August 29, 2019

Climate Health WA Inquiry

Re: Power costs, poverty, rising temperatures and indigenous social health in the Kimberley


- The incidence of Crime is highly seasonal rising from a minimum in winter to a maximum in summer suggesting that the rising indigenous crime rate from predominantly family violence and drugs is in someway being exacerbated by rising annual temperatures (see Graph 1).
- The incidence of Crime is rising at a higher rate than population growth rate. Statistical analysis indicates that 46% of this increase is associated with a warming of 2C in the North (Graphs 2, 3 and 4). What if anything is driving this relationship?
- Consulting with Aboriginal elders, CEO and a Teacher from Mowanjum near Derby, confirmed that a significant number of indigenous households have difficulty pre-paying for electrical power and therefore are often without air-conditioning, refrigeration and cooking in the heat of summer.
- Each house is individually metered for access to pre-paid power, which is purchased via a terminal in either the Mowanjum Store (often closed) or from IGA in Derby (no car to drive into town).
- During summer, these problems can be intensified by overcrowding as relatives visit during the Wet Season.
- As one of the WA Government’s measurable objectives is to reduce the indigenous incarceration rate by 23%, addressing the causes above could have an immediate impact on the escalating social health measured by level of family violence and resultant incarceration of indigenous people in the Kimberley.

- WA Government could immediately address the causes by:
  - Reducing power costs and installing solar panels in response to the extreme poverty in which many indigenous households find themselves in.
  - Improving access to the pre-paid points of sale where individual house meters are switched on using an internet/mobile app such as http://chargestar.com.au/nextcharge/, used for activating remotely located charging stations for electric cars.

Yours sincerely

Dr Richard Smith, Chairman Creative Living Centre, Floreat Uniting Church.
Graph 1: Seasonality of Crime rates in Derby and Family Assaults in the Kimberley from WA Police Statistics
Graph 2: Seasonality of Crime in the Kimberley with 77% of the variance associated with time from Jan 2007, P < 1%. Population growth rate is about 2.5% while crime rate is growing at 8%.

Graph 3: Crime rate and temperature relationship in Kimberley. P < 1%
Average Maximum Monthly Temperature, Kunnurra 2007-2018

Annual mean temperature anomaly, Northern Australia (1910 to 2018)

Australian Bureau of Meteorology

Graph 4