16th February 2007

Mr Ken Matthews
Chairman and Executive Officer
National Water Commission
95 Northbourne Avenue
CANBERRA ACT 2600

Dear Ken

Plantation Timber Industry - Submission to National Water Commission
First Biennial Assessment of the National Water Initiative - February 2007

Key Points

The plantation industry advocates that:

- Plantation forestry is a dryland (non-irrigated) agricultural land use and any policy that is contemplated in relation to water use/interception by plantations should be considered only as part of a full debate on water use by all dryland agricultural land uses;
- All policy on water use/interception must be underpinned by sound repeatable science;
- All policy on water use/interception should take into account issues of water quality as well as water quantity; and
- Clauses 55-57 of the National Water Initiative should only be implemented as written, that is, constrained to consideration of land use change (e.g. new plantations) not existing land uses.

The plantation timber industry has very serious concerns about the progress of water policy implementation in South East South Australia. The South East Natural Resource Management Board is proposing to deal with plantation forestry in a manner which is inconsistent with, and beyond, the National Water Initiative.

The plantation industry calls on the National Water Commission to provide greater rigour and national consistency to the Implementation of Clauses 55-57 of the National Water Initiative.

Background – Water Interception by Plantations

Only a miniscule proportion of the commercial timber plantations in Australia are irrigated. The vast majority of timber plantations are a dryland land use, not an extractive water user. Plantations are grown using the rain which falls on them and rainfall is a major factor in the selection and pricing of land for plantation establishment.

The plantation industry acknowledges that:

- forests (native and plantation) intercept a greater proportion of the total rainfall they receive than does grassland or pastures. This is due to the physical structure and physiology of trees;
- forests (native and plantation) play a significant role in protecting and improving water quality by protecting soil from erosive forces. Plantations can provide other environmental benefits such as assisting in managing dryland salinity by reducing recharge to groundwater and thereby potentially reducing salinity of waterways and providing biodiversity and carbon sequestration;
- the National Water Initiative (NWI) identifies land use change activities (including large scale plantation forestry) as having the potential to intercept significant volumes of surface and/or ground water;
- the NWI requires assessment of the significance of the impact of land use change activities on catchments and aquifers, based on an understanding of the total water cycle, the economic and environmental costs and benefits of the activities of concern;
- the NWI requires appropriate planning, management and/or regulatory measures be applied to land use change activities where necessary to protect the integrity of the water access entitlements systems and the achievement of environmental objectives.

Clauses 55-57 of the NWI set out the above arrangements for dealing with interception resulting from land use change. The Clauses are to be implemented through regional water plans. While accepting the broad requirements of the NWI in relation to interception the plantation timber industry has serious concerns about the detail of how the clauses will be implemented in an equitable manner which is technically sound and delivers on the overarching objectives of the NWI, while accounting for environmental, social and economic consideration.

A fundamental part of regional water planning is estimating and deciding how much water will be available for allocation to extractive water users.

However, this is not a simple objective task as there are a large number of assumptions which need to be made and variables which can only be estimated with a certain level of confidence. Rainfall and the nature and location of water collection, storage and distribution infrastructure are the major factors determining water availability.

Hydrogeological factors, evaporation, and transpiration by vegetation are factors which also need to be taken into account.

The plantation timber industry contends that any change to the volume of water available for allocation resulting from likely plantation expansion in the foreseeable future is tiny compared with the variability associated with rainfall and other factors. In the majority of regions it would seem to be a waste of limited resources and a source of unnecessary conflict to pursue the complex task of determining the impact of new plantations on water availability. More importantly, endeavouring to develop a regulatory or market based system for managing interception associated with land use change will be complex and may deliver little if any economic, social or environmental benefit.

Plantations have a range of environmental and social benefits to the community which justifies any increased interception associated with plantations being estimated but taken into account by inclusion in the "background" variability against which volumes available for allocation are determined.

With respect to any attempts to account for interception by plantations established prior to the signing of the NWI, such as is currently being contemplated in South East South Australia. It must be noted that a substantial proportion of the plantation area was established on previously forested land. A number of studies have shown that the interception associated with plantations is very similar to native eucalypt forests. Any suggestion that plantations that predate the NWI, or for that matter native forests, should be removed to increase water availability should be dismissed immediately on environmental grounds.

On the basis of the above the plantation industry argued against inclusion of land use change in the NWI and particularly the inclusion of 'large-scale plantation forestry' as the only example given of significant land use change.

The specific reference to plantations may well lead to a situation where plantations will be the ONLY form of land use change that will be dealt with in regional water plans as a token effort to implement the NWI Interception clauses.

Implementation of the NWI Interception Clauses

The NWI timeline requires that the interception clauses (Clauses 55-57) be implemented by 2011. Given this timeline, the many more urgent priorities and the scientific uncertainty associated with the interception issue, most States have not progressed a long way with the implementation of the interception clauses.

Most States appear to be addressing the interception issue by some form of State-wide process to assess the most appropriate technical and policy approach. The plantation industry acknowledges State government responsibility for water and land management within their jurisdictions. However, the National Water Commission should provide leadership, guidance and consistency to the implementation of the interception clauses.

This can be achieved by a more clearly defined process and definition of terms.

The plantation timber industry contends that implementation of Clauses 55-57 by the States and/or regions in the development of regional water plans should:

- Only consider land use CHANGE, i.e. interception of rainfall should only be taken into account where land use changes occur subsequent to the signing of the NWI (2004). Interception that occurs on areas of land where the land use has not changed should not be impacted in any way.
- In each regional water plan, all actual and potential land use change that may lead to increased interception should be assessed. Land use change should include:
  - farm dams;
  - interception, diversion and storage of overland flows;
  - clearing of native vegetation for urban development or agriculture;
  - afforestation/reafforestation of land previously cleared for agriculture (whether naturally occurring or human induced/assisted);
  - new crop establishment including:
    - timber plantations;
    - horticulture;
    - grains;
    - fodder crops;
  - changes in agricultural land management practices including:
    - stubble retention;
    - low/zero tillage practices; and
    - pasture improvement/rotational grazing/perennial pastures/drought resistant crops.
  - changes in plantation management practices including
    - rotation length
    - species
    - thinning regimes
    - period of fallow between crops
    - treatment of logging slash
  - removal and regeneration of vegetation by controlled or uncontrolled fire.

- The term 'significant' in relation to interception by changed land use should be defined at the national level. While there may be a need for this definition to take into account a range of circumstances (e.g. different rainfall zones) it should not be open for interpretation within each water plan;
- Where land use change of a certain size and nature is considered significant, options for managing/regulating any such change should be considered in consultation with industry but should not automatically involve planning constraints or purchasing of water entitlements. A range of options should be available.
- All the above steps should be carried out based on sound repeatable science.

South East South Australia

South East South Australia is the region in which the consideration of interception of water by plantations has been pursued to the greatest extent. In 2004 measures to address water interception by new areas of plantation established post 2002 were included in the water planning process in the region.

Despite having major concerns with the water management process in the region the plantation timber industry has endeavoured to participate in as constructive a manner as possible. However, recent decisions by the South East Natural Resource Management Board (SENRMB) in relation to plantation forestry taken as part of a review of water allocation plans are totally unacceptable to the industry.

It is not appropriate to go into intimate detail about the regional situation in this submission. The plantation timber industry in the region is still in the process of assessing the potential impacts and best way of dealing with the position of the SENRMB. However the plantation timber industry considers that:

- The SENRMB has gone well beyond the provisions of the NWI in considering land use change in developing its plantation and water policy as part of the revision of the WAP.
- No area of land that was part of the established plantation base as at 2002 should be included in any arrangement (e.g. water licensing, regulation etc) required to bring water allocations into line with water availability.
- The SENRMB has not adequately considered and addressed a number of important issues such as the impact of drainage channels and the illogical distortions caused by the water management units (hundreds) on which water allocation is based.

The plantation industry calls on the National Water Commission to provide greater rigour and national consistency to the Implementation of Clauses 55-57 of the National Water Initiative. In the first instance this should involve a review of the arrangements currently under consideration by the SENRM Board.

NWC Engagement in Regional Processes

It is increasingly clear that the regional delivery framework is being either vastly underutilised or extremely uninformed about their role under the NWI. While the states are clearly the conduit to the NWC it is imperative that NWC ensure a consistent approach to the delivery of the NWI principles across regions. To date the plantation timber industry has been unable to detect any involvement from the NWC in guiding or monitoring the activities under the NWI of regional bodies.

It is our view that the NWC is abrogating its responsibilities by failing to provide this guidance and/or subsequent compliance monitoring. We seek much more active engagement from the NWC in these matters to ensure that, firstly, the NWI is not exceeded, and secondly that the NWI is equitably implemented across all landuses that affect water availability, not simply the **examples** provided in the NWI agreement.

Yours sincerely,

For and on behalf of the Forest Industry Water Policy Group

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