

WILDFIRE

Case Studies and Fire Hunt

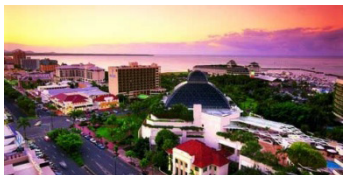




Please note, there are two activities in this pack: “Case studies” and “Fire hunt”

Case studies

This activity is targeted at giving students awareness of the environmental hazards that can increase the risk of a wildfire affecting a property such as a house, school building or work-

Instructions:

1. Provide students with a copy of the worksheet on page 2 and give students 15 minutes to read the description of each area and assign a rating of 1-5 of least fire prone, to most fire prone – with 5 being the most fire prone.
2. After completion of the activity ask students to share their answers to the question and discuss the reasons behind their decision. Where might these locations be in Cairns?

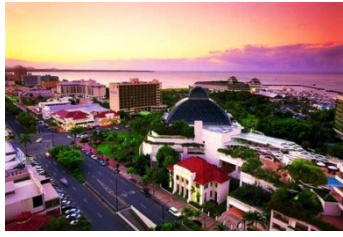
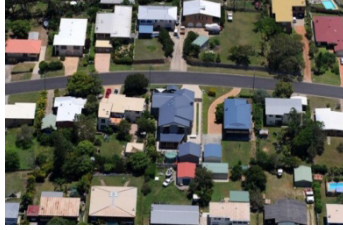



An office block in the middle of the city with office buildings on either side. To the front of the building is a busy road, with continuous traffic for most of the day. On the far side of the road is a park with large evergreen trees. Behind the building is a series of shops selling clothing, shoes and other fashion items.		1
An estate full of medium-sized, family homes. There are a number of small park areas in the estate so that children have room to play because the houses take up most of the land on the small blocks. The estate backs onto a bush reserve on two sides and main roads run along the other two sides		3
A number of homes on ½ to 1 hectare blocks, approximately three hours' drive from the city. Homes are in natural bush areas with families choosing them for the calm peaceful lifestyle. The surrounding area bushland is being kept as a natural reserve for birds and small mammals.		5
A sparsely populated rural area with little rain fall. There is only a small amount of vegetation and houses are spread out across a wide area with farms in between. There are low farmland areas and grass fields surrounding the homes.		4
A seaside block, with a number of units and houses for tourists to spend the summer. A number of residents live in the area all year round, but things really get busy during the warmer months. The buildings face the sea-front with more buildings and narrow roads behind. There is a small fish and chip shop nearby and a park area for walking dogs is at the end of the street.		2

WILDFIRE

Case studies

Below are five different environments. Think about where these locations are in Cairns.

1. Number each of the environments in order from least fire-prone area to most fire-prone area.
2. Justify your decision.

<p>An office block in the middle of the city with office buildings on either side. To the front of the building is a busy road, with continuous traffic for most of the day. On the far side of the road is a park with large evergreen trees. Behind the building is a series of shops selling clothing, shoes and other fashion items.</p>		
<p>An estate full of medium-sized, family homes. There are a number of small park areas in the estate so that children have room to play because the houses take up most of the land on the small blocks. The estate backs onto a bush reserve on two sides and main roads run along the other two sides</p>		
<p>A number of homes on 1/2 to 1 hectare blocks, approximately three hours' drive from the city. Homes are in natural bush areas with families choosing them for the calm peaceful lifestyle. The surrounding area bushland is being kept as a natural reserve for birds and small mammals.</p>		
<p>A sparsely populated rural area with little rain fall. There is only a small amount of vegetation and houses are spread out across a wide area with farms in between. There are low farmland areas and grass fields surrounding the homes.</p>		
<p>A seaside block, with a number of units and houses for tourists to spend the summer. A number of residents live in the area all year round, but things really get busy during the warmer months. The buildings face the sea-front with more buildings and narrow roads behind. There is a small fish and chip shop nearby and a park area for walking dogs is at the end of the street.</p>		

WILDFIRE

Fire Hunt

This activity is aimed at increasing student awareness of the hazards that can cause a wildfire.

1. Print out pictures of the causes below and hide them around the classroom/hall / playground. Have multiple print outs so that students can work in small groups to find the causes below
2. Instruct students to work in small groups to find the causes of wildfire hidden around the area and collect as many causes as they can.
3. After completion of the activity ask students to share why they think each picture may be a cause of a wildfire: e.g. broken glass can cause a wildfire in the same way that using a magnifying glass can concentrate the rays of the sun to burn grass beneath the lens. What causes most fires in Cairns?

<p>NATURE</p> 	<p>CAMPFIRES</p> 	<p>LIGHTNING</p> 
<p>BARBECUE</p> 	<p>BROKEN GLASS</p> 	<p>CONTROLLED BURN</p> 
<p>MOTORISED EQUIPMENT</p> 	<p>HOT ENGINE</p> 	<p>DELIBERATE</p> 

Curriculum links

11-12	Science, Earth & Environmental Science	ACSES012: Science as a Human Endeavour	The use of scientific knowledge may have beneficial and / or harmful and / or unintended consequences
11-12	Science, Earth & Environmental Science	ACSES014: Science as a Human Endeavour	Scientific knowledge can be used to develop and evaluate projected economic, social and environmental impacts and to design action for sustainability
11-12	Geography	ACHGE027: Geographical knowledge and understanding; Overview of natural and ecological hazards	The sustainable risk management policies, procedures and practices designed to reduce the impacts of the hazard through preparedness, mitigation, prevention and adaptation
11	Geography	ACHGE012: Geographical knowledge and understanding; Overview of natural and ecological hazards	An overview of the nature of natural hazards (atmospheric, hydrological, and geomorphic) and ecological hazards
11	Geography	ACHGE013: Geographical knowledge and understanding; Overview of natural and ecological hazards	The concept of risk as applied to natural and ecological hazards
11	Geography	ACHGE014: Geographical knowledge and understanding; Overview of natural and ecological hazards	The temporal and spatial distribution, randomness, magnitude, frequency and scale of spatial impact of natural and ecological hazards at a global scale
11	Geography	ACHGE022: Geographical knowledge and understanding; Depth and study of an ecological hazard	The nature and causes of the selected hazard and how the activities of people can intensify its impacts
11	Geography	ACHGE025: Geographical knowledge and understanding; Depth and study of an ecological hazard	The physical and human factors that explain why some places are more vulnerable than others
12	Science	ACSES094: Science as a human endeavour; The cause and impact of Earth hazards	People can use scientific knowledge to inform the monitoring, assessment and evaluation of risk
12	Science	ACSES098: Science Understanding; The cause and impact of Earth Hazards	Earth hazards result from the interactions of Earth systems and can threaten life, health, property, or the environment; their occurrence may not be prevented but their effect can be mitigated
12	Science	ACSES102: Science Understanding; The cause and impact of Earth Hazards	Human activities, including land clearing, can contribute to the frequency, magnitude and intensity of some natural hazards (for example, drought, flood, bushfire, landslides) at local and regional scales