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The Secretary
Legislative Council Select Committee on the Tasmanian Forests
Agreement Bill 2012
Parliament of Tasmania

Parliament House
HOBART TAS 7000

18 January 2013

Dear Sir/Madam

I am writing to regarding the *Tasmanian Forests Agreement Bill 2012* (No 30) on a matter that I believe is relevant to the terms of reference of your enquiry, the continued operation of the Warra research site as a long term ecological research site and part of the broader TERN infrastructure umbrella.

TERN's function

The **Terrestrial Ecosystem Research Network (TERN)** is an integrated network designed to serve the ecosystem science and management communities in Australia, and builds on significant past investment by researchers and governments to understand Australian ecosystems. TERN is establishing enduring monitoring and information systems to help gather, integrate and share data, information and knowledge through a range of terrestrial ecosystem observation and synthesis facilities.

TERN's Vision is for an Australian ecosystem science community that has undergone transformational change - from one in which effort is frequently fragmented, duplicative and short-term, to one that is connected, coordinated and enduring, and delivering for Australia's future.

TERN's Mission is to build the relationships and infrastructure that will enable sustained, long-term collection, storage, sharing, analysis and synthesis of ecosystem data to meet terrestrial ecosystem science and natural resource management needs in Australia.

Details of the network can be found at www.tern.org.au.

Warra

The Warra Tall Eucalypt research site was established as a Long-term Ecological Research (LTER) site in 1998. Details of the site can be found at <http://www.tern-supersites.net.au/index.php/warra> and I provide an extract here of the overview: The site has been one of Australia's most scientifically productive. It is a hub for intensive,



multi-disciplinary research to understand the fundamental ecological processes in *E. obliqua* forests and the long-term effects that management has on those processes in contrast with natural disturbance.

Current research is focussing on the bio-physical processes that support the biota and how they fluctuate across scales both spatial and temporal.

Importantly, research done at Warra Tall Eucalypt has directly driven improvements in forest management more generally, e.g. the introduction of variable retention silviculture in mature tall, wet eucalypt forests.

Key research objectives

- to understand fundamental ecological processes in *E. obliqua* wet forests
- to assess and monitor biodiversity and geodiversity
- to determine the long term effects of different forest management regimes on natural diversity and ecological processes and thus assess their sustainability
- where necessary, to develop alternative management regimes
- to provide an integrated multi-disciplinary focus which complements research programs elsewhere in Tasmania
- to link Tasmanian forest research with national and international programs having a long-term ecological focus

Warra and the origins of the Australian long term ecological research networking

The origins of a formal long term ecological research network in Australia grew out of the 1992 National Forest Policy Statement which saw governments at both a state and commonwealth level commit to the objectives of sustainable forest management. Integral to this was the recognition that forests systems operated on timelines over decades and centuries and that

“a much greater level of understanding about the variability of forests and impacts of differing management regimes can come from having a multi-disciplinary, long term, site-based approach so that different specialists can bring their skills and understanding to bear on a common goal” (Brown, Elliott et al. 2001).

In 1995 a long-term ecological research (LTER) site was established by the Tasmania Government at Warra in State Forest and National Park partially overlapping the Wilderness World Heritage Area in Tasmania in 1995 (Brown, Elliott et al. 2001). Warra become one of the first

sites to participate in the International Long Term Ecological Research network (<http://www.ilternet.edu>).

With the establishment of TERN in 2009 and the complimentary nature of its objectives and science agenda it was logical for the Australian LTER network to be integrated into the TERN program. Warra has remained one of the crucial sites for long-term ecological research and is now part of the TERN Supersites network (see <http://www.tern-supersites.net.au/> for more details).

Recent Investment

As part of the TERN supersite network there has been considerable recent investment at the site building on previous State and Commonwealth investment. A significant development has been the funding of an 80-metre carbon flux tower that is part of the Ozflux network (<http://www.ozflux.org.au/>). OzFlux is a national ecosystem research network linked into then international network ([FluxNet](#)) of over 500 flux stations that are providing continuous, long-term micrometeorological measurements to monitor the state of ecosystems globally. Funding for the tower came from the Commonwealth government's EIF Supersite Program (see TERN website for more details).

Future

I would like to emphasise the importance of the continuation of Warra as a long term research site dedicated to supplying scientific information to deliver on the broader objectives of ecologically sustainable forest management. As part of the continued operation as research infrastructure of national and international significance, issues of access to the site by the science community (including those of relevant management agencies) and the activities that will be permitted to meet the research objectives of the site need to be appropriately considered and included in any management overlay for the area (including the development of appropriate conservation covenants). It is important that the relevant research community is consulted with in this process. Also, options for the formal recognition of Warra as a research site within the proposed act or related subsidiary instruments are worthy of consideration.

Yours sincerely

Prof Tim Clancy
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