Impacts of Climate Change: Australasia

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CPSG101 Science & Global Change First Year Colloquium II
April 19, 2016

Introduction:
When looking at climate change as a global issue, the Australasian region emerges as one of the most apparent examples of climate change at work. This results from the extreme eco-regions (deserts and rainforests), large population, and unique food-chain found on the continental region.

Environmental:
The impacts of climate change in Australia will cause extensive change to the environmental conditions that the continent already experiences. This will include less average rain fall, more extreme temperatures, coral bleaching, more intense and frequent wild bush fires, a decrease in soil fertility, overall oceanic and atmospheric temperature rise, and sea level rise. The environmental impact of sea level rise will be especially pertinent to low lying island countries in the Pacific.

Wildfires:
A current impact of climate change that is already hurting the Australian ecosystem is wildfires. The increase in wildfires comes partly from the overall increase in atmospheric temperatures and extreme temperatures in the summer. These wildfires will impact Australia because the large investment of capital needed to rebuild structures will create a larger carbon footprint for the nation from the burning of trees and fossil fuels used to rebuild the land after these catastrophes. This, in turn, will amplify property damage, the destruction of ecosystems, and death rates. The increase in wildfires could possibly cause a detrimental positive feedback loop.

Social:
The social impact of climate change in Australia will be more indirect than its environmental impacts. From the resulting loss of agricultural productivity of the land, tensions will emerge between different states in the country over the land that they possess. The Aborigines will also face competition of their reserved natural resources from the Australian government. This might be even more true in Papua New Guinea where the large native population living in the rainforest has been largely undisturbed since its independence.

Invasive Species:
The impacts of climate change are also apparent to endemic species in the region. While the environmental impacts will cause the range of most of these species to decrease, a widespread menace will propagate because of increased climate change: invasive species. An example of this invasion is the Acacia tree - which is currently pestilent across Australia. As with other invasive species, it harms farm animals when ingested and takes water from endemic plants and animals. Climate change will allow more invasive species to populate the region. This will be especially detrimental to New Zealand because of its smaller area and higher density of endemic species.

Bibliography: