

How Will Climate Change Affect Alaska?

Climate change means shrinking glaciers, receding sea ice and thawing permafrost in Alaska.

In addition to national data, the Third National Climate Assessment has chapters that explore how climate change will affect different regions of America.

Among the National Climate Assessment's findings for Alaska:

- Alaska has warmed twice as fast as the rest of the country.
- Over the past 60 years, Alaska has warmed • more than twice as fast as the rest of the United States. Average annual temperatures have increased by 3 degrees Fahrenheit and average winter temperatures by 6 degrees Fahrenheit.
- Alaskans are already seeing earlier spring • snowmelt, widespread glacier retreat, drier landscapes, and more insect outbreaks and wildfires because of climate change.
- Arctic summer sea ice is receding faster than previously projected and is expected to virtually disappear before mid-century.
- There is now only about half as much sea ice in the month of September as at the beginning of the satellite records in 1979 for that month.

Declining Sea Ice Extent



Source: Nation Climate Assessment

With the late-summer ice edge located farther north than it used to be, storms produce larger waves and **more coastal erosion**. One Alaskan village has already started to relocate to escape erosion, and several others are trying to.

- Alaska is home to some of the largest glaciers and **fastest loss of glacier ice** on Earth. •
- Permafrost temperatures in Alaska are rising. Thaw is already occurring in interior and • southern Alaska and in northern Canada, and will like continue.
- Uneven sinking of the ground in response to permafrost thaw is estimated to add as much as **\$6 billion** to the costs of buildings, pipelines, roads, and other infrastructure over the next 20 years.
- The increased frequency of warm dry summers and associated thunderstorms, along with • the drying out of wetlands, have led to more large fires in Alaska in the last ten years than in any decade since record-keeping began in the 1940s.

Want even more info? Check out these state-by-state fact sheets on the White House web site