

CLIMATE IMPACTS

The science is clear: recent extreme weather is becoming part of our new normal and the impacts are far reaching.

Climate change is compounding challenges here in northwest Washington, highlighting systemic inequities as well as a lack of preparedness. These projections for our region highlight the need to invest in resilience in the face of climate impacts that will touch our lives in multiple ways.

TRENDS

IMPACTS



DROUGHT

A **38% reduction in April snowpack** is likely by 2030-2050. We could see a **22% decrease in summer precipitation** by the 2050s, along with a **23% decrease in summer streamflows** by 2030-2050.

- Less water storage in the mountains
- Irrigation and other water shortages
- Winter and summer recreation impacts
- Increased impacts on salmon
- Conflicts over water resource mgmt.



INCREASED TEMPS

By mid-century the avg. year in WA will be hotter than that hottest year in the 20th century. We could see a **67% increase in the number of hot days** (above 90°F) annually. Glaciers in the Nooksack River basin could **recede by 90%** by 2100.

- More lethal heat-related illness, esp. the elderly and outdoor workers.
- More frequent harmful algal blooms
- Salmon die-offs from elevated water temps



WILDFIRE + SMOKE

In northwest Washington we can expect a **160% increase in particulate levels** from wildfire smoke by mid-century.

- Unsafe conditions for outdoor workers
- Decreases in outdoor recreation
- Adverse effects on crops and livestock
- Increased respiratory-related hospital admissions



FLOODING

Higher winter stream flows from increases in precipitation (**streamflows up 16%**). Under a moderate emissions scenario, streamflow in the Nooksack River during a 100-year flood event is projected to **increase by 27%** by the 2080s.

- Costly flood protection and recovery
- Loss of property, displacement
- Degradation of salmon habitat
- increases in pollution, costly stormwater management



SEA LEVEL RISE

Marine water levels are expected to rise by two feet by 2100 if we can't avoid significant increases to global greenhouse gas emissions. Higher emissions scenarios predict as much as **four feet of sea level rise** in parts of Whatcom County.

- Costly flood protection and recovery
- Loss of property, displacement
- Impacts on marine industries, including fishing and tourism

