

Submission to the State Planning Commission on the Mount Lofty Golf Estate Pty Ltd Development Report

August 2023

From

**David Shearman, Emeritus Professor of Medicine,
University of Adelaide**

Professor David Shearman AM MB, ChB, PhD, FRACP, FRCPE.

David Shearman is Emeritus Professor of Medicine at Adelaide University 1975-1997, and previously held senior positions at Edinburgh and Yale Universities. He is author of many books relating to climate change, its science, consequences, democratic and international and economic implications; he served on the IPCC for two terms on health and scientific sections. He has been President of the Conservation Council of South Australia and with the late Professor Tony McMichael he founded Doctors for the Environment Australia in 2001 and was the Hon Secretary 2001-2018. He is author and co-author of several hundred scientific and medical papers and writes frequently for the media. He was awarded an AM for service to medicine and to climate change.

His website is www.davidshearman.org

A significant dimension of this Report is missing;- the relevance of this development in the driest state in the driest country at a time when the world is approaching an environmental crisis.

Science now recognises that after many decades of a steady rise in greenhouse emissions, we are suddenly at a point where the consequences of warming are following a much more severe trajectory in virtually all parts of the world. The scientific evidence is overwhelming.

The majority of scientists now believe that we are near to a tipping point which will make climate change uncontrollable. Simultaneously the same numbers of scientists believe we are near to a tipping point on environmental collapse. Climate change and a sustainable natural environment are synergistic and both are equally important in the quest for survival.

This Development, like many before it, is just seen as a routine matter for State development but is one of many which have denuded the natural vegetation of South Australia. It will be approved without any consideration of the parlous state of the environment and what this means for our future.

My criticisms of the development emanate from my experience as a medical doctor and as a biological scientist and former member of the IPCC with responsibilities as for health and the environment in Australasia,

The SA environment

The condition of the natural environment as a life support system, can be measured by several parameters and tree cover is perhaps the most important. A WWF report on Trees tells us https://assets.wwf.org.au/image/upload/f_pdf/file_WWF_Trees_Scorecard_report that "Standing tall in first place on the leader board is South Australia (SA), with no native forest logging, strong commitments, and a range of conservation programs." I don't agree with this statement In contrast most other States still have extensive native forest logging which is frequently in the media because they still have forest to cut down. It is not detailed our media that in SA logging and clearance are now of the remnants of tree cover.

Currently native forests cover only 9% of South Australia with less than 10% of the original forest remaining in the Mount Lofty Ranges, and less than 4% remaining on the Adelaide Plains relative to the commencement of colonisation. So there are very few trees left to cut down and it is likely that SA should be last on the WWF scorecard instead of the top.

In SA between 1990 and 2015 nearly 500,000 hectares of native vegetation were lost under the Native Vegetation Act of 1991; between 2010 and 2020 only [1% of 1428 applications to clear were refused](#).

Many applications to clear are for small areas relating to housing, roads and other developments. If a road needs widening according to the development minister, small remnants of vegetation and trees will be removed whatever the environmental and health case for protection.

In the Adelaide Hills patches of remnant tree cover are frequently destroyed and I have documented one in the media, <https://johnmenadue.com/land-clearing-an-environmental-and-human-health-disaster-that-must-stop/> but it would be possible to write such an article on a clearance virtually every week. Applications to clear seem to be approved under the plea of "it's only a small number" and what is seen as an economic imperative for 'development'. The issue is not considered as a whole.

In South Australia we are debilitated by a Native Vegetation Act from the last century (1991), governments failing to prioritise life support systems such as ecological services and ineffective assessment systems based on "Your say".

Tree cover is an indirect measure of ecological services, living soil for food production, water filtration and purification etc. SA is denying its population its future for successive governments adopt 'La Belle Indifference' approach. Of the many politicians and public servants I have spoken to, I find a significant lack of knowledge of this issue. If I succeed with nothing else with this submission, I ask all who read it as part of their occupation as to why trees must now be urgently preserved https://dea.org.au/wp-content/uploads/2023/03/WWF_DEA_Trees-Health-Report_FINAL_030323.pdf

I also suggest the article by Professor Bradshaw an internationally acclaimed SA scientist be read.

<http://www.onlyoneplanet.com/marineBradshaw2021.pdf>

Mount Lofty Golf Estate - Ecological Flora and Fauna Assessment

This is thorough report

It noted that a total of 71 native scattered trees were recorded within the Project Area, which included three *Acacia melanoxylon* (Blackwood), 24 *Eucalyptus obliqua* (Messmate Stringybark) and 44 State Rare *Eucalyptus viminalis* ssp. *viminalis* (Manna Gum). All trees were categorised based on their Unit Biodiversity Score (UBS). A tree with a UBS of less than 4 was categorised as low in quality and should be retained as much as possible but may be removed. A tree with a UBS between 4 and 7 was categorised as moderate in quality and should be retained where possible

All trees were of a mature age and ranged from poor to excellent in health. Some trees contain hollows which could provide suitable habitat for fauna species.

It is noted that "Pockets of remnant native vegetation were often degraded by the presence of introduced flora species and fragmented from more intact remnant native vegetation but may be used by fauna as wildlife corridors to more intact and better quality native vegetation, particularly to the surrounding areas in Mount George Conservation Park

My Comment; This patch of vegetation is an ecological entity; it includes some "low quality trees" but these have a crucial role, if they die they provide carbon to the soil, as they rot they provide different habitat for a range of species – The tree cover is part of a functioning unit for retaining carbon, removing carbon from the atmosphere and it exists in symbiosis with a network of fungi in the soil, which store carbon

Offsets; these cannot replace the existing tree and current environmental services which are priceless. Tree planting will take more than a century to deliver the same carbon services. In general, financial offsets such as \$439,095 fail to deliver protection and should be used no longer.

Water scarcity, the Murray River and the Great Artesian Basin

Those assessing this application should be aware of the long term meteorological forecasts for SA which has a Mediterranean climate; diminishing water resources in all other Mediterranean climates

throughout the world; and that we are moving into an El Niño which is likely to more prolonged the past El Nino's

It is inevitable that we will have water shortage and are extremely unlikely to evade the shortages detailed in current international water reports. Our task now is to conserve.

The conclusion of the report on Sustainability of water supplies, The Integrated Water Management Plan appendix DD, states "that the proposed works can be suitably designed and developed to holistically manage water both on site and within the surrounding catchment to mitigate negative effects on the environment. This assessment has been undertaken with consideration to the EPA, SA Health and WSAA code requirements, along with best practices for stormwater management" There is a total absence of the wider considerations detailed in this submission. These are below:-

The viability of the Murray River System

This System is under serious question The Murray River's management plan is not working, there was inadequate recognition of climate change impacts, rorting of water allocation by upstream states, theft of water by landowners, use of damaging water markets, and failure of allocations to Aboriginal peoples. <https://johnmenadue.com/the-murray-darling-basin-plan-has-fundamental-problems-and-needs-replacing/> Many eminent scientists believe the river is dying

Fortunately some necessary action for the future was recognised in 2012 with the commencement of the Adelaide Desalination Plant for emergency use. However since then SA water policy has failed to give priority to human and environmental use. My comments on this situation and on the Murray River and GAB are detailed in submission to the Productivity Commission, https://www.pc.gov.au/_data/assets/pdf_file/0011/273989/subdr126-water-reform-2020.pdf and in my submission to the SA governments water security paper government <https://static1.squarespace.com/static/6035c9d62d099d4f3b8d7db4/t/60de845eced5b0239f5d7e8c/1625195617264/Submission-Water-Security-Statement-2021-Water-for-Sustainable-Growth.pdf>

The conclusion these reports indicate that SA water policy is inadequate. They consider water as a given for economic purposes and the water protective role of trees and vegetation cover is threatened. This is particularly so with the Great Artesian Basin

The Great Artesian Basin (GAB)

My reports above indicate that the GAB must become a reserve for human and agricultural use and further mining must be resisted. In the next month there will be national report on the human health harms from fracking which causes water contamination with toxic chemicals from both coal seam and shale gas mining.

How does water security impact the proposed development?

The Australian Golf Industry Council indicates that, an average of 124 megalitres per 18-hole equivalent course is used each year
<https://archive.golf.org.au/wp-content/uploads/2020/11/00035025-source.pdf>

Golf serves the purpose of providing an important health benefit for users and the water provides some security for adjacent vegetation. However recreation water will become restricted as the expected problems in SA eventuate.

The problem arises for leisure industries when the economy has to contract because the increasing damage to the environment and to infrastructure from climate change; we have failed internationally to reduce our consumption and emissions and contraction will be inevitable; is this time for more tourism development when the world and Australia live with flood and flame? A likely outcome will be less travel, more difficult flying conditions and much less spending power.

Conclusion

This Development should not proceed for it would be a part of the current clearance of native vegetation threatening the future of this state. The issue must be considered in association with the many other matters and clearances not mentioned in the Development Report and presumably not requested by the State Planning Commission