

Climate change is everywhere.



NORTH AMERICA

- Northwest fish moving north, increasing coastal erosion
- High temperatures, severe drought, enhanced wildfires, and insect infestations are stressing ecosystems
- Extreme heat events caused increases in mortality and sickness
- Energy demand for cooling increasing and infrastructure enduring significant damages from extreme events
- Decreasing snowpacks affecting seasonal stream flows

EUROPE

- Major crop production decreasing during summer heat waves, diseases affecting livestock
- Sea life habitats shifting, invasive species invading
- Plants shifting to higher altitudes, birds shifting northward and declining
- Heat waves caused thousands of fatalities
- Damages from increasing flood events put insurance markets under pressure
- Glaciers retreating

ASIA

- Decreases in wheat and corn yields
- Declining coral reefs, northward spread of corals, shift in fish species, coastal erosion
- Plants, animals shifting upward, poleward, plants changing, invading
- Increases in water-borne diseases
- Suffered huge economic losses from extreme weather and climate events
- Permafrost thawing, shrinking mountain glaciers, surface water degradation, reducing soil moisture

SMALL ISLANDS

- Rates of sea level rise much higher than global average, unprecedented coral reef bleaching events
- Plants moving higher in elevation, disease vectors affecting ecosystems
- Increasing incidence of diseases such as malaria and dengue fever
- Beach erosion, coral bleaching, and reduced freshwater during droughts affecting tourism
- Reduced freshwater availability from decreasing streamflow

SOUTH/CENTRAL AMERICA

- Increased agricultural yields and expansion of agricultural areas
- Increased coral bleaching and mangrove degradation
- Increased tree mortality, forest fires in Amazon, rainforest degradation and recession in Amazon
- Shrinking glaciers, changes in extreme flows of Amazon River, changing discharge patterns in rivers

AFRICA

- Farmers have had to respond to changing rainfall patterns
- Declining coral reefs in tropical waters
- Tree density decreasing, range shifts of Southern plants and animals, increases in wildfires
- Increasing malaria incidence
- Reduced fishery productivity
- Retreat of tropical highland glaciers, reduced discharge in West African rivers, lake surface warming

AUSTRALIA & NEW ZEALAND

- Heat stress for dairy cows
- Climate zones shifting and warming ocean affecting sea life
- Heat waves and drought causing mass die offs, changes in distributions, traits, structures of species and communities
- Heat-related physical and mental health problems and deaths
- Mining disrupted, stress on energy networks and black-outs, tourism hurt
- Extreme drought caused unprecedented decline in river flows affecting urban centers, irrigation, and water sharing

Note: Impacts and categories for each region do not include projected impacts in future. All observed impacts identified have been attributed in some capacity to climate change, specifically. (Source: IPCC AR5 WGII 2014)

impact categories



AGRICULTURE, LIVESTOCK, FISHERIES, FOOD PRODUCTION AND SECURITY, LAND-USE CHANGE, FORESTRY



COASTAL AND MARINE SYSTEMS, SEA LEVEL RISE, INUNDATION, SHORELINE CHANGE



ECOSYSTEMS AND BIODIVERSITY



HUMAN HEALTH



SETTLEMENTS, INDUSTRY, INFRASTRUCTURE, URBANIZATION, PRODUCTION SYSTEMS, ECONOMICS



WATER RESOURCES, AVAILABILITY, AND SECURITY