

Geography Year 7 Tasks – Work Pack 3

Case Studies

Task 1: Using the information below, write a brief report on the impact of the Australian Bush Fires. The report should include information, opinions and the response from the government/world. What is the long lasting impact?

What's happened so far?

- Dozens of fires erupted in New South Wales, Australia, prompting the government to declare a state of emergency in November 2019. Fires rapidly spread across all states to become some of the most devastating on record. An area about the size of South Korea, roughly 25.5 million acres, has burned. Many people died and others had life changing injuries.
- Summer extends from December to February in Australia, with fire season typically peaking in late January or early February. By January 10th, another round of massive evacuations began across the hardest-hit regions of the southeast due to dangerous winds fanning the flames.
- The fires in New South Wales, the state most affected, were finally declared “contained” on February 13th. The relief came after torrential rains marked the wettest week in the region in three decades.
- The smoke became another disaster. On January 1st, Australia’s capital recorded the worst pollution it’s ever seen, with an air quality index 23 times higher than what’s considered “hazardous.” Smoke in the city crept into birthing rooms, stopped MRI machines from working, and triggered respiratory distress in one elderly woman who died soon after she stepped off a plane.
- More than 1 billion mammals, birds, and reptiles likely lost their lives in the blazes, according to one estimate from the University of Sydney. Around 25,000 koalas were feared dead on Kangaroo Island. Eight thousand koalas, a third of all the koalas in New South Wales, are believed to have perished, and about 30 percent of the koalas’ habitat has also been wiped out. The continent is home to 244 species that are not found anywhere else. The region also has the highest rate of native mammals becoming extinct over the past 200 years.

What does climate change have to do with it?

- Firestorms are not new to Australia. It’s typically hot and dry, similar to conditions in California or the Mediterranean. Eucalyptus forests in Australia have a unique relationship to fire; the trees actually depend on fire to release their seeds.
- This season’s fires, however, are unprecedented. It’s a much earlier fire season, and the fires have gotten very big, very early, Kolden tells The Verge. Weather conditions feeding the fires are historic. Australia suffered from its hottest day on record on December 18th, reaching a national average temperature of 41.9 degrees Celsius (107.4 degrees Fahrenheit). Last month was Australia’s hottest December, and 2019 was the country’s hottest and driest year on record. Extreme heat and drought create more tinder to fuel fires. The heightened intensity and frequency of wildfires fall in line with scientists’ predictions for a warming world.
- Australia Prime Minister Scott Morrison is facing heat for his own inaction on climate change and defense of coal. Morrison’s administration faced criticism for thwarting global efforts to complete a rulebook for implementing the Paris agreement during a United Nations climate conference in Madrid in December. Morrison also got backlash for taking a vacation to Hawaii — which he ended up cutting short — in the midst of the fires.
- Thousands of protesters took to the streets in Sydney, Melbourne, and other cities across Australia on January 10th. Demonstrators called for an end to fossil fuel subsidies and action on climate change, and they shut down some roads while demanding that Prime Minister Morrison leave office.

How are the fires being fought?

- Australia relies heavily on volunteer firefighters, especially in the rural bush where much of the fires are burning. Its fire response relies more heavily on community efforts compared to places like the United States that have centralised fire management systems. Help is also coming from abroad: the United States and Canada have sent firefighters to battle the blazes.

What help was available?

- In Australia, Givit had a list of specific items needed by people and organizations affected by the bushfires.
- People with emergency response training could sign up to volunteer in Queensland.
- The WWF charity collected donations to restore habitats for koalas impacted by the fires.
- The Australian Red Cross’s fire recovery and relief fund was set up to help.
- People were urged to donate directly to fire services.

Task 2: Answer the following questions, based on the Australian Bushfires case study.

What were the social impacts?	
What were the environmental impacts?	
What were the economic impacts?	

Decide if the following statements are **Social/Economic/Environmental**:

- 1 billion animals perished in the bushfires =
- Australia did not have enough firefighters =
- The Australian PM encouraged fossil fuel production =

Extension: Which of the impacts above (**social, environmental and economic**) do you think is the most important issue in Australia and why?

Task 3: Create a leaflet for the World Wildlife Fund (WWF) regarding the impact on wildlife in Australia. There is some information below to assist.



Donate to WWF's Australian Wildlife and Nature Recovery Fund

The fires are out, and we are now at a critical moment as we work to restore what Australia has lost.

- The unprecedented fire season saw fires burning in every state and territory in the country, but for the first time this fire season, all fires have now been contained. It has been a long and hard fight for our volunteer rural firefighters, but the work they have done has been exceptional.
- With the fires contained, as a nation we're starting to assess what we have lost and begin the long road to recovery ahead.
- At least 32 lives have been lost and over 2,700 homes lost. WWF is greatly saddened by the loss of life and homes, as well as all the injuries, pain and suffering caused by the bushfires.
- More than 12 million hectares of Australian land has been burnt. When habitat is lost, our wildlife suffers.

It's been estimated that around 1.25 billion animals have been killed across Australia to date.

- This includes thousands of koalas and other iconic species such as kangaroos, wallabies, kookaburras, cockatoos and honeyeaters burnt alive, and many thousands more injured and homeless.
- The catastrophic megafires that swept across our country have greatly exacerbated the species extinction crisis we're already facing. That's why WWF-Australia has called for immediate global support to establish a AUD\$30 million **Australian Wildlife and Nature Recovery Fund**.
- Whilst we still may not have the full picture yet, we already know the WWF Australian Wildlife and Nature Recovery Fund will deliver:
 - **Wildlife response** - including partnering with wildlife response organisations, communities and scientists nationally for a swift and effective response and recovery at scale.
 - **Habitat restoration for people and nature** - including restoring forests and damaged wildlife habitat, stopping deforestation, including cultivating habitat connectivity, core habitat and Indigenous and rural fire management.
 - **Future-proofing Australia** - including driving innovative solutions to help mitigate climate change, driving climate preparedness, species adaptation and long-term wildlife and nature conservation efforts towards securing Australia's natural resources for people and nature.

What your donation does to help

- **Urgent care:** supporting specialist veterinarians who are providing care and medical treatment to injured wildlife across Australia.
- **Food and water:** providing starving wildlife with food and water in bushfire impacted regions.
- **Finding koalas and other fire-affected wildlife:** deploying koala detection dogs and drones to bushfire sites to search for surviving koalas and conducting rapid threatened species assessments in fire-affected areas.
- **Supplies and triage:** getting veterinary supplies to bushfire triage sites.