



SUBMISSION

Response to the Draft Gippsland Region Sustainable Water Strategy for Community Comment

December 2010



Introduction

The Victorian Association of Forest Industries (VAFI) appreciates the opportunity to provide comments on the *Draft Gippsland Region Sustainable Water Strategy for Community Comment*.

The VAFI is the peak forestry industry body in Victoria. In preparing this submission, we consulted with a working group of industry representatives.

This submission builds on the substantial submission¹ we made on accounting for all significant water uses – land use change, in the *Draft Western Region Sustainable Water Strategy for Community Comment*. That document provides further background and detail which is relevant to our comments below and we propose that it should be read in conjunction with this submission.

The plantation sector in Gippsland

Gippsland is an important and long-established plantation region in Victoria. The plantation estate in Gippsland includes 100,400 hectares of plantations. There are 60,400 hectares of softwood plantations and 40,000 hectares of hardwood plantations, including some of Australia's most extensive older hardwood plantations.

There is a long history of plantation establishment in Gippsland on previously forested as well as previously cleared land from the 1950s until the present.² As the Draft Gippsland Sustainable Water Strategy (SWS) notes, the softwood plantations were primarily established from the late 1960s until the early 1970s, whilst hardwood plantations have been progressively established until the present. Since 1994, plantations have increased by 17,000 hectares (16%).

The forestry industry is a significant contributor to the Victorian and the Gippsland region economies. The industry employs nearly 24,000 people as well as supporting a further 42,000 to 52,000 indirect jobs in Victoria.³

The industry supports an important manufacturing sector and makes a significant socio-economic contribution in regional Victoria. Victorian sourced timber generated approximately \$3 billion in economic value in 2007-08 and much more in flow-on economic activity. Victoria's sales and services income from wood and paper product manufacturing industry is \$6.5 billion.⁴

Despite their economic significance, plantations are a relatively minor private land user in Gippsland when compared to grazing (48% of private land) and dryland mixed grazing and dairy (24% of private land). Plantations occupy approximately 10.3% of private land in Gippsland. Expansion of the

¹ VAFI (2010) Submission – Response to the Draft Western Region Sustainable Water Strategy for Community Comment, June, http://www.ourwater.vic.gov.au/data/assets/pdf_file/0003/76395/Victorian-Association-of-Forest-Industries_Marty,-L_WRDS181.pdf

² Zhang, Z., Peterson, J., Zhu, X and Wright, W. (2007) Modelling Land Use and Land Cover Change in the Strzelecki Ranges, In Oxley, L. and Kulasiri, D. (eds) MODSIM 2007 International Congress on Modelling and Simulation. Modelling and Simulation Society of Australia and New Zealand, December 2007, pp. 74-80. ISBN : 978-0-9758400-4-7. http://www.mssanz.org.au/MODSIM07/papers/21_s46/ModellingLand_s46_Zhang_.pdf

³ Schirmer, J. And Dunn, C. (2010) Socio-economic characteristics of Victoria's forestry industries, Report prepared by the Fenner School of Environment and Society for the Victorian Department of Primary Industries, July, <http://new.dpi.vic.gov.au/forestry/research/technical-reports>

⁴ ABARE (2008) Australian Forest and Wood Product Statistics, March and June quarters 2008, Canberra



plantation sector across Victoria is currently very low. Plantation establishment across Victoria last year was only 3,000 hectares. Future growth is likely to be small.

Likewise, predictions of increases in plantings for carbon sequestration and bioenergy need to be cognisant of the policy and market uncertainty, which is likely to inhibit incentives in the medium term.

Plantation forestry is a legitimate agricultural land use, which provides additional economic diversification at the regional levels as well as environmental benefits including carbon sequestration. It is the only broadacre agricultural land use to operate to a legislated code of practice.

Comments on chapter 6: Accounting for all significant water uses

We recognise that land use change can impact on water yield in surface water resources and under certain circumstances, in ground water resources. We also recognise that the current water accounting framework is incomplete and does not include water interception, including by vegetation.

We believe that developing efficient and equitable policy for managing the impact of land use change on water resources is fundamentally important both for future water security and the future socio-economic contribution and sustainable growth of our industry.

We also recognise that the most up-to-date scientific and policy research on this issue in Victoria found that “impacts of land use change on water resources are notable only in several small localities.”⁵

In this context and the approach put forward in our submission to the Draft Western Region SWS, we support the principles guiding Government action articulated on page 135 of the Draft Gippsland Region SWS.

Our overarching views on principles for developing equitable, efficient and effective policy to manage the impacts of land use change on water resources are summarised in Attachment 1. They are consistent with the principles articulated on page 135 of the Draft Gippsland SWS and existing Victorian Government policy positions and commitments as set out in the National Water Initiative, Action 2.20 of the Securing Our Water Future Together White Paper and the 2009 Victorian Timber Industry Strategy.

We also make the following comments in relation to the proposals and questions in chapter 6.

Policy Proposal 6.1 Managing the impact of land use change

The Government will monitor and improve our understanding of, and account for, the impact of land use change on water resources, and based on feedback on the Draft Gippsland and Western Region SWSs, will develop appropriate management responses over time in accordance with the principles outlined above.

The VAFI supports the monitoring and improved accounting for the impact of land use change on water resources.

⁵ DSE (2010) Draft Gippsland Region Sustainable Water Strategy for Community Comment, State of Victoria, August, p. 135



We note that the Report of the Independent Panel for the Western Region SWS states, “The Panel believes that Victoria’s water accounting system will need to expand over the next decade to include all interception activities if we are to insure against a drier future.”⁶

As noted below, we believe there is a need for further investment in science to underpin technical and policy decisions on the impact of land use change on water resources.

The VAFI strongly supports the principle guiding Government action that the benefits of intervention must outweigh the costs. A targeted approach is required. There is no case for a statewide or regionwide regulatory framework to restrict land use change. As noted in the Draft Gippsland SWS, land use change can provide a range of socio-economic and environmental benefits, including carbon sequestration.

The impacts of land use change on water resources are not uniform and an approach targeting highly stressed areas within a broader monitoring and accounting-based policy approach may be appropriate.

The Victorian Government principles note, “where Government action is appropriate, a response will be flexible, adaptable and tailored to suit local circumstances within a consistent State-wide approach that ensures comparable responses in like circumstances.”⁷

The Western Region SWS Independent Panel notes that “a comprehensive region wide approach would not be cost-effective at this time and instead prefers a targeted approach in “hotspot” catchments.”⁸

Equitable treatment of all land uses and users

Timber plantations are an ‘as-of-right’ crop raising activity and must be treated on equal footing with other agricultural land uses. Policy must include all land use changes, and not single out plantations.

Management of new or additional land use change

The NWI requires new land use changes to be managed or controlled. Victorian Government policy also states that this policy will not be directed to existing land uses. In this context, it is essential to recognise that a change in rotation is not a change in land use; this is applicable to all crops, including timber plantations.

An efficient and equitable approach in Victoria will be consistent with South Australia

The Independent Panel recommends collaboration with the South Australian Government on interception policy consistent with National Water Initiative, which is developing its own approach given the desirability of a consistent approach in border zone. However, the circumstances in Gippsland are very different to those in South Australia and the South West of Victoria and highlight

⁶ Forster, C., Langford, J., Steggall, B. And Farrier, S. (2010) Report from the Independent Panel – Western Regional Draft Sustainable Water Strategy, September,

<http://www.ourwater.vic.gov.au/programs/sws/western/independent-panel>

⁷ DSE (2010) Draft Gippsland Region Sustainable Water Strategy for Community Comment, State of Victoria, August, p. 135

⁸ Forster, C., Langford, J., Steggall, B. And Farrier, S. (2010) Report from the Independent Panel – Western Regional Draft Sustainable Water Strategy, September,

<http://www.ourwater.vic.gov.au/programs/sws/western/independent-panel>



that Victorian approach must be primarily developed for the Victorian context, both policy and geography.

The forestry industry in South Australia has been extremely concerned with these proposals due to their retrospectivity, lack of consideration of positive environmental benefits, use of assumptions and methodologies which do not reflect the level of uncertainty in the data on which they are based or allow for an appeal mechanism, the lack of appropriate consideration of significance, discrimination against plantations relative to other land uses and the lack of equity. South Australian policy is not considered compliant with the NWI. The WRSWS also overstates the progress made in South Australia.

We consider that an efficient and equitable policy framework in Victoria would be complimentary with that developed in South Australia; it does not have to be the same or similar.

Proposal 6.3 Monitoring land use change and improving estimates of the impact on water resources

The Government will use the best available science to estimate the impact of current land use on Gippsland's water resources. To help identify high risk areas and the potential need for more active management, these estimates will be updated periodically to account for changes in land use identified in the DPI's Victorian Land Use Information System.

The VAFI supports ongoing investment in scientific knowledge of the impacts of all land uses and land use changes on water resources.

There are key areas of uncertainty

Our current understanding of the impacts of land use change is minimal at best. Empirical research has been largely focused on the impact of plantations in a small number of (generally highly stressed) localities. However, there is need for a better understanding of all water users outside the water entitlement framework to ensure all water users are treated equitably and the resource is sustainability managed. There are also limitations to the modelling in terms of assessing the actual impact of land use change, given management scenarios and for groundwater.

We believe there is strong cause for proceeding with caution and managing the impact of high costs associated with policy interventions. The risks associated with intervention can be managed through targeting intervention at the source of the problem.

Technical and policy decisions should be based on evidence and sound repeatable science

As the Draft Gippsland SWS states, the level of information is limited. It is important that water resource impacts by planted forests are kept in perspective, including the fact that in Gippsland many plantations were established on previously forested areas.

Localised and cumulative impacts should be considered. In particular, it is important that adequate monitoring and research is undertaken for all land uses.

Question 6.7 for comment: Setting a baseline for more active management of land use change

What date should be set to establish a baseline from which more active management of land use change impacts on water resources could apply?

What issues should be considered in setting this date?



Rights for water use by land use exist

Land uses which currently intercept water have implied rights to that water use. Advice on policy development to implement Action 2.20, prepared for the Department of Primary Industries by Acil Tasman argues that interception rights exist and have been capitalised in the value of the land and retain option value, including for landowners with currently low levels of interception.

The baseline must not be retrospective

Should a change in water policy be introduced consistent across all land uses, applicable to all land users and with sound scientific backing, the plantation timber industry is adamant that there should be no basis to penalise existing plantations with the application of new water policy. The reasons are:

- Re-investment decisions, including expected recurrent costs and returns, in existing plantations were made at the time the plantation land was secured.
- Existing plantations contribute to processing industries, many of which have long-term agreements for wood supply based on existing plantation resources.
- Plantations contribute a wide range of environmental outcomes not provided by agricultural land-use.
- Consistent with NWI and Action 2.20.

We consider that, given the complexities involved in fully developing the policy for managing the impact of land use change on water resources, setting a baseline date that allows more time to resolve key methodological issues would be beneficial.

We support a baseline based on the date a decision is made to introduce more active management in a particular area.

Policy must be inclusive of all land uses and land users

A baseline must apply for all land uses.

Historical land use has been dynamic, including clearing of native vegetation to establish agriculture and settlements. Recent, current and potential changes in land use and management, which have a potential to significantly impact on water resources include timber plantations, native revegetation, carbon and environmental plantings, perennial pasture, broadacre cropping and changes in agricultural management systems. The NWI requires parties to act to manage all significant interception activities.

It is important to be clear that replanting a crop following harvesting (including a plantation) does not constitute a change in land use.

Question 6.8 for comment: Determining what land use change has a significant impact on water resources

How do you think we should decide when water use as a result of land use changes is significant enough to take action?

All land uses should be treated equitably and thus included with the management focus to be on water use, rather than the activity.



We believe that a set of criteria should be developed to assist in identifying significant water use by land use and land management changes. The criteria should capture the intensity, timing, geography, site characteristics, management and cumulative scale of land use and land management impacts.

It is important to distinguish the scale of impact from intensity. As the Acil Tasman report states, “the cumulative scale of trends into higher yielding and more drought resistant pasture and crop species from alternative crop and pasture management systems could exceed those of forestry in many areas.”⁹

We consider the unit of measurement, the threshold and the test for significance require careful consideration and further consultation with potentially affected stakeholders.

Question 6.9 for comment: Managing increased water use by land use change (options)

Which of the options discussed – collaborative approaches, recording use, planning referrals/permits, registering use of licensing use – do you think should be used to manage the impacts from water interception and protect existing water users and the environment?

As stated above, the purpose of the policy must be to manage water, not land use activities.

In general, the options which integrate interception into water resource management will provide the efficient, adaptive and flexible policy measure. Integrating interception in water resource management would be a policy to manage the water rather than the activity and therefore a more direct approach. It may also facilitate water use according to the highest value rather than first movers or many small interceptors at the expense of more intense ones.

This approach also offers a potential set of tools, which could be applied as ‘building blocks’, depending on the need to act. The package of tools available would allow improved information and monitoring as part of the water accounts. As discussed above, we agree with the Draft Gippsland SWS that at the regional level, monitoring and accounting for water use are the most appropriate tools, except where systems are highly stressed due to land use change.

The water management framework also provides options to better control water use in stressed systems by potentially creating value for water to flow to its highest value use. It is important that a policy allows individuals to manage their own choices and risks.

The water management framework also provides for more adaptable control of water use where this is beneficial to land management. While this report is written in the context of an extended dry period, in recent times tree-planting was promoted as a remedy for insufficient interception in over-cleared recharge areas which resulted in dry-land salinity. In a long term strategy and recognising a changing climate, it cannot be assumed to be a guarantee that these circumstances will not re-occur.

It is important to separate the impact of land use change from issues of allocative stress and reduced rainfall. Addressing land use change should not be a proxy means for bringing systems back into balance but rather the rights of all water users, including interceptors should be recognised and measures developed to address overallocation.

⁹ Acil Tasman (2010) Land Use Change & Water Resources – Review of Policy Options, Volume I, Prepared for the Victorian Department of Primary Industries, April, <http://new.dpi.vic.gov.au/forestry/publications/land-use-change-and-water-resources>



However, we believe that a stepwise approach should be undertaken and there remains a substantial amount of work to consider the practical challenges, benefits, risks and implications of this set of options. See our submission on the Draft Western Region SWS for our detailed assessment of the policy options.

Accounting for water use could provide a first step measure that may be applied in combination with others, where appropriate or as a system of monitoring in areas that are not currently stressed.

The Western Region SWS Independent Panel recommends that “the Water Act be the primary legislative instrument for managing the impacts on water resources”, but that other legislation and trading may be applied to hotspot areas as required.¹⁰

We have raised a number of questions about the practical application of further regulation in hotspot areas in our submission on the Draft Western Region SWS. It is imperative that any targeted approach allow individuals to manage their own risks and choices, not discriminate between land uses and be developed through engagement with affected stakeholders.

Question 6.10 for comment: Managing increase water use by land use change (areas of ‘intensive management’)

Do you think the Government should have the power to declare ‘areas of intensive management’ when they are under water stress from land use changes?

There are only a small number of localities in Victoria where land use and management change appears to be significantly contributing to water stress. We believe that, although interception should be better accounted for, it is only these areas that should be targeted by direct policy measures which provide landowners with the tools to manage the opportunity cost of future changes in land use.

There must be a science-based, transparent and predictable process for identifying these areas. It is important to investigate the underlying causes of water stress (including reduced rainfall, over-allocation of entitlements, land use change or other) and consider management solutions accordingly.

The development of any process for declaring land use change ‘hot spots’ or ‘areas of intensive management’ must include strong engagement with those organisations and individuals likely to be affected.

There must be transparent, predictable and equitable rules for determining when an area is highly stressed.

Comments on Appendix 6: Bushfire impacts on water quality and quantity

As detailed in Appendix 6, large-scale bushfires can have a significant impact on water yield as the forest regenerates as well as on water quality.

There are cases where forest thinning and fuel reduction burning are being applied to forested catchments to increase water yield.¹¹ We believe that forest management techniques, including

¹⁰ Forster, C., Langford, J., Steggall, B. And Farrier, S. (2010) Report from the Independent Panel – Western Regional Draft Sustainable Water Strategy, September, <http://www.ourwater.vic.gov.au/programs/sws/western/independent-panel>



thinning and strategic burning could assist in managing the water yield impacts of large bushfires in the Gippsland region and should be considered in the final Gippsland SWS as well as broader land management strategies.

Conclusions

We consider that the range of options presented in the Gippsland Region SWS offer pathways forward for the Victorian Government to work with all stakeholders to deliver a policy that is targeted, equitable, minimises the regulatory burden and maximises the value of water use to the community.

We consider that a multi-layered approach is necessary so that there is a statewide policy approach but measures are regionally-appropriate and targeted. On balance, the options presented under the water resource management framework provide a more efficient and equitable approach. This framework also lends itself to a progression over time, which will benefit from improved monitoring, knowledge and technology.

The complete development of a policy will require significant further work and we as an industry are committed to working with the Victorian Government in this process.

¹¹ Batini, F., Bradshaw, J. And Underwood, R. (2007) 'Managing forested catchments for water, timber and biodiversity', Proceedings of the 2007 IFA and NZIF Conference, Coffs Harbour, June 2007, pp. 60-65



Attachment 1: Developing policy to manage the impacts of land use change on water resources

Principles for equitable, efficient and effective policy:

1. Equitable treatment of all land uses and land users

Timber plantations are an 'as-of-right' crop raising activity and must be treated on an equitable footing with other agricultural land uses.

Policy must include all new, significant water interception activities. It must extend to all land users, not single out timber plantations.

2. Management of new or additional land use change

The baseline determined by any policy or action must not be retrospective but recognise the current mix of land uses or those in place on the date that a policy or action is determined.

3. A change in rotation does not constitute a change in land use

This is applicable to all crops, including timber plantations.

4. The impacts of water interception from land use change must be considered in conjunction with its benefits to the community

Changes in land use can provide environmental benefits such as carbon storage, water quality and salinity mitigation as well as socio-economic benefits to the community.

5. Technical decisions should be based on evidence and sound repeatable science

Forestry water use must be kept in perspective. Localised and cumulative impacts should be considered. Significance must be measured in terms of scale as well as intensity and factors such as geography, site characteristics, timing and management must be considered when measuring the impact of water interception.

6. The benefits of intervention must outweigh the costs

A targeted approach is required. There is no case for a statewide or regionwide regulatory framework. The impacts of land use change on water resources are not uniform and an approach targeting highly stressed areas within a broader policy approach may be appropriate. In such cases, there must be transparent, predictable and equitable rules for determining when an area is highly stressed.

7. Existing rights and entitlements must be recognised

Rights for water use by land users do exist. They are implicit in the value of the land and the retained option value.

8. Allow individuals to manage their own risk and exercise their choices

Where there exists conflicting rights for water and highly stressed water systems, approaches should be considered which allow individuals to manage their own choices and risks.

9. Policy must be adaptive and flexible, and supported by investment in new science and research

There remain key areas of uncertainty and a need for a better understanding of all water users outside the water entitlement framework.

10. Policy should focus on managing the water not the land use activity

