frequent and more severe across the country.

### **Fisheries**

Our fisheries are also at risk, as climate change may affect both the populations and ranges of species sensitive to changes in water temperature, and have impacts on habitat. The Pacific marine fishery is likely to see lower sustainable salmon harvests in the south, but higher and more consistent harvests in the north. The Atlantic marine fishery is likely to suffer negative impacts resulting from complex and unpredictable changes in the water currents that shape the offshore habitats.

### **Lakes and Rivers**

Water levels in Canada's southern lakes are expected to decline, potentially affecting the quality of our drinking water, our use of the lakes for transportation, recreation and fishing, and our ability to generate hydroelectric power. In addition, storm sewers and sanitary systems in some areas may not be able to deal with increased precipitation, rising sea levels or storms.