

# Wildfire

# EVACUATION

## Instructions

- ▶ Provide students with access to the Cairns Regional Council's regional planning scheme mapping tool: <http://ssapub.cairns.qld.gov.au:8010/connect/analyst/mobile/#/main?mapcfg=CairnsPlan%202016>
- ▶ Play the Catalyst segment on House Fires, at <https://www.abc.net.au/catalyst/house-fire/11014834>
- ▶ Provide students with the attached question and answer sheet, or write questions on the board for students to answer in their science books

Please note, the preferred term is "wildfire" however the planning scheme identifies a "bushfire" overlay.

## Questions and answers

While we live in North Queensland, in a tropical environment with lots of rainfall we are still at risk of wildfires during the drier months of the year.

1. Open the Cairns Regional Council's Planning Scheme mapping tool, and go to the legend on the far right hand side of the screen (see Figure 1 below)

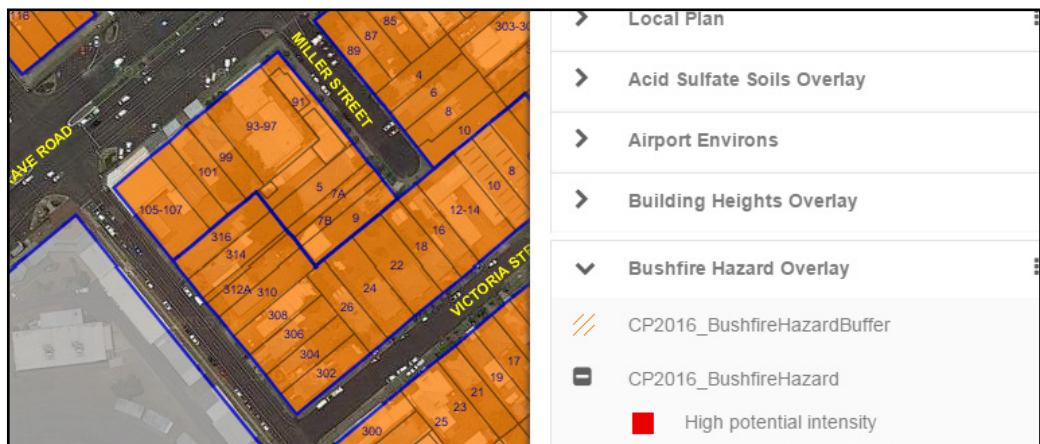


Figure 1

2. Then click of bushfire hazard to activate bushfire hazard zones in the Cairns region (see figure 2 below)

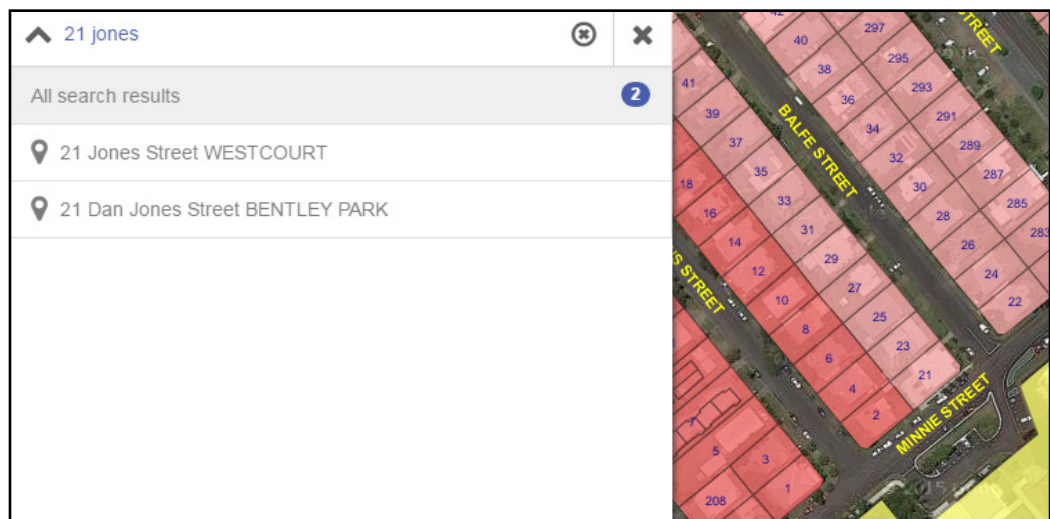


Figure 2

# Classroom activity

Classroom resources provided by Cairns Regional Council



- ▶ Next type your address, or the address of your school into the address bar
- ▶ Identify what the level of wildfire risk is at your house
- ▶ If your chosen address is in a low fire hazard zone, scan around your region, paying particular attention to hill slopes and areas covered by natural vegetation
- ▶ Does this change your perception of wildfire risk in your area?

Q1: Now with the knowledge you have of bushfire risk for your house, school or local area, do you and your family have a plan for what you would do in the event of a bushfire?

Q2: Before starting the Catalyst House Fire video, estimate how long you would have to get out of a house fire after ignition?

A: No specified answer, question posed to generate thought on the subject

Watch the Catalyst segment about House Fires

Q3: How long did it take following ignition for the room to reach flashover point (when the room is engulfed in flames)?

A: 2 minutes

Q4: Why does it now only take 2 minutes for a modern, furnished room to reach flashover, whilst a 1950s furnished house takes 17-20 minutes

A: Most modern furnishings are made from synthetic furniture, like mattresses and couches filled with polyurethane - a petroleum product

Q5: Why should you "get down low, and go, go, go" during a house fire?

A: because the hottest black smoke rises, and standing up during a fire would expose your lungs to the hottest smoke, scorching your lungs

Q6: Where should smoke alarms be placed in the house and how often should you change the batteries to ensure you're minimising the risk of fire in your house?

A: A smoke alarm in the kitchen, outside and inside bedrooms

Q7: Now that you are aware of how fast a fire can engulf a room draw a diagram of your house, and trace out an evacuation route from your bedroom out of your house to a safe evacuation point.

Q8: While this video was about house fires, this also demonstrates how quickly a wildfire can destroy a house when it comes close to your house.

Draw another diagram of your house and draw in any features outside your house that you think may be a wildfire risk (eg barbecue, dried timber, mulch pile, trees, and long grass).

Think about the evacuation route you would need to take to leave your house safely in the event of a wildfire and make note of a designated safe evacuation point your family could drive to, or run to, to escape a wildfire (eg a river or creek with a large opening, the beach, a large carpark or shopping centre away from bushland).

Draw the route you will need to take to get to your evacuation point safely.



## Curriculum links

7	Science	ACSHE223: Science as a Human Endeavour; Nature and development of science	Science knowledge can develop through collaboration and connecting across the disciplines of science
7	Science	ACSHE120: Science as a Human Endeavour; Use and influence of science	Science and technology contribute to finding solutions to a range of contemporary issues; these solutions may impact on other areas of society
7	Geography	ACHGK042: Geographical Knowledge and understanding; Water in the world	Causes, impacts and responses to an atmospheric or hydrological hazard
7	Geography	ACHGS050: Geographical inquiry and skill; Collecting, recording, evaluating and representing	Represent spatial distribution of different types of geographical phenomena by constructing appropriate maps at different scales that conform to cartographic conventions, using spatial technologies as appropriate
7	Humanities & Social Science	ACHASSK185: Knowledge and Understanding; Geography	The nature of water scarcity and ways of overcoming it, including studies drawn from Australia and West Asia and/or North Africa
7	Health & Physical Education	ACPPS072: Personal, Social and Community Health; Being healthy, safe and active	Practise and apply strategies to seek help for themselves or others
7	Health & Physical Education	ACPPS073: Personal, Social and Community Health: Being healthy, safe and active	Investigate and select strategies to promote health, safety and wellbeing
7	Health & Physical Education	ACPPS077: Personal, Social and Community Health; Contributing to healthy and active communities	Plan and use health practices, behaviours and resources to enhance health, safety and wellbeing of their communities
8	Science	ACSHE135: Science as a Human Endeavour; Use and influence of science	Science and technology contribute to finding solutions to a range of contemporary issues; these solutions may impact on other areas of society
8	Science	ACSHE136: Science as a Human Endeavour; Use and influence of science	People use science understanding and skills in their occupations and these have influenced the development of practices in areas of human activity
8	Geography	ACHGK059: Geographical Knowledge and Understanding; Changing nations	Management and planning of Australia's urban future
9	Science	ACSSU180: Science understanding; Earth and space science	The theory of plate tectonics explains global patterns of geological activity and continental movement
9	Geography	ACHGK063: Geographical Knowledge and Understanding; Biomes and food security	The challenges to food production, including land and water degradation, shortage of fresh water, competing land uses, and climate change, for Australia and other areas of the world
9	Geography	ACHGS069: Geographical Knowledge; Interpreting, analysing and concluding	Identify how geographical information systems (GIS) might be used to analyse geographical data and make predictions
9-10	Health & Physical Education	ACPPS072: Personal, Social and Community Health; Being healthy, safe and active	Practise and apply strategies to seek help for themselves or others
9-10	Health & Physical Education	ACPPS096: Personal, Social and Community Health; Contributing to healthy and active communities	Plan, implement and critique strategies to enhance health, safety and wellbeing of their communities
9-10	Health & Physical Education	ACPPS091: Personal, Social and Community Health; Being healthy, safe and active	Plan, rehearse and evaluate options (including CPR and first aid) for managing situations where their own or others' health, safety and wellbeing may be at short or long term risk

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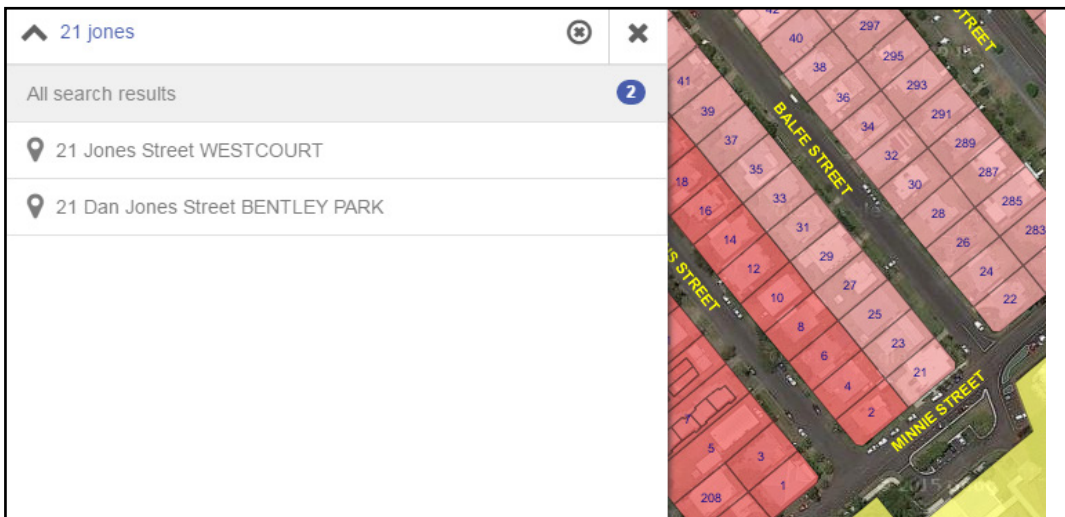


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## Quiz

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