

The Institute of Foresters of Australia

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Submission: Water Quality Protection Note (WQPN) 121

Plantation management in public drinking water source areas

Background

The Institute of Foresters (the IFA) is the professional body that represents professional forest managers in Australia. The Western Australian Division has 140 members with professional qualifications and with many years experience in the management of forests in this State. The IFA has ratified a number of policies relating to plantation management in water catchments. The comments offered by the IFA on this draft Water Quality Protection Note (WQPN) are consistent with those policies.

IFA policies

The establishment of plantations in catchments can have highly variable effects on water quality and quantity. The IFA advocates that plantation development take account of water management requirements and that plantations be treated equitably with other land uses when determining water rights and land use in catchments.

The National Water Initiative identifies large scale afforestation as a land use change that may intercept significant volumes of surface and ground water. Targeted plantation establishment can help control erosion, reduce salinity and improve water quality.

The IFA recognises that well planned and managed plantations can generate substantial economic, environmental and social benefits but may also have negative impacts. The IFA advocates the continued development of plantations in rural landscapes providing that this development balances environmental, social and economic impacts. Native forests should not be cleared for plantation establishment where this would compromise regional conservation and catchment management objectives. Plantation development on private land should be assessed against criteria which also apply to alternative land-uses.

Codes of Forest Practice are an effective tool for the regulation of forest management, to meet the expectations of the community and to ensure that forest management activities, such as timber harvesting and roading, contribute to the maintenance of forest values. The IFA considers that all significant forest activities should be subject to codes of forest practice, irrespective of land tenure, that are effectively implemented, regularly reviewed and independently audited. The IFA advocates the ongoing development, implementation, auditing and review of Codes of Forest Practice and associated forest regulations.

Comments on the draft WQPN 121

The opening comments under Purpose are negative suggesting an unjustified bias against plantation forestry. There are outstanding examples of positive impacts of plantations enhancing water quality including the Denmark River (Bari et al. 2004) and the Wellington River Catchment. The assertions that poorly managed plantations can lead to loss of catchment slope stability, nutrient and chemical contamination and pathogens from human activity within catchments, while possible, are not supported by documented experience in Western Australia. These risks are common to most forms of land management post-removal of the native vegetation and plantation forestry is relatively lower risk than most forms of agriculture and mining. We suggest a more balanced approach would recognise the potential benefits and risks of plantation forestry in domestic water catchments.



It would enhance the effectiveness of this document for any statutory requirements to be included in the Code of Practice for Timber Plantations in Western Australia. The Code of Practice is the document accepted by the plantation industry as the repository of regulatory prescriptions. Contractors and plantation managers are expected to be familiar with the Code of Practice but it is unrealistic for them to be required to be familiar with all government legislation.

The guidelines in draft WQPN 121 should be sufficiently broad that they can cope with trends in market forces and land use practices without constant updating. Plantations of native species (karri, jarrah, blackbutt) managed for timber production and environmental benefits are likely to become more common in the future, as are plantations managed for purposes in addition to timber production (carbon sequestration). Plantations of this type could be harvested in quite different ways to short rotation pulpwood plantations e.g. by periodic thinning with a continuous canopy cover maintained.

The bauxite and mineral sands rehabilitation sites should be included as plantations.

Many of the standards proposed in the draft WQPN set higher standards for plantation forestry than alternative land uses. We note there are no WQPNs for mining (especially bauxite and mineral sands), coal seam gas recovery, grazing and dairy farming in the high rainfall districts of south west of WA, cropping and vineyards.

Plantation forestry is normally required to achieve planning consent providing a mechanism to mandate conditions on proponents. Many plantation forestry managers have achieved certified sustainable forest management and are subject to third party audit of their compliance with laws and the principles and criteria of environmental care.

The WQPN #1 for agriculture – dryland crops near sensitive waterways says farmers should be aware of the location of wetlands and sensitive waterways on their property and ensure that all activities are in accordance with relevant Environmental Protection Act policies and use best industry practice management. Dryland cropping should be managed to prevent harm or disturbance to wetlands. Appropriate buffers from disturbed land should be maintained. However, the lack of any planning consent for dryland cropping in the general rural zone significantly reduces the effectiveness of these objectives. compared with plantation forestry which normally does require planning consent.

A document of this type should not dictate slope limits for plantation establishment, as this will depend on the objectives of the landowner. It may require different silviculture or harvesting techniques to be employed to minimise erosion risk.

Modern plantation managers use multiple contaminant barriers:

- A primary barrier to distance potentially harmful forestry activities from water bodies;
- Quality-assured contaminant containment processes;
- An internationally accredited environmental management system;
- Effectively trained operators
- Routine supervision of land use activities
- Demonstrated spill intervention capability; and,
- An industrial track record of environmental contamination monitoring and avoidance.

The IFA believes plantation forestry, through the course of normal industry practices, systems and processes will improve the quality of water bodies on the land managed.

Reference

Bari, M, Mauger, G, Dixon, R, Bonieker, L, Ward, B, Sparks, T & Waterhouse, A 2004, *Salinity Situation Statement*, Department of Environment.

22nd November, 2010