

Version 30.5.2015.

TO Climate Change Contribution Consultation

FROM Kit Withers, D Sc,

email

Some of my papers on modelling climate extremes are listed at the end.

INTRODUCTION AND SUMMARY

Sir Geoffrey PALMER gives a bleak assessment of the chances of nations over-coming their self-interest to stop posturing and agree to binding targets for reducing carbon emissions. Let me quote from his public lecture, "New Zealand's Defective Law on Climate Change", held at Victoria's Faculty of Law on 16.2.2015.

<http://www.victoria.ac.nz/law/about/news/new-zealands-defective-law-on-climate-change/ClimateChangeSpeech16Feb2015Final.pdf>

Anthropogenic climate change is heating up the atmosphere, raising sea levels, increasing ocean acidification, increasing the frequency and intensity of storms and other extreme weather events that will make life seriously endangered.

...the world has made little progress since 1990. The nature of the policy failures in both these areas is a sad indictment on the incapacity of the peoples of the world to act in their own collective self-interest. The international community lacks both the machinery and the political will. At present it may also lack the technology to reduce the reliance on carbon. The science is telling us to reduce carbon emissions as soon as possible. In practical terms this means using alternatives to coal for electricity as

soon as humanly possible and switching from other fossil fuels on a rapid transition path.

... The strategy adopted by the Government in 1990 called for priority to be given to reducing the emission of greenhouse gases, rather than focusing on adaptation. The announced aim was a 20 per cent reduction of 1990 carbon dioxide emissions by 2005, as an interim objective. The Ministries of Commerce, the Environment and Transport were required to work together to develop a carbon dioxide reduction plan, in consultation with other government agencies, local and regional government and NGOs. The strategy also required the pursuit of an increased use of renewable energy resources in New Zealand.

... New Zealand worked hard within the United Nations in those years and later to ensure the upheavals that the Pacific Islands were facing from climate change were brought to the attention of the world in the reports then being prepared. Inundation from the sea will likely create climate change refugees and worldwide there will be millions of them.

4. THE DEFECTIVE INTERNATIONAL LAW.

International negotiations on climate change that have been progressing fitfully for more than 20 years are planned to move to a climax in Paris in December 2015. The Ministry of Foreign Affairs and Trade October 2014 briefing paper to the incoming Government stated the main issue accurately and succinctly: ref.

<http://mfat.govt.nz/downloads/media-and-publications/BIM%202014%20Public.pdf>

Climate change is the most urgent and far-reaching threat we face and the current negotiations on climate change are the most important multilateral negotiation now underway. Positions taken by countries on climate change and their readiness to contribute to global solutions will increasingly define the way that others perceive them, politically and economically.

What we need to understand is the legal context in which those negotiations will take place. Governments may play lip service to making progress but whether real progress will be achieved remains dangerously uncertain.

International environmental governance is weak and the explanation for that lies in the institutions of international law. The negotiating of treaties is dominated by the principle of unanimous consent. Nations cannot be bound to treaties to which they do not agree. The burden of state sovereignty poses obstacles to progress in every direction. Unless there are clear rules and obligations that are enforceable the prospects of solving the problems of climate change seem remote. Securing the necessary level of voluntary agreement between nations looks unlikely 23 years after the Framework Convention on Climate Change was agreed. Individual country commitments do involve specific costs now. The benefits on the other hand will be reaped by future generations. The issue of fairness to future generations arises in many areas of international environmental law is and particularly prominent in climate change. [Ref. 9.]

Consent is required in the international legal system. It is not required in any domestic legal system. Nations have legislatures. They pass laws. Those laws are binding on everyone in the country whether they agree or not. There is no international equivalent of a legislature for climate change, despite the best efforts that were made in providing for majority decisions in some aspects of the climate change convention. ...

I wrote an article in 1992 published in the American Journal of International Law drawing attention to the fundamental weaknesses of international environmental law and suggesting that new ways be devised to overcome the problem. [Ref. 10.] The missing institutional link was the equivalent of a legislature. What was required were new methods that avoided developing international legal standards in small incremental steps, each of which must be subsequently ratified by all countries. A new chapter of the United Nations

Charter could accomplish such a development I thought, perhaps a new Environmental Protection Council with the capacity to take binding decisions.

The international legal order is not fit for purpose when it comes to dealing with climate change. The incubus of outdated ideas about state sovereignty too often prevents the required outcomes in climate change negotiations. The frustration, the waste of time and resources and the spinning of wheels that these negotiations involve should not be underestimated. The failures are due to the structural weaknesses of the international legal framework. A quantum leap forward in international governance is required.

To secure such a change will require determined political leadership and there have been few signs of that emerging on the climate change issue. Freedom to pollute the global commons brings ruin to us all yet the short-term incentives for individual nations not to act are strong.¹¹ We have failed to build the institutions necessary to cope with problems that human activities have created. Nations are unwilling to agree to enforceable legal rules against themselves. The way the 2015 negotiations in Paris are shaping up it seems that the goal of legally binding targets upon nations for their carbon emissions will not be achieved, although that was the aim when the preparatory meetings started. If agreement is to be achieved there will be issues about the precise content of the agreement and how effective it will be.

5. NEW ZEALAND'S ROLE INTERNATIONALLY.

There have been occasional reports that New Zealand is playing an important role in bringing together developed and developing countries to find a way to reach commitments. Since the Presidents of China and United States reached an understanding late in 2014 there has been an impetus in these talks. If understandings could be reached by the biggest emitters that would help greatly.

New Zealand's proposal is that each country would make a legally binding obligation to submit a schedule for reducing emissions. There would be legally binding pledges for accounting, reporting and periodic review and updating,

but the content of the schedule - the level to which emissions will actually be reduced - would not be legally binding.¹² The power of the proposals lies in the principle of transparency, that the agreement would implement a universal transparency framework. The justification for the approach that avoids legally binding targets is put forward by New Zealand as follows:

National determination of contributions allows Parties to self-select the type and ambition of their mitigation contributions to suit their national circumstances. Different commitment types lend themselves to different transparency requirements - both ex ante and ex post the tabling of contributions. A common transparency framework can accommodate parties at different stages of development - the tiered approach of the IPCC guidelines for national greenhouse gas inventories, for example. An accounting menu, from which Parties select options best suited to their national circumstances will also align expectations of Parties with their circumstances. In respect of providing finance, categories of countries make little sense in the context of the magnitude of the task. All Parties in a position to do so should support the most vulnerable and least capable.

It is of vital importance that such an agreement is backed up by enforceable obligations - clear accounting rules and methodologies, the need to provide information about national determined contributions, the provision of hard information about what has occurred and the opportunity for review. In a word there need to be mechanisms to ensure compliance.

But without targets the approach has serious weaknesses in my view.¹³ It will allow for all manner of backsliding, gaming, prevarication and the securing of rewards for free-riding nations. Such problems will likely ensure that targets backed by even the most conservative science will be missed. I note that the European Union favours legally binding emissions targets.¹⁴

The issues at stake here is how much national flexibility to allow and how much to rely on international rules. However the balance is struck in Paris, it

is vital that it be struck. Further endless iteration will mean we run out of time and cannot mitigate thus relying on adaptation only.

... The absence of legally binding commitments on emission targets or measures that will have the same effect will open the door to policy failure.

6. THE POLITICAL REALITY.

There is every prospect that the structural weaknesses in the international system will defeat the effective implementation of such a proposal even if it is agreed. We are working with defective tools here. Few governments wish to face that issue, many try to avoid it. The political imperative that dominates all significant international meetings is of being able to claim progress has been made and that consensus is reached. Inevitably that means the standard is of the lowest common denominator. Weasel words and loose language will cover up ambiguities and difficulties.

Political leaders will proclaim they have made progress when the reality is likely to be very different. Since 1992 the history of climate change negotiations has been littered with false starts, blind alleys and a lack of achievement in arriving at binding targets or equivalent measures for the reduction of carbon dioxide emissions. Now there is a risk that the ground is being laid for the critical Paris talks towards the end of 2015 to produce more fudge and push out the boat for future iterations. But we do not have time as the science makes clear.

Sir Geoffrey covers much more:

7. Science Says Rapid Reductions in Carbon Emissions Required.

11. Climate Change Deniers.

13. A HOPEFUL CONCLUSION.

... We must not despair. We must hope and we must act. We must stop being threatened and rise to the challenge. Big changes to climate change policies everywhere are as necessary as they are inevitable. It was such a conviction, no doubt, that caused Bill McKibben to name his organization .350.org since 350 parts per million is the safe level of carbon dioxide in the atmosphere.

In New Zealand it is 350 Aotearoa,...

In summary Sir Geoffrey not only says what must be done, but argues that the UN will be impotent to do this without difficult reform.

I would add that our seat on the Security Council - whose permanent members are the 5 biggest sellers of arms & so morally compromised, our seat should not be squandered by short-term self-interest, but rather be seized as an opportunity for leading Sir Geoffrey's call for the UN reform needed to save not only countless species being destroyed even now by our plundering the planet, but to save civilisation as we know it.

If that seems an exaggeration of the danger we face, then I ask that you read my excerpts of my 1st reference below.

OTHER REFERENCES - mostly most recent first.

The .txt format means that long links run off the page.

These can be found in the source file at

<http://freepages.misc.rootsweb.com/~kitwithers/ClimateChangeSubmissionDue3-6-15.txt>

<http://www.informationclearinghouse.info/article41002.htm>

Unprecedented: Can Civilization Survive the CO2 Crisis?

by David Ray GRIFFIN, 2015, Clarity Press. Held by WCL.

Some excerpts.

Chapter 8, Climate Refugees (CRs).

The 1951 Geneva Convention does not apply as these refugees are not fleeing war. This is the excuse used by NZ p113 to turn down an application of a Kiribati in 2012

p110 Tuvalu between Oz & Hawaii where sealevel has been rising 3 times the global average, is 3m above sealevel. The 10,000 people there need to move

somewhere.

p111 Al Gore: A 1 m rise which could happen by 2050, could result in 22-35 million in Bangladesh having to relocate.

Saltwater intrusion hurts the production of rice, the country's staple crop.

A 2007 Washington Post essay: 20 million in Bangladesh will become CRs by 2030.

In 1995 half of Bhola Island, Bangladesh's biggest island, was swallowed by rising sea levels leaving 500,000 homeless.

p112 'We are staring catastrophe in the face' said a leader of a group helping CRs. They lose everything they have & cannot recover when their land is washed away.

p114 argues that the scope of the UNHCR needs to be broadened to include these, & the 1951 convention expanded.

p115 Biermann & Boas: [Their] protection must be seen as a global problem & a global responsibility. In most cases CRs will be poor, & their own responsibility for the past accumulation of greenhouse gases will be small.

By a large measure the wealthy industrialized countries have caused most past & present greenhouse gas emissions, & it is thus these countries that have the greatest moral, if not legal, responsibility for the victims of global warming.

[They must do] their share in financing, supporting & facilitating the protection & resettlement of CRs.

In 2014 a family from Tuvalu who'd moved to NZ in 2007 applied for refugee status to get work permits, saying that climate change had made life on the island too difficult. The immigration tribunal dismissed the application in 2013 but approved it in 2014 on 'exceptional humanitarian grounds'.

p116 William Lacy-Swing, director general of the International Organization of Migration: the international community needs to agree on ways to help people who - through the international community's failures to respond to the scientific warnings over the previous decades - have had their homes & livelihoods destroyed.

References include

Threatened island nations, 2013, M Gerrard & A Sabin, Cambridge UP.

CRs: people displaced by climate change & the role of the churches. 2013,

World Council of Churches.

Chapter 9, Mobilization:

'In the face of an absolutely unprecedented emergency, society has no choice but to take dramatic action to avert a collapse of civilization.'

- Blue Planet Laureates 2012.

The mobilization must be unprecedented 'because the entire world has never before been so threatened. - Lester Brown 2009.

p392: The transformation must be very rapid because the international community ... failed to start on it earlier...

The weather will become more extreme: summers increasingly hot, with more intense heat waves & temperatures in places exceeding livable limits & making farming impossible; drought in the [SW USA] will become .. the "permanent dry"; & wildfires will become more intense & occur more often.

Storms will become worse. Extreme rainfall, followed by extreme flooding, will occur more often & in more places. The [US] Snowmageddon of 2010 will become commonplace ... And deadly hurricanes & tornadoes will become even deadlier.

The sea-level rise will inundate land along Americas coasts & do the same in China & many other countries, ruining much of their best agricultural land.

Billions will lose their primary sources of water.

Food shortages will become increasingly severe because of climate disruption & ocean acidification, which will eventually lead to the death of sea life.

The rising sea level & other types of climate change will create 100,000s & then millions of climate refugees, all demanding to be allowed into luckier countries.

As our militaries have started warning us, climate change has already contributed to warfare & will increasingly bring about climate wars, especially because of shortages of food & water.

Most frighteningly, climate change will increasingly bring about the collapse of ecosystems, ultimately the global ecosystem, & thereby the destruction of civilization & perhaps even the extinction of human beings altogether. The main threat to global collapse is the melting of the Arctic's permafrost, which will

release great amounts of methane, a greenhouse gas much stronger than CO₂.

The book outlines the drastic steps that world leaders need to take, not just the US President & Congress, but businesses, academics, agriculture & forestry, economists, financial leaders, mayors, military, religious scientific & technological leaders, women, activists & youth.

Youth groups listed include Plant-for-the-planet, inspired by a 9-year-old, Alliance for climate education, C2C fellows, Climate education in an age of media, Earth guardians, Energy action coalition, Kids vs global warming - started by a 12-year-old, Focus the nation, Interfaith youth for climate justice, & National Wildlife Federation's campus ecology fellows.

One 14-year-old wrote "... please contact your legislators & President Obama on behalf of your kids & grandkids. Ask them to side with the children of this country rather than the fossil-fuel lobbyists."

p421: We need to mobilize as fast & thoroughly as possible to wind the battle of life against death - the battle with "the drive by corporations to extract the last remaining natural resources from the earth, even if it kills us all."

Tom Engelhardt: To destroy our planet with only the most immediate profits on the brain, with only your own comfort & wellbeing (&those of your shareholders) in mind: isn't that the ultimate crime?

p422: We are thus far the pathetic generation because there is no mystery about what we need to do but have not done. Besides reforming agriculture & helping the world reforest, our government simply needs to

- 1) eliminate fossil-fuel subsidies,
- 2) impose an escalating tax on carbon, &
- 3) do everything possible to accelerate, both nationally & globally, the transition to a 100% green economy.

The race for what's left of the world's coal, oil & natural gas will be transformed into a race to replace them.

This is the most important book on the world's most important problem. It has 100s of references. Please get it out from your local library, - or if they don't have it, ask them to get it, as WCL did.

Our PM John Key asked,

Why should we do anything when the big polluters aren't? That excuse failed when the US & China signed a carbon emissions agreement on 11.11.2014.

[http://www.truth-out.org/news/item/3](http://www.truth-out.org/news/item/30760-carbon-tax-or-carbon-market)

0760-carbon-tax-or-carbon-market

Carbon Tax or Carbon Market? The world's two best-known climate economists disagree radically on most issues. But they agree on one: The most effective policy for slowing global warming would be a price on carbon. 17.5.2015.

<http://www.truth-out.org/news/item/30671-shift-to-renewables-seems-inevitable-but-is-it-fast-enough>

Shift to Renewables Seems Inevitable, but Is It Fast Enough? 8.5.2015.

<http://www.truth-out.org/news/item/30155-triassic-mass-extinction-may-give-clues-on-how-oceans-will-be-affected-by-climate-change>

Triassic Mass Extinction May Give Clues on How Oceans Will Be Affected by Climate Change.

... rapidly rising atmospheric CO₂ levels can be expected to be similar: ocean acidification, oxygen depletion of the oceans, hydrogen sulphide poisoning and disruption of food chains through the killing off of photosynthesisers in the ocean.

Studies of ancient mass extinctions such as the one at the end-Triassic inform us of the possible consequences of our own CO₂ crisis. 13.4.2015.

<http://www.ipsnews.net/2015/02/everything-you-wanted-to-know-about-climate-change/>

Everything You Wanted to Know About Climate Change...

Corporate lobby groups urge governments not to act, while concerned citizens push for immediate action... a new report by The Energy and Resources Institute (TERI), a think-tank based in New Delhi that has compiled an exhaustive assessment of the world's progress on climate mitigation and adaptation [with]

detailed forecasts of what each country can expect in the coming years, providing a blueprint for action...

Trends, risks and damages. The Global Sustainability Report 2015 ranks the top 20 countries most at risk from climate change based on the actual impacts of extreme climate events from 1980 to 2013.

The TERI report cites data compiled by the Centre for Research on the Epidemiology of Disasters.. which maintains a global database of natural disasters..

The study found a 10-fold increase to 525 natural disasters in 2002 from around 50 in 1975. By 2011, 95 percent of deaths from this consistent trend of increasing natural disasters were from developing countries...

<http://truth-out.org/news/item/28765-on-the-news-with-thom-hartmann-we-may-have-reached-a-climate-tipping-point-and-more>

We May Have Reached a Climate Tipping Point.

<http://truth-out.org/news/item/29317-the-mega-drought-future-disappearance-of-coral-reefs-and-our-unwillingness-to-listen>

The "Mega-Drought Future," the Disappearance of Coral Reefs and the Unwillingness to Listen... sea levels north of New York City "jumped by 128mm (5 inches)" in just two years...the jet stream is no longer contained to its previous patterns... the giant craters in Siberia that are believed to have been caused by methane gas eruptions in melting permafrost are now sparking fears of the unfolding of an Arctic natural disaster.

<http://insideclimatenews.org/news/20140213/climate-change-science-carbon-budget-nature-global-warming-2-degrees-bill-mckibben-fossil-fuels-keystone-xl-oil?page=show>

According to new research published in the journal Science, human activity has compromised about half of the natural processes that maintain the stability of our planet. ... BP is being pressured by their investors. ...

<http://www.truth-out.org/news/item/26537-climate-disruption-s-confederacy-of-dunces>

Climate disruption.

<http://www.theguardian.com/environment/2014/sep/16/climate-change-report-damage-overhaul-global-economy>

Climate change report: prevent damage by overhauling global economy.

Reducing emissions can generate better growth than old high-carbon model, says co-author of report, Lord Stern.

<http://quaker.org.nz/global-climate-change> A global climate-change Quaker site.

<http://truth-out.org/news/item/28714-epa-sued-over-disclosure-rules-for-toxic-pollution-from-drilling-and-fracking>

EPA estimates that the oil industry emits at least 127,000 tons of hazardous air pollutants every year ...

http://earthsky.org/earth/hundreds-of-millions-of-south-asians-at-risk-from-glacier-melt?utm_source=EarthSky+News&utm_campaign=0d18e068cb-

[EarthSky_News&utm_medium=email&utm_term=0_c643945d79-0d18e068cb-393884341](http://earthsky.org/earth/hundreds-of-millions-of-south-asians-at-risk-from-glacier-melt?utm_source=EarthSky+News&utm_medium=email&utm_term=0_c643945d79-0d18e068cb-393884341)

South-Asians at risk from glacier melt.

Chapter 10, Corruption & Global Warming, of COCKCROFT, Laurence (2014) below, warns that the 100 billion expected to flow thru existing climate change funds are very likely to be in large part illegally siphoned off. Graphic examples are given of credit systems already hijacked.

<http://www.economist.com/news/leaders/21639501-fall-price-oil-and-gas-provides-once-generation-opportunity-fix-bad>

\$550 billion in subsidies for producing or consuming fossil fuels in 2014.

By one count, such handouts led to extra consumption that was responsible for 36% of global carbon emissions in 1980-2010.

<http://truth-out.org/news/item/29129-zimbabwe-s-famed-forests-could-soon-be-desert>
Zimbabwe's famed forests could soon be desert.

<http://www.truth-out.org/news/item/29234-air-pollution-from-europe-and-the-us-is-making-the-tropics-drier>

Aerosol emissions in North America and Europe have moved the ITCZ south. This is the belt of monsoon rainfall encircling the Earth near the equator that migrates seasonally between the hemispheres.

<http://truth-out.org/news/item/29229-addressing-population-growth-through-freedom-not-control-is-crucial-to-confronting-climate-disruption>

Dahr Jamail argues that population-related problems, like anthropogenic climate disruption, stem from resource use in the West. ...

By 2030 demand for food will have increased by 40 percent, global demand for water will have increased by 30 percent, and nearly 4 billion people will be living in areas of "high water stress."

[http://earthsky.org/earth/high-risk-for-future-u-s-megadroughts?](http://earthsky.org/earth/high-risk-for-future-u-s-megadroughts?utm_source=EarthSky+News&utm_campaign=33dd22efa1-EarthSky_News&utm_medium=email&utm_term=0_c643945d79-33dd22efa1-393884341)

[utm_source=EarthSky+News&utm_campaign=33dd22efa1-](http://earthsky.org/earth/high-risk-for-future-u-s-megadroughts?utm_source=EarthSky+News&utm_campaign=33dd22efa1-EarthSky_News&utm_medium=email&utm_term=0_c643945d79-33dd22efa1-393884341)

[EarthSky_News&utm_medium=email&utm_term=0_c643945d79-33dd22efa1-393884341](http://earthsky.org/earth/high-risk-for-future-u-s-megadroughts?utm_source=EarthSky+News&utm_campaign=33dd22efa1-EarthSky_News&utm_medium=email&utm_term=0_c643945d79-33dd22efa1-393884341)

High risk for future U.S. megadroughts.

<http://grist.org/series/skeptics/#Stages%20of%20Denial>

How to Talk to a Climate Skeptic: Responses to the most common skeptical arguments on global warming.

<http://truth-out.org/news/item/29331-climate-deniers-exposed-top-scientist-got-funding-from-exxonmobil-koch-brothers-big-coal>

Climate Deniers Exposed: Top Scientist Got Funding From ExxonMobil, Koch Brothers, Big Coal.

<http://www.amazon.com/dp/1609804961/ref=nosim/?tag=tomdispatch-20>

Arctic Voices: Resistance at the Tipping Point. Paperback, 2013

by Subhankar Banerjee. See also

http://www.tomdispatch.com/post/175963/tomgram%3A_subhankar_banerjee%2C_arctic_nightmares/#more

<http://truth-out.org/opinion/item/29745-why-the-climate-change-movement-must-demand-energy-industry-nationalization>

Why the Climate Change Movement Must Demand Energy Industry Nationalization.

The Bayway refinery, the site of extensive environmental damage, and the subject of a legal battle between Exxon and the state, in New Jersey,

February 27, 2015: A long-fought legal battle to recover \$8.9 billion in

damages from Exxon Mobil for the contamination and loss of use of more than 1,500 acres of wetlands, marshes, meadows and waters in New Jersey has been quietly settled by the state for around \$250 million.

<http://truth-out.org/opinion/item/29899-sorry-monsanto-the-science-is-on-our-side-not-yours>

Monsanto: the biotech industry would pretend to side with the scientists

sounding the alarm on global warming - when the largest contributor to global warming is industrial agriculture, with its GMO monoculture crops.

<http://www.ipsnews.net/2015/04/opinion-world-leaders-lack-ambition-to-tackle-climate-crisis/>

World Leaders Lack Ambition to Tackle Climate Crisis.

2014 NZ documentary Hot Air, the politics of climate change 1988-2009,

Chris Barton of NZH. NZ Climate Coalition funded by US interests. Exxon

funded the Heartland Institute. Business Roundtable brought out several pseudo-experts.

<https://www.youtube.com/watch?v=eH1s9GCqPKo&spfreload=1>

Planet Ocean [UK]- the film by Yann Arthus-Bertrand.

The pillage and destruction of the ocean's life.

WHO AM I?

I give some references to my own papers on climate change.

I am a mathematical statistician with a PhD from Stanford and 200 publications.

My main contribution to climate extremes was to show that the driver of extremes is primarily driven by changing variability (as the earth heats, the atmosphere becomes less stable), and NOT by the trend in the mean. This explains in part why the planet is experiencing more cold extremes as well as hot extremes.

Modelling dependency between climate extremes for New Zealand.

World Resource Review, 2001, 13 (4), 526-539.

CS Withers and S Nadarajah.

Presented at 11th Global Warming Conference, Boston, 25-28.4.2000.

Predicting temperature extremes in New Zealand.

World Resource Review, 2000, 12 (2), 237-252.

CS Withers and S Nadarajah.

Presented at 10th International Conference on Global Warming, Japan.

Evidence of trend in return levels for daily rainfall in New Zealand.

Journal of Hydrology, New Zealand, 2000, 39 (2), 155-166.

CS Withers and S Nadarajah.

Modelling climate extremes.

Proc. New Zealand Institute of Agric. Science and the New Zealand Society for Horticultural Science Annual Convention 2000,

'Managing the impacts of climatic variability - the Noah paradigm',

Massey University, Palmerston North, 27-29.6.2000,

p61. Editor D Swain. ISSN 1172-2827.

Estimates of return levels for extreme events from
temperature series subject to trend and changing variability.

World Resource Review, 1997, 9, 225-239.

CS Withers.

An examination of the extremes of selected New Zealand rainfall and runoff
records for evidence of trend.

Proc. International Extreme Values Conference,

1993, 3, 223-230,

National Institute of Standards and Technology, Special Publication 866,
editors J Galambos et al. Maryland.

A test for trend when residuals have the Gumbel or the generalised
extreme value distribution (Abstract)

The New Zealand Statistician, 1993, 28, (2), 78.