

Environmental Fundamentalism

Predetermined beliefs rather than science are driving public policy on environmental issues, warns **Jennifer Marohasy**

Australians generally perceive themselves to be affable and rational, and part of a secular nation that determines its public policies—including policies on environmental issues—largely on the basis of evidence. Most of us feel comfortable in the belief that our fellow citizens, and especially our policy leaders, are unlikely to ever be swept along by quasi-religious ideas. The reality, however, is somewhat different. There is ample evidence that environmental fundamentalism drives public policy decision making on a range of issues, with significant social and economic impact but little if any environmental benefit.

I consider myself an environmentalist. I want to ensure a beautiful, healthy, biologically diverse planet for future generations. But this will be best achieved if we are honest to the data and proceed with our minds open to the evidence. A problem with fundamentalist creeds is that they are driven by adherence to predetermined agendas and teachings. The fundamentalist's position is rarely tolerant of new information and is generally dismissive of evidence. Environmental fundamentalism is subversive in that it draws on science to give legitimacy to its beliefs—the same beliefs that, in many instances, have no basis in observation or tested theory.

Dr Jennifer Marohasy is Director of the Environment Unit, Institute of Public Affairs. This is an edited version of a lecture given at the CIS on Wednesday 12th May, 2004.

Three issues are particularly illustrative of how we are being swept along by environmental fundamentalism: the banning of broad scale tree clearing in Queensland, water policies for the Murray-Darling Basin and moratoriums on GM food crops.

Tree clearing in Queensland

The outlawing of broad-scale tree clearing was a key Queensland state government election commitment. I live in the marginal Brisbane seat of Indooroopilly and the propaganda on this issue in the lead up to the 2004 election was relentless. The junk mail gave the very clear impression that broad-scale tree clearing was turning Queensland into a treeless wasteland—this was the slogan for the media campaign driven by the Wilderness Society. The message from the government to farmers protesting the new legislation has been to stop whinging because the government has a clear mandate.

But what if the election mandate was based on misinformation? What if forest cover has actually been increasing in Queensland over the last decade? According to the state government report *Land Cover Change in Queensland 1999-2001* there has been a 5 million hectares *increase* in the area classified as woody vegetation over the period 1992 to 2001 in Queensland. You may also find it hard to believe that the official statistics from the Queensland Herbarium show 81% of Queensland is covered in remnant vegetation—a figure that has remained constant over the last decade. The dictionary definition of ‘remnant’ is ‘little or few that remains, a fragment or scrap’. The legislative definition of ‘remnant’ is vegetation with 50% of its original cover and 70% of its original height. In Queensland ‘remnant’ is the dominant vegetation classification.

The relatively high level of remnant vegetation cover in Queensland is at least in part achieved by vegetation re-growing after clearing, and turning into ‘remnant’ over time. Woodlands are also

thickening and acacia thickets replacing once open grasslands over approximately 50 million hectares of rangeland. Interestingly, Queensland satellite data shows that 26% of all clearing in 2000-01 was of land that had no trees in 1991.

Australian Aboriginals were not forest dwellers. They roamed over extensive grassland areas. The end of Aboriginal burning and the introduction of sheep and cattle resulted in the forest encroachment beginning in the late 1800s. The new laws banning broad scale tree clearing were reported on ABC radio’s World Today with a story that began, ‘Green groups are popping champagne corks, farmers are crying into their beers. But the first people affected by the new (Queensland) laws won’t have either of those options. The small Aboriginal community of Napranum adopted a zero tolerance to alcohol last year, and for a town trying desperately to solve its serious social problems, these tree clearing laws may have just scuttled a \$200 million dream’. The Aboriginal community had been working on a plan to clear 25,000 hectares and grow soya beans, sorghum and fat cattle for sale directly to Asia through the remote gulf port of Weipa. A Queensland government spokesman quoted on the program said exemptions from the tree clearing laws for the Aboriginal community were possible, but only if they can prove it is a project of state importance.

Water Dreaming

‘Water Dreaming’ was the title of a feature in Melbourne’s *Age* newspaper on 19th April 2003 in which Tim Flannery, director of the South Australian Museum, was reported explaining how water is at the heart of our inability as Australians to reconcile ourselves with our land. He also said that the Murray-Darling system is ‘the lifeblood of the continent’ and a symbol of how we may be losing that war—‘The river is dying, trees that have been growing for 300 years are now pegging it because of the poor and declining water quality. The loss of biodiversity in that river, the salinisation; it is clearly unsustainable.’

I came to the issue a few months later—when I started with the Institute of Public Affairs in July last year. At that time the Wentworth Group, of which Tim Flannery is a member, were asking all irrigators to give up 10% of their water allocation for the

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‘dying river’. A total amount of 1,500 gigalitres was proposed, worth approximately \$1.8 billion. I was keen to understand the evidence—to understand the nature and the magnitude of the problem.

Key water quality indicators can give an indication of the health of a river. The message with respect to water quality and river salinity in July last year was very clear. The Wentworth Group said that ‘deteriorating water quality was seriously affecting the sustainability of agriculture’; and the CSIRO website was unambiguous: ‘salt levels are rising in almost all of the Basin’s rivers’. I asked the CSIRO for the data to support their website’s statement. After some time, they said they didn’t have the data and referred me to the Murray-Darling Basin Commission. I discovered daily readings for salinity are available on request from the Commission for many key sites, including Morgan in South Australia.

Morgan is considered the key indicator site for water quality in the Murray-Darling Basin. It is below the inflow from the Darling and just upstream of the pipeline off-takes for Adelaide’s water supply. According to the Commission, ‘its use as an indicator site emphasises the relative importance of river salinity impacts on all water users in the system’. A plot of the yearly averages for salinity since recordings, which were first made in 1938 and can be seen in Figure 1, shows current salinity levels at Morgan are equivalent to pre-World War II levels. I was surprised. I was expecting an increasing trend. The peak in 1982 is attributed to the drought at this time, with low flow conditions normally associated with higher salt levels. Since 1982 and despite the current drought, salinity levels have dropped. Water quality has, in effect, improved. The Commission have concurred with my findings and indicated that average salinity in the river Murray has improved over the last decade. The improvements are attributed to the salt interception schemes and improvements in on-farm practices.

After a repeated challenge the CSIRO eventually changed the text on their website. Interestingly they replaced reference to rising salt levels with the following text, ‘Land and water resource managers in Australia are under increasing pressure to meet stringent environmental guidelines, and the health of river and estuaries is a key factor in

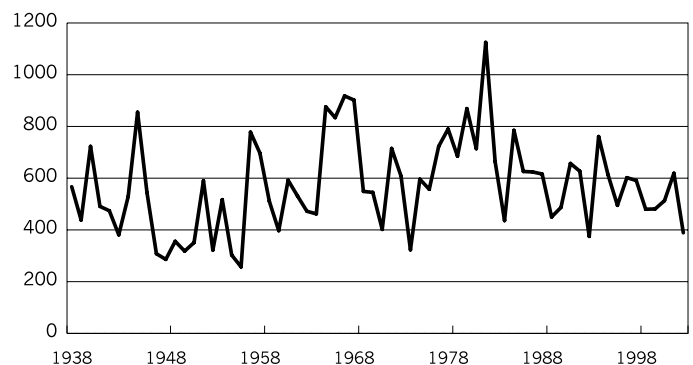
the sustainable management of Australia’s natural resources.’ I subsequently plotted other key water quality indicators. Nitrogen, phosphorus and turbidity levels are not increasing—water quality is not deteriorating in the Murray River.

I wrote up my water quality work as a small paper titled ‘Received Evidence for Deteriorating Water Quality in the Murray River’. The paper was widely circulated on the internet after a seminar I gave in Canberra on 25th July 2003. The response of the Deputy Prime Minister, John Anderson, was typical of many people when presented with ‘good news’. In an address he gave in Moree a few weeks later he said, ‘though we are achieving environmental improvements in some areas, such as reducing the salinity of the Murray . . . one indicator of a much broader problem is the decline in native fish numbers throughout the basin’.

Murray cod had just been listed by the then Federal Environment Minister, David Kemp, as a vulnerable species under the *Environment Protection and Biodiversity Conservation Act* 1999 on the basis that there had been a 30% decline in Murray cod numbers over the last 50 years. But there are *no* data to support this claim made in the media release associated with the listing and reported extensively in the media. *The Australian* newspaper has been running a ‘Saving the Murray’ campaign since February 2001, so it immediately runs all and any bad news stories on the river. It picked up on the Minister’s media release and ran stories with the headlines ‘Murray cod on national list’ and ‘For cod’s sake, Murray needs stronger flow’.

The most widely quoted source of information on native fish status in the Murray-Darling Basin is a survey undertaken in 1995-96 by NSW Fisheries.

Figure 1: Salinity levels 1938-2003, Morgan, SA.



The survey does not provide any trend data. The report's principal conclusions include the statement that: 'A telling indication of the condition of rivers in the Murray region was the fact that, despite intensive fishing with the most efficient types of sampling gear for a total of 220 person-days over a two-year period in 20 randomly chosen Murray-region sites, *not* a single Murray cod or freshwater catfish was caught.'

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It is evident from fishing magazines and the results of local fishing competitions that Murray cod are present. A local Murray River fisherman's retort to the scientist's declaration that they didn't catch any fish goes something along the lines, 'The scientists, although having letters behind their name, spending some \$2 million on gear, and two years trying, evidently still can't fish.' But perhaps most remarkable, in the same years and in the same regions that the scientists undertook their now much-quoted survey that found not a single Murray cod, commercial fishermen harvested 26 tonnes of Murray cod!

Genetically Modified (GM) food

GM producing countries dominate world grain trade and account for 80% of world maize exports, 70% of soybeans, 50% of cotton seed and 40% of canola. These countries increased their share of the market by 15% between 2002 and 2003, and are expected to increase it further as more GM broad acre crops are harvested. Uptake of the technology has been rapid in North and South America, but anti-GM campaigning has slowed or blocked plantings in most of Europe, Africa and parts of Asia.

In New Zealand, anti-GM sentiment was very strong and so a confused government held a royal commission into the issue. The commission found that GM is not inherently dangerous, that New Zealand could not afford to ignore the potential benefits of the technology, and recommended the

lifting of the moratorium. Field trials of the first New Zealand GM crop were recently approved—GM herbicide tolerant onions.

Australia is interesting. In 1988 we were the first country to release a GM organism, a successful crown gall bacterium to prevent the disease of roses, apples, pears and peaches. Since then, we have made only one other release, GM cotton, first planted in 1996. This has been impressively successful, grown on 90% of cotton farms in NSW and Queensland, with the first variety reducing insecticide use by an average 56% and the latest varieties anticipated to reduce insecticide use by an impressive 75%.

Cotton is grown primarily for its fibre, but the cotton seed is used to produce vegetable oil. Few people realise that about 35% of Australian's vegetable oil is from cotton seed. Cotton seed oil is in fact favoured by many fast food outlets because it cooks hot and retains heat. The reality is that GM fish and chips are already an Australian staple. Most of the rest of our vegetable oil is from canola. Anti-GM campaigners have deceptively targeted GM canola as the first GM food crop and completely ignored cotton as a source of vegetable oil.

Greenpeace has led a formidable campaign to prevent the commercial release of GM canola varieties in Australia; varieties grown in Canada since 1996. We now have a situation where all state governments (except Queensland) have, over the last few months, introduced or extended bans in one form or another on the commercial production of GM food crops. Bans or significant restrictions have also been placed on field trials. Cotton is given legislative exemptions on the basis it is grown primarily for fibre.

Every state government has accepted there is no health or environmental issue with GM canola, but claim concern for Australia's clean green image and our international markets. In the case of the Victorian Bracks government the decision directly contradicted recommendations in the two reports it had commissioned on the issue. These reports found that while market sensitivities exist, our main competitors are selling GM product into our major markets.

Fresh from the success of brow-beating state governments into submission, Greenpeace is now going for 'rollback' by, in the first instance, targeting GM soy from the United States. Greenpeace activists painted 'Stop GE Imports' on the side of

a ship carrying 13,000 tonnes of GM soy meal from the US—feed for Ingham chickens and perhaps also some dairy cows. This stunt got loads of media coverage. Once upon a time the protest might have been against the importation of stock feed from an overseas competitor. I guess we are now benefiting in a round about sort of way, from the US farm subsidies.

Environmentalism

Michael Crichton—notable American writer and author of *Jurassic Park*—has described environmentalism as the religion of choice for ‘urban atheists’. Recently, I gave a lecture to university environmental science students on the ‘Burden of Proof in the Environment Sphere’. My key message was that proof or evidence appears to be becoming less necessary as scientists increasingly operate on the basis of belief. The point was made back to me by the students that, ‘Belief is important. It is what makes the world go around.’ One of their main concerns was that if people believed that everything was OK, the environment would be destroyed. While environmental campaigners express great concern over a problem, they often also seem deeply committed to the continued existence of the same problem.

Evidence is information establishing fact. Belief is trust and acceptance of a received theology. It is the latter, acceptance of the belief system that underpins environmental fundamentalism, which is increasingly underpinning public policy decision making in Australia.

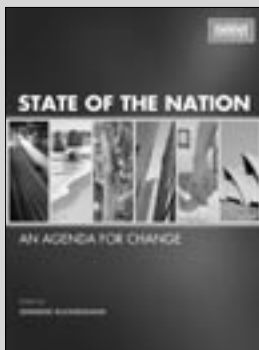
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Forest is replacing once open native grassland across approximately 50 million hectares of rangeland in Queensland, but tree clearing is being banned. Why? Because trees have become sacred in Australia—like cows in India. The act of pulling or cutting down trees offends environmental fundamentalists. Their beliefs now take precedence, with the management of our rangelands complicated, and development opportunities forgone.

Environmental advocates masquerading as scientists have been misleading us on the health of the Murray River system for years. They have been screaming imminent catastrophe based on the hypothetical. The successful environmental initiatives of the 1970s and 1980s that reversed the then trends of increasing river salinity and rising water tables have gone largely unreported.

State governments banning GM food crops was my third example of environmental fundamentalism dictating public policy. A newspaper headline in *The Herald Sun* the week after the Bracks government placed the four year ban on the commercial production of GM crops summed up the situation: ‘Good, safe, banned.’ I respect the rights of those who do not want to eat GM food—in the same way I respect the rights of Muslims to not eat pork. But the anti-GM campaigners do not appear to accept my right to choose GM. I might choose GM because of the real environmental benefits from reduced pesticide use, and its potential to feed a world population with an increasing appetite for meat and dairy products. More land will need to be brought under cultivation unless we can produce more animal food from currently cultivated areas.

In material, standard of living terms, Australia has progressed and benefited enormously from the secularisation of society and the power and independence of science. It is time we returned to this solid foundation. It is time we started demanding a rational evidence-based approach to public policy on environmental issues.



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