

**Submission by Mark O'Connor 12 November 2010 to the ACT's
INQUIRY INTO ECOLOGICAL CARRYING CAPACITY OF THE ACT AND
REGION**

I write as a long-standing ACT resident, and as the author or co-author of two substantial and well-reviewed books on carrying capacity *This Tired Brown Land* and (with William Lines) *Overloading Australia: How governments and media dither and deny on population*. I have also a number of academic qualifications and publications, including having been the ANU's H C Coombs Fellow, and the Museum of Victoria's Science and Humanities Fellow.

This submission concentrates on the relations between population size and carrying capacity.

I would be happy to be interviewed on this.

Human Population Size and how it affects ecological carrying capacity.

There are a number of myths about this. Several have been promoted in the ACT, usually though not always by vested interests, and often without effective analysis.

Below I list some of these and suggest why and how the Enquiry should avoid falling into them.

Myth 1:

There is "No necessary connection" between an increase in human numbers and an increase in environmental damage.

Comment:

There is also no *necessary* connection between speeding or drink-driving and an increase in road accidents —at least not for the individual driver. But there is on the whole an entirely predictable and statistical connection. It is obvious that every extra human being —in the world or in a region — adds in manifold ways to the pressures on the environment and on other species.

This is so even if that person or that society is clever at reducing or strongly motivated to reduce some of these pressures. Some people go to great lengths to reduce some of their impacts (e.g. by recycling garbage) while continuing to travel by plane or car. Those who reduce *all* impacts are too few as yet to be statistically significant. As the UK's Chief Scientist Sir David King remarked, it is self-evident that the massive growth in the human population is the chief cause of the decline of biodiversity. [See *Overloading Australia* p. 5]

Myth 2:

"It's not the number of people, it's the way they behave."

Comment:

No, it's both; and in most cases it is the one multiplied by the other.

Those who talk hopefully about compensating for the effects of an increase in residents by a corresponding reduction in all forms of per capita consumption (and of per capita demands on the environment) forget that the society which those extra persons are joining is not at present a conserver society; nor are they (at least most of them) moving to the ACT in order to reduce their consumption but rather to improve their "lifestyle".

The proposed method of getting everyone to consume less often amounts to "jawboning" — i.e. preaching. It is true that preaching to people about the common good has a certain

effect, since we are a social species and desire to do the right thing—at least to the extent that we agree with the preachers and to the extent that we see most of our fellow citizens doing so also.

However there is a kind of powerful counter-preaching, designed to ensure that everyone consumes at least as much as they can afford. This is called advertising. Billions of dollars are spent on it — more than a thousand times more than are spent on encouraging folk to consume less — and they are spent because advertising works. (US\$550 billion per year is one credible estimate for the world's annual advertising expenditure — see http://www.sfnblog.com/industry_trends/2009/09/sfn)._ Most folk consume as much as their incomes permit. As well, government repeatedly backs calls to increase consumption, and regards downturns in consumer sentiment as alarming.

Canadian environmentalist Tim Murray has put the issue in a nutshell: *What the world needs is fewer Canadian consumers, not more green Canadians.* For Canadians read Australians, and Canberrans.

As well, those who talk over-optimistically of persuading most Canberrans to voluntarily consume less and to use greener technology often fail to factor in the Jevons Paradox. (See Wikipedia on this.) And as World Bank economist Herman Daly has pointed out, public frugality must precede, not follow, private thrift, because “frugality first” induces efficiency; but efficiency first makes frugality less necessary. (See <http://www.earthrights.net/docs/daly.html>) Otherwise private persons who practise thrift may merely subsidise and prolong public profligacy. (cf. the recent scandal when it emerged that private citizens who reduced their own emissions were merely expanding the pollution allowances of major companies.)

Myth 3:

If we pack people into Canberra more densely they will use public transport more, so emissions will be lower and other species will benefit.

Comment:

Not so. More people will always consume more, even if they consume less *per capita*. “*The planet does not do per capita calculations*” — it’s total emissions and total consumption that count.

And emphatically the larger/denser population will do more driving. I know several cases where large blocks of flats have been forced into “underused” streets in RZ2 zones, and justified on grounds that this will encourage public transport. Yet, to reduce parking problems, ACTPLA requires developers to provide about as many carparks as there are bedrooms (e.g. 19 carparks for a 12 unit development). To circumvent the 2-storey limit, developers then excavate basement carparks that are often dangerous, cramped, and within a few years ill-lit and ill-drained. Their excavation probably uses far more fossil fuels than the increased bus-use could ever save. And of course there is soon a massive increase in the number of cars using that street.

Myth 4:

If we pack people into Canberra more densely they will have to consume less space, live in a more constrained and less expansive manner, emissions will be lower, and other species will benefit. Nature will applaud our efforts and appreciate our sacrifices in lifestyle.

Comment:

Apartment living, though denser, is often more energy expensive —even *per capita*. Tony Recsei of Save Our Suburbs in Sydney has published extensively on this.

There is probably a case for building newer suburbs in a more cramped way — even though this means that sunlight, pet space and garden area are more limited — simply because fuel for transport may soon become drastically scarce. The heavily shaded hutch-like “gardens” of Crace (“fuck hutches”, one architect rudely calls them) where the rules about set-backs

have been greatly reduced, are the result. Similarly, densifying older suburbs until it gets difficult, unpleasant and time-consuming to find a park at the shops may help persuade people to drive less. However there is little energy-saving, and much pain and destruction in the densifying of older suburbs, which I would argue should no longer be pursued. Reducing the rate of increase of Canberra's population is a far more promising strategy. (Some of its issues are discussed below.)

An important article by Michael Lardelli

www.onlineopinion.com.au/view.asp?article=8635&page=0

demonstrates that

Population growth lies at the core of all questions of sustainability. It is growth of the human population and the increasing resources that it requires that drives the destruction of habitats, the increasing levels of pollution (especially CO₂), and the accelerating depletion of finite resources. It is impossible to stop exacerbating these problems if we do not stop population growth.

At the same time, planners need to recognise that Canberra is not yet “post car” —though either Peak Oil or emission limits may yet make it become so. For the present, the deliberate creation of inconvenience to motorists (who often then spend much more time driving round in search of a park) is hard to justify. The sell-off of convenient public carparks on the flat, which forces motorists to use multi-storey carparks, adds stress, can increase emissions and seems often against the (present) public interest.

Human inconvenience, though often necessary if space is to be left for other species, is not a good in itself. Indeed it is, in itself, an undesirable.

Nature is not a piqued goddess, does not award credit points or places in heaven for our personal “sacrifices”, and cannot be placated by lower per capita footprints when in fact the *total* human footprint of the city is moving relentlessly upward.

Similarly the bitumen in your street is not “underused” if you can back out of your drive without having to wait while a couple of cars go by. Peace and spaciousness do matter.

Myth 5:

(Opposite of myths 3 and 4). We need lots more people to make a booming economy. The richer we are, the better we will look after the environment.

Comment:

I’m not aware of any environmental authorities who accept the second sentence. This line is mainly used by those economists with no interest in environment and by persons who want a way to deflect responsibility for the environmental damage they know or suspect their advice will produce.

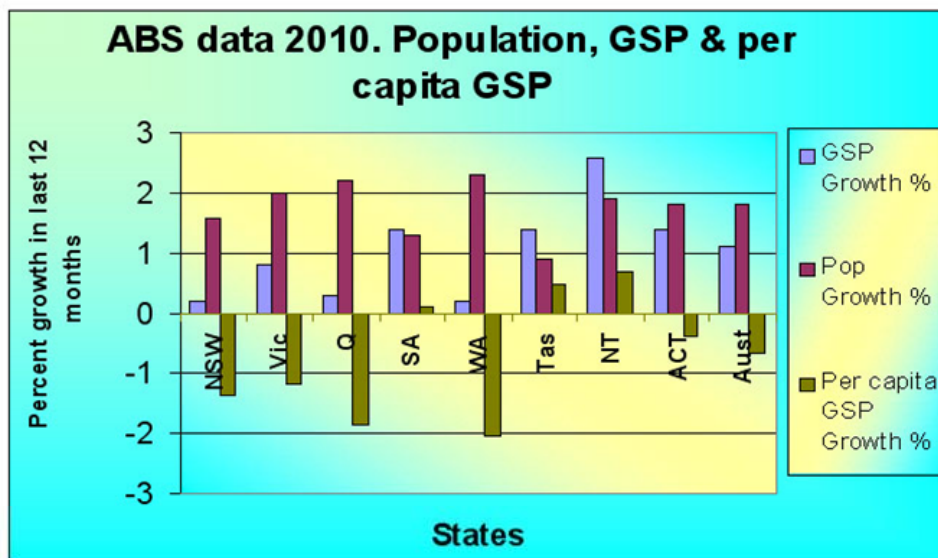
Incidentally the opposite claim, that it’s the rich that do all the environmental damage, is at least exaggerated. In fact it is the world’s *most* affluent and also the world’s *least* affluent who do the worst damage, as demonstrated in Chapter 2 of *Overloading Australia*. (pp. 16-23).

However it might seem possible to argue that an Australian urban population or a regional government like the ACT’s will make worse environmental (and civic) decisions when it is cash-strapped. Therefore a given size of population will have worse environmental effects if it is in economic trouble — *and paradoxically it might be in worse economic trouble because it is not increasing*. So, might an *increasing* population paradoxically cause less environmental damage because it is richer?

This somewhat perverse argument can, fortunately, be dismissed; and not just because it would be in effect a Ponzi strategy.

Current economic data shows that those Australian states with rapid population growth have in general been disadvantaged by

it, in terms of wealth as measured by per capita GDP (or rather GSP — Gross State Product).



WA with highest pop growth has most negative per cap GSP, Queensland with next highest pop growth has next most negative per cap GSP growth. This finding is consistent over many years and dispels any claim of economic benefit from population growth

It seems the Chief Minister, to judge by his form letter mentioned below, has been receiving dodgy economic advice. Former Democrat leader John Coulter, who compiled the above graph, comments that ABS data released 29 September 2010 reveal:

"Those states with the highest rates of population growth suffered the largest reduction in standard of living. Queensland and West Australia economies went backwards by 1.9 and 2 percent respectively in terms of per capita Gross State Product (GSP). On the other hand the Northern Territory, Tasmania and South Australia showed growth of per capita GSP of 0.7, 0.5 and 0.1 percent respectively. Australia, as a whole suffered a decline in per capita GDP of 0.7 percent.

"These figures clearly indicate that far from improving the lot of ordinary citizens, population growth by exceeding economic growth was, on average, making each citizen worse off.

"Importantly also, these raw figures do not reveal the full extent of the damaging impact of population growth on

the welfare of ordinary citizens. Much of the 'cost' of the additional infrastructure required for population growth is added to and inflates GDP and GSP. Thus, in terms of the existing population, the growth of total GDP/GSP, does not represent a real benefit.

Moreover, the costs borne by ordinary citizens in terms of traffic congestion, longer travel times, ameliorating environmental damage are also added to GDP/GSP. These are real costs masquerading as benefits through the misleading way in which GDP and GSP measures are constructed.

"These data expose, yet again, the deceit behind the self-interested claims of property developers and some other business interests that population growth is good for Australians and similar claims made by the major parties that receive large donations from these interests", —Dr John Coulter, Tel 08/8388 2153

The reasons that increasing population impoverishes a region are well set out by University of Queensland's Dr Jane O'Sullivan at

<http://www.onlineopinion.com.au/view.asp?article=10137&page=0>

As Dr O'Sullivan points out, when population growth approaches 2% p.a. it becomes quite impossible for government to extract enough tax money for infrastructure to catch up. This gives the lie not only to loose talk about how government will soon start "doing better" or "making more provision for infrastructure", but also to the self-interested arguments of some educational institutions. These argue disguised immigration via their courses is a major profitable industry for Australia and the ACT. Rather it is a net cost to the public, though much appreciated by property speculators. (On the harm done by high house and land prices see *Overloading Australia* Chapter 14 pp. 120 ff.)

The huge infrastructure costs of population increase can only briefly be met by the rapid selling off of ACT government land for commercial or residential purposes.

Dr O'Sullivan also points out that the infrastructure costs of population growth exceed the savings in old age pensions (via a "younging" of the population) by a factor of thirty! and asks: "Can we really be so stupid?" She assumes that the upfront infrastructure costs per person added to the population are in the low hundred thousands of dollars. More recently William Bourke has argued that the real cost may be more like half a million dollars per person. See <http://www.onlineopinion.com.au/view.asp?article=11141&page=0> Clearly the whole myth that growth and densification are vibrant forward-looking processes needs to be questioned.

All this raises the issue of **the ACT government's selective use of consultants with ideological biases**. (See **Proposals** below.)

Another example of this issue would be the scathing comments recently passed by the former head of the UN's Population Division, Dr Joseph Chamie, upon what he terms the "Ponzi demography" of an ANU consultant's advice. See <http://www.theglobalist.com/storyid.aspx?StoryId=8321>

Myth 6:

Australia and the ACT suffer (or are threatened by) a terrible labor shortage a.k.a. an excessive dependency ratio due to an ageing population.

Comment:

Rubbish! This claim has been repeatedly rejected by competent enquiries, including a recent study by the Australia Institute; yet it continues to be made by vested interests and is often repeated by politicians. However like all spin it has a kernel of truth to give it plausibility. Yes, Australian couples, or

Australian women, are averaging just under 2 children each; and this allows us to expect in time an age-balanced population, i.e. one with approximately equal numbers of people in each ten-year age bracket (up to those ages at which people start to die off).

This “normal” population will be quite unfamiliar to us, since it will contain more older people and fewer children than we are used to. However the dependency ratio (the percentage of people who are either too young or too old to work — say under 20 and over 70) will not change much. Remember three things:

- Having more people in their working years is no help at all if we can't employ them all; and in fact Australia has quite high unemployment, plus high underemployment and also high disguised unemployment. An out-of-work breadwinner with a dependant spouse and children is a much larger charge on the public purse than an old person on the pension — or self-funded.
- The young are much more helpless and expensive than the old. Up to 75, the old are a net source of financial support to younger generations. Grandparents as child minders also help parents return to work; and retired people carry out many free services and run many organisations for which people in work lack spare time.
- Claims by employers that they can't find skilled and willing workers (for the money they want to pay them) should not be naively accepted. (Ask anyone who has a teenage child looking for work! And remember that many of our best public servants have been forcibly retired at 55, because we have surplus employees.) The world's highest immigration rates have accustomed employers to not training their own workers and to paying less than the world market rate for skilled labor.

Myth 7:

The ACT's unusually low age structure ensures considerable natural increase (surplus of births over deaths). Together with Australia's migration rate (the highest per capita rate in the world) this ensures high population growth in the ACT. The ACT government is just trying to manage it by building ever more (and ever denser) housing; and any environmental damage can't be helped.

(NOTE: This fallacy can be considered a local variant of the common "selective fatalism" argument. In this growthists represent the indefinite population growth they desire as inevitable, and persons who object to Australia having the world's highest per capita immigration rate as "Canutes" holding back a natural process.)

Comment:

Note that the first claim, about the ACT's population being unusually young, (found in another of the Chief Minister's form letters) is incompatible with the previous myth: that we suffer a terribly *aged* population.

In fact with Sydney only 3 hours away it is far from inevitable that the ACT must swell. A reduction in net migration would reduce the population pressure on both cities. NSW has already seen a Premier stand up strongly to the federal government and criticise Australia's bizarre levels of net migration; yet the ACT Chief Minister actually attacked the PM for saying she was not a "big Australia" person. Clearly the current ACT government is complicit in the big Australia movement. If it remains so, it should not seek to dodge responsibility for the social, economic and environmental consequences.

Myth 8:

People have to live somewhere, and their environmental footprint would be much the same anywhere. Canberra's expansion helps more populous countries bring their population under control. So let's be unselfish and think globally.

Comment:

It is easier to have patience with this argument when it is made by genuine idealists than when it is used as a fall-back by vested interests who have tried, and failed, to prove that population growth improves conditions for all Australians. But even when offered with genuine idealism it is unsatisfactory. As *Overloading Australia* shows at more length than is possible here, Australia cannot and does not take off any significant percentage of the annual increase of more populous countries. But the belief that there is still an “empty country” that “needs” more people does enormous harm elsewhere. Only a tiny percentage of our immigrants are refugees. Most are “skilled immigrants” lured from countries where their skills are more needed than here.

And immigrants *do* increase their emissions and environmental demands. The average Australian puts out about 26 tonnes of CO₂ equivalent per year (and new arrivals soon move towards Australian norms), the average European about 10 tonnes, Chinese 4, Indian 2. For immigrants, increased affluence (and emissions) compensate for loss of language and cultural background—an understandable bargain but not one an environmentalist can greatly admire.

Myth 9:

There is no necessary connection between regional resources and the human population that might be sustained in a given region. Hence growth (of population, of housing developments, and of the state or regional economy) can and should go on forever.

Comment:

This seemed plausible during the Age of Oil (c. 1920-2008) when energy from oil and natural gas was abundant and

absurdly cheap (relative to the limited supplies and to the billions of humans that want it both now and for the foreseeable future).

The Economist's claim in 1999, quoted in *Overloading Australia* p. 127, that oil (which had recently risen to \$10 a barrel) must soon drop back permanently to \$5, was typical of the naivety of growth economists. The ACT government is still relying on their advice, as is clear from a form letter the Chief Minister's office sends out to those raising the population issue. [“ While we have not adopted a target to date, there is a growing recognition that population growth may be necessary to maintain economic stability. As the ACT ages new workers will be needed to replace retirees and support an older demographic.”] This, apart from using the *ageing population scare*, falsely claims that economic opinion is increasingly that population growth is essential to economic stability. In fact the present very sharp rise in the price of energy has the opposite implication. This leads to the issue of *Peak Oil*.

—Peak Oil —

The US Joints Chiefs of Staff, its German equivalent, and Lloyd's of London have all recently endorsed predictions that Peak Oil is imminent, that oil may rise as high as \$200 a barrel (invalidating many if not most current business plans, and likely creating economic chaos), and that no satisfactory alternative sources of *bulk* energy will be generally available for 20 years. See also the most recent ABC *Science Show's* interview with a leading expert: “Oil production peaked in 2008. It has been in decline since. Prof. Kjell Aleklett says....” (<http://www.abc.net.au/rn/scienceshow/stories/2010/3061272.htm> full transcript).

As Bill McKibben pointed out in his article on Breaking the Growth Habitat in the March *Scientific American*, we (which includes the ACT government) need to concede that Peak Oil is upon us, and that henceforth longterm continued growth is impossible, and "sustainable growth" an oxymoron. See <http://www.scientificamerican.com/article.cfm?id=bill->

[mckibben-question-and-answer](#)

The world depends on oil and gas to feed itself, via high-energy nitrate fertilisers made from oil and gas. This is why food riots broke out when oil reached \$100 a barrel, and only ceased when the GFC reduced oil and hence fertiliser prices.

Our civilisation's chief essentials are oil/energy and food. Till recently both have been absurdly cheap. Hence cities and new suburbs have been recklessly multiplied, on the assumption that oil and food could easily be brought to them. Indeed cities like Melbourne and Canberra that produce little for export have followed the Las Vegas syndrome, and believed that they could support their populations through endless economic growth, — much of it based on the building of housing for an ever growing population.

Such thinking is now irresponsible and must be abandoned. Peak Oil makes it crucial to ask of each new proposed suburb or housing project *“What commodity will the inhabitants of this proposed suburb be so exceptionally well-placed to produce for export that the rest of the world (or even the rest of Australia) will be disposed to send them treasures like oil and food in exchange?”*

To assume that a city can survive through the “productive” industry of building more houses and suburbs to settle in ever more people — “a housing-led recovery” etc.-- will soon be a folly comparable to the economics of that famous country (imagined by Adam Smith) whose inhabitants were going to live by taking in each other's washing!

The above leads on to the question of Canberra's sustainable population limit, in purely human terms. (The following analysis neglects environmental issues—it is after all obvious that every extra person adds, *ceteris paribus*, to the pressures on the environment and on other species.).

Canberra is unlikely ever to be a major regional agricultural centre, mainly because it is surrounded by regions with very poor soils (with the tiny exception of Pialligo). Also it has

Goulburn for a competitor. Its hope of sustaining itself rests primarily on a single export: *governmental services*. (Some businesses may also be advantageously positioned, by being in the capital, to provide various kinds of centralised information services. However in an internet age they face competition from literally every other part of the country, and from many places where premises are cheaper.)

In a future world where each city's population may need to correspond roughly to the value of what it can reliably export, we need to ask what population is required to supply Canberra's governmental and related services (including the national-cultural services of the War Memorial and National Library and National Museum) to the rest of Australia? (The figure should include those persons required to supply all desired or affordable services to those actually doing the bureaucratic, national-cultural and policy work. Such services include everything from policing and nursing to the provision of café lattes.)

My "somewhat informed" guess is: between 100,000 and 200,000 persons. (Perhaps your committee should set up a more detailed examination of this issue). If my guess is roughly right, the pushing of population up towards 500,000, as favored by the Property Council and the present ACT government, may prove to be a folly.

As well, there is always Dick Smith's question: "And then what?"

i.e. if we let population grow towards 500,000, giving in to the lobbies that see short-term economic benefits in this, what happens when we reach 500,000 and the Property Council, for instance, suddenly ups its goal from 500,000 to 750,000 or 1 million?

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A final important **issue** is **the need for the ACT government to use better and more environmentally aware consultants**. One example: *Overloading Australia* describes

(page 8) the ideology of former Brisbane mayor Jim Soorly who was credibly reported as wanting Australia to triple its population in 20 years. Such high growth policies caused so much pain in Brisbane that Anna Bligh now spends much of her time apologising for population growth and claiming that she “feels” ordinary people’s pain as the infrastructure fails to keep up. Yet Soorley later became consultant to the ACT where he was a driving force behind the initiative to abandon plans for the development of City Hill as an appropriate third apex of the National Triangle. As described by Jack Kershaw (*Canberra Times* 3 November: “The Civic Creep invades City Hill”) the ACT orchestrated Amendment 59 so that the ACT government could sell off City Hill for largely commercial high rise. This will obscure the Hill and destroy its visual relationship to Capital Hill and Russell Hill. Such mercenary policies might have been necessary to pay for a vast increase of population and consequently of infrastructure, but many of the ACT’s consultants, seem to have presented an extreme ideology of growthism as commonsense to which there was no alternative.

Granted that there *is* an alternative to such viewpoints, the ACT government should urgently employ consultants with alternative visions of Canberra’s future, and should then reconsider *all* of its current forward planning in the light of the additional points of view provided. Follies like the overdevelopment of the airport region, and the consequent requirement for the taxpayer to foot the bill for duplication of the airport road, need to be avoided in future.

General Observations

Note that human beings are extremely long-lived mammals. While it is easy to import population growth it is very difficult to go in the opposite direction. “Not in this lifetime”. Hence we

need to remember that the ACT's population growth is effectively irreversible.

There are many signs that we are crossing desirable thresholds for the ACT's population size. These signs include water restrictions and the government's attempt to impose the use of treated effluent in drinking water.

I ask that the Inquiry recommend:

- termination of the Live in Canberra program;
- adoption of a policy to slow and as soon as possible cap Canberra's population growth; and
- that the ACT inform and encourage individuals to limit their ecological footprints, including the sizes of their families.
- Use of a much wider range of consultants, including demographers like Bob Birrell or Katharine Betts who understand environmental limits, and city planners like Jack Kershaw and Patrick Troy who understand the value of open and less crowded public spaces, and further recommend that the ACT Government reconsider *all* of its current forward planning in the light of the additional points of view provided..
- Expansion of the Environmental Defender's Office with a brief to offer advice to residents threatened by nearby developments, and thus restrict the time lost and the consequent interference to their working and parenting lives when they seek to resist a development
- Other appropriate measures to create a more level playing field between residents and developers, including a principle that developers must pay the real costs of nuisance and disruption, beyond a

reasonable minimum, that their activities cause to the public;

- A tightening of the RZ2 rules to prevent the excavation of underground car parks as a device to evade the 2-storey restrictions and thus to produce unit developments whose density is out of character with the streets in which these are inserted;
- Measures to restrict the influence of vested interests and their lobbyists, and to ensure that ACT LA Members hear as often from residents groups and environmentalists as from developers, pro-growth business bodies, and professional lobbyists. .
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Yours sincerely,

Mark O'Connor