# Imagining Australia’s Climate Change Dystopia

## 2015 Update

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This essay was originally written in early 2014, when the majority of Australia had just suffered through an unprecedented heatwave; at the same time, North America experienced a Polar Vortex. These extreme weather events are no coincidence: I'm here to explain to you Our Oncoming Dystopic Future!

This is not an argument about whether climate change exists, or been caused by humans. This is an explanation of how it may proceed and its impact on Australia using projections from the CSIRO (Commonwealth Scientific and Industrial Research Organisation), a leading scientific research organisation; hopefully explaining this will help you apply your country's data to your own country situation. Or if you’re Australian, you can start preparing.

The CSIRO revises its projections every few years. This document was originally written using the 2007 projections, and has been revised to use the updated 2015 figures. Projections suggest that the majority of Australia may warm between 0.4 to 2.0C by 2030 and up to 5.1C by 2090; annual rainfall will decrease in the south and east on the mainland across spring and winter; there will be more frequent extreme rainfall events; inland and eastern coastal areas may experience wetter summers. Tasmania, at least initially, will see increased winter rainfall, but that won’t last. Tasmania and some coastal areas may see slightly less warming than inland; the range of warming will be greatest in spring and least in winter. Australia will warm slightly faster than the rest of the globe, but the interior will warm faster than coastal areas. Patterns of rain change will see reduced stream flow across the country, and evaporation will increase. The seas will rise (45 to 85cm by 2090). Fluctuation events will have greater impact until 2030, after which the climate change impacts will dominate over the fluctuations.

So here's what happens in Australia: it gets hotter. Bodies sweat to decrease body temperatures; bodies dehydrate; the heart works harder to regulate the body and get stuff moving: heart attack. People who are susceptible: older people, people with chronic disease, very young people, people who do physical labour or lots of strenuous outdoor activities; people on meds that change how bodies regulate heat.

The focus will be on building bodies that can take the heat and pump the blood. Although science will try its best, dust (and flies) will get into all those machines, and they will become more expensive and more rare. The expensive machines will be filthy, and hygiene will become an issue. Labour will become hard labour. Meds will become expensive, a thing one must travel to find.

Attractiveness will be pale skin, no sweat, no tan lines. A life that means one never has to venture outside.

Unions will become more. Identity will be about union affiliation on top of everything else.

People who access home, community and health services get cut off as demand increases. The heat means more people need to access these services. The heat, the fire, the water issues and Australia's distances mean that accessing these people becomes more difficult. Meals on wheels, medical home visits, and carers become a thing for people who know people.

This means increases in tiny communities supporting each other; this means tiny communities defending against each other. This means people being abandoned, locked in their homes until heat stroke takes them and their properties are taken over by squatters.

Higher walls as those built communities in the outer suburbs with the curly confusing streets build their walls up and keep everyone else out; separated by what used to be freeways but are now just tar potholes. Kangaroos leap across these deserted bitumen rivers, with feet just a little larger, just a little sturdier, just a little stronger than before as they seek to claim back land.

Western Australia discusses secession (again).

UV increases, fire risk increases (predicted to increase by 10-40% in 2020 on 2007 figures). Fire services see an increased demand, not only in terms of fire but in terms of the other services firies provide ("You won't find a climate change sceptic at the end of a fire hose," said Peter Marshall of the United Firefighters Union in 2013). Infrastructure breaks and slows under increased demand and heat and fire. Trams, trains and buses are canceled or services are changed as tracks buckle or blackouts occur. Things melt. Electronics such as lights and signs fail. Bikes see an increase after a short foray into horse-drawn carriages (the horse-drawn carriages go the way of most exotic animals – they just can't in our Climate Change Future). Camels come into use, with drovers venturing into the desert to catch wild ones, and spinning stories of Australia's past. Drovers become ghosts in the desert, alongside everyone else who thought they'd take their chances. Little desert communities pop up, found only by rumour and luck and song.

Travel slows. Every town and city, separated by hundreds and thousands of kilometres, becomes more distant. Truckies bridge the

distance for as long as they can, until the fuel gives out.

There might still be public transport, at least for a little while, and at least in the cities. There will be trains that run on solar and on wind (the wind to get them out of stations, and solar cells across the roofs and along relay stations). There will be trams that run on solar, but probably not wind. Maybe not in Melbourne, though, where V/Line will be slow to get on board, and Metro as well.

In the near future, how our tourism works will change. An increase in cycle tourism will see a change to the structure of country towns. V/Line will still be a jerk about letting your bike on the train, though. This will help as we transition to a bicycle transit community, but it won't help enough; cars will still take a long time to disappear off the landscape.

Blackouts and brownouts occur as providers struggle with demand. Power is slow to be reconnected as efforts are hampered by total fire bans, which can prevent full line inspections taking place. Increased demand on services during peak times results in blackouts; decreased access to resources and increased demand sees increasing costs of electricity. A decrease in public amenities as governments shut them down sees more pressure on private amenities, which crank up the power use. Entry costs for amenities increase. Alternative energy attempts are made, sparked by research into steam technology in the USA; these are soon superseded by sand tech, because sand is plentiful and water is not. Still, given our eurocentricity, steam research continues, stubbornly, though it is not as efficient as sand.

The sand gets everywhere, and it becomes a point of pride amongst upper, white, classes to be sand free.

Solar power battery storage will increase our ability to sleep and have our units gain charge during the day with minimal electricity use, and then let that electricity out during the night when we're awake and doing things. Maybe we'll even still have air-conditioning, or at the very least, fans! But purchasing that storage is going to be expensive, at least for a little while, even though the cost payback period will decrease. So it'll still be focussed on the richer communities, on the larger businesses. Electricity, despite this technology leap, will still be a resource primarily available to certain groups.

There will be electricity theft, a connection running to a cable as carefully and subtly as possible. Electricity piracy will become widespread, and firmly prosecuted as Big Coal tries to retain its hold and earn money for as long as the coal lasts.

Death by wombat increases, as we burrow into the land to make homes and find water, and wombats fight back.

Water issues emerge. Sea levels rise, especially on the East Coast,

damaging coastal properties and decreasing access to the ocean (play, sport, surf, food). Amenities costs increase as we make a desperate bid to save our beloved coast. Increased drought severity sees increasing water costs, increased water restrictions. Our mostly excellent water quality drops dramatically, until we're filtering our potable water and watching it run brown. Freshwater wetlands will be more susceptible to saline conversion. Increased rain events move wastewater into freshwater and potable water streams. Drainage capacity reduces, increasing flowback to roads and properties, and putting more pressure on drains that can't cope. Contributes to further flooding. Flooding damages crops. Water rationing occurs.

In the far south-west and far south-east, freshwater resources decline. This heavily impacts Western Australia's wine industry. For a time, they are supplanted by Tasmania's, with enhanced agricultural advantages as the soil retains its moisture. But this too shall pass, and eventually even Tasmania's soil moisture will fall, and the landscape will succumb to the severe fire danger days.

Beer becomes a delicacy for the wealthy; an echo of a past long gone; drunk at fancy dinners in barricaded communities below-ground and in well-shielded communities above sea level.

Food prices increase. Crop yields decline due to a increased heat and water demand. We get poorer quality than what we're used to, and more expensive. The good stuff comes from pricy greenhouses and controlled environments, or is imported; contributing to increasing the cost of living in what is already one of the most expensive cost-of-living countries. Food scarcity increases, as does food poisoning. Remote and Aboriginal communities are going to be very solidly hit, both by the cost of living and access to health amenities. We see consideration of another intervention, before the government realises our privileged, too, are vulnerable.

I'm going to miss you, grapes.

Biodiversity drops. Australia is a megadiversity country (a technical term meaning one country out of 17 that harbours the majority of the Earth's species), and endemic and exotic figures will drop. Rising heat, increased fire, continued encroachment by the urban landscape, introduced species fighting for resources are the major impacts on biodiversity. Although many Australian plant species propagate via fire, they're not gonna propagate as frequently as the fires. A food black market develops, with grapes, rice and tomatoes the hot items.

There's a backlash against GM crops, and a political campaign. It's unAustralian to eat GM crops when we just lose them to fire. Gotta propagate via fire.

There might be riots over Big Coal, but probably not for a while,

not until it’s too late.

People try getting high on eucalyptus leaves, like koalas do. Koalas get grumpy, and claw back. Koala and drop bear attacks increase.

Ballooning will increase. I know you already love spiders, but you’re going to love them even more when areas that experience flooding are covered in ballooning spiders, sending out cobwebs in order to escape the rising waters. Once caught by the wind, ballooning baby spiders can travel up to 3 kilometres off the ground and many more kilometres along the ground. It’s a great way to know which way the wind is blowing; follow the spiders.

Rabbit populations briefly rise, then drop again until they almost die out, unable to compete in such conditions; but not before a strain of wild rabbit develops, born blind but somehow fully functional directionally. This leads to speculation of psychic rabbits.

There will be no more snow. But there will be increased cyclone intensity in the north, and more heat extremes.

Moving towards the 2090 predictions, extreme weather events increase. Increased intensity of tropical cyclones, longer heatwaves and increased flooding and rain; going from extreme dry to extreme wet is just gonna make Australia a country of mud, and infrastructure that can't cope. This leads to underground communities further inland on the firm desert ground; but raised communities on the coast where the land is unstable and still the oceans are rising. These raised communities are fully air-conditioned, shielded from the sun, and difficult to access; attacks on the integrity of these protected communities is likely to be directed towards underground communities, considered more vulnerable. Residents of these communities learn to fear the sky in a way middle and lower-class Australians never will.

Existing remote Indigenous communities make a start early, revering their elders and trying for those skills diminished by the impacts of colonisation and the Stolen Generation. People with dual citizenship make a run for it, and city population sizes change. Communities spring up on the outskirts of most cities, aiming for self-sufficiency before it’s too late. Some of them even work, for a while. Borders are built up in wealthy areas, particularly those close (but not too close) to the coast. Due to Gun Restrictions, it’s not shoot on sight, but Australians always have means of policing borders (solar-powered laser guns and bombs filled with red backs).

The expensive foods go straight into those shielded communities above sea level. Anyone who lives on the surface struggles to get food. Crops are heavily guarded, but guards are easily bribed to look the other way. (We bring back the death penalty specifically

for stealing food)

Accessibility falls. Australian cities are heat sinks, with decreasing foliage, heat absorbing surfaces and inadequate urban planning. Roads deteriorate; underground surfaces in coastal areas suffer. Repair takes longer and is more difficult due to accessibility to surfaces and to resources. Buildings suffer more damage from increased extreme weather events, and from increased use as we come to rely on them more and more to escape the elements. Coastal infrastructure suffers, not only from the extreme weather events but from increased erosion, salt and inundation. Expensive property changes from seafront properties to those next to the inner city parks and inside gated communities. The emphasis is still the Australian dream, the backyard with a pool, and the most expensive properties maintain just that. (There are riots at swimming holes; they aren't protected by crocs, but people threaten it)

Tall Poppy Syndrome continues, and to battle this some parties put forward party leaders as potential prime minister: scientists, rabbis, an android programmed by Sony but it's all considered a bit foreign so we continue as we always have, with a white man who's conservative, still convinced climate change is a natural phenomenon. (He lives in a community up high, and commutes to parliament under armed guard, but no-one cares enough to attack him)

There are riots, and police are empowered with paralysing gas. (Those hit are left where they are, and when the sun comes up they fry)

Health risks increase. E.coli on the coast, pollution in our waters, heatstroke and heart attack, anxiety. An increase in food and water-borne diseases due to increased temperature.

Welts from mozzies and bull ants are common evidence of going outside as humans push into their areas and they push right back.

Spiders and snakes, always a hindrance, blend ever so better with the changing landscape, a little more brown, and humans fall victim more frequently, and learn to live with the consequences as access to anti-venom ceases.

Insurance costs rise. Our public health system struggles under the burden.

Australian political relationships deteriorate internationally. The first climate refugees will be Australia's neighbours, and we'll reject them, sending our burden to other countries. This will sour other relationships overseas. As our own needs for imports and support increase, so too will the needs of our political allies, and they will reject us in favour of saving themselves.

Western Australian secedes, and the rest of Australia finds out when they try to get more aluminium and are stamped with an export tax. Our non-robotic prime minister tries to start a war with Western

Australia, but the lack of investment in solar means there’s no power to get there.

Tourism falls as we lose our foods, our coasts become dangerous, the roads deteriorate, our sports grounds deteriorate and our lifestyles suffer. Australia becomes more xenophobic as a way to battle its problems, because that's what Australia has always done, despite its constant failure as a strategy. Stranger danger increases. Battles over areas based on ethnicity; riots over race; lines are drawn and trips to Chinatown or Little Greece become actual journeys. Those who need to cross from border to border are questioned over loyalties. (Tattoos become more widespread)

The economy suffers as our major agricultural exports and our tourism fall. We keep on mining, though, which contributes to water issues, and makes those Western Australians cocky about secession.

Our deserts will be brown and red and dry; except for when it’s green. Australia isn’t like the European climate tradition, and our climate change dystopia won’t be, either.

Will there still be sharks? With the ocean acidifying, it’s hard to tell. We’ll definitely lose the Great Barrier Reef and Ningaloo, though.

Something about this is going to come to pass, this isn’t a worst case scenario. Many Australian scientists consider we’ve moved beyond a tipping point and everything now is just adaptation, making sure we’re ready for what lies ahead.

And it keeps getting hotter.