

Harvesting in State forests supplying water to Melbourne

Interim Update

October 2007

The '*Harvesting in State forests supplying water to Melbourne*' project is being conducted by the Victorian Government under Action 2.21 of the Government's White Paper: '*Securing our Water Future Together*'.

The project aims to determine forest management options to improve water yield for Melbourne's water supply catchments, while continuing to meet timber supply commitments. The project is due to be finished in September 2008.

This Interim Update summarises the studies completed and highlights next stages of the project.

There has been a long history of debate about the relative costs and benefits of wood and water production from the State forests supplying water to Melbourne. Timber harvesting in these catchment areas provides economic benefit to Victoria and in particular, regional Victoria, however timber harvesting also influences the available water yield due to the high water use of young, regenerating forests.

Despite a reduction in per capita water use, Melbourne's demand for water is increasing at a rate that is greater than current supply measures can meet in the medium to long term. Population growth and the potential impacts of climate change are major considerations. This has heightened the need to examine options to increase water yield.

'*Securing Our Water Future Together*' makes the commitment to undertake a series of scientific studies and a sustainability assessment to allow the Government to make important and informed decisions about the sustainable management of Melbourne's catchment based on the best science and thinking available. The first series of these studies are now complete.

The completed studies

The *Part 1 – Hydrological studies* has created the hydrological model for the State forests supplying water to Melbourne. This complex modelling has established the existing water, climate, landscape and forest conditions for the catchments. The results will be used in the *Part 2 – Hydrological studies* to predict the impact on water yield of various forest management, bushfire and climate change scenarios.

The *Water quality review* examined the water quality issues associated with timber harvesting through reviewing relevant literature and environmental audits of timber harvesting in Melbourne's catchments.

It focussed on the impacts on 'in-stream' water quality and found that, while the main impacts from timber harvesting relate to sediments and nutrients from unsealed forest roads, best management practices employed in the catchments are effective at minimising sediment and nutrient inputs to waterways.* These measures, as well as a number of other catchment protection measures, continue to ensure that Melbourne's water is of the highest quality and requires little treatment.

The *Part 1 – Timber substitution study* investigated the technical issues associated with using plantation grown timber to replace native forest timber from Melbourne's catchments. It concludes that for the next thirty years, substituting native forest timber with sawlogs from existing plantations is not feasible. However, it also concludes that within the next 25-35 years that new 'direct sawlog' plantations located on good sites, combined with significant industry adjustment, could have the potential to produce timber to replace or supplement native forest timber.

*It should be noted that the water quality review did not investigate impacts on 'potable' water quality. (This footnote constitutes an amendment to the Interim Update of Oct 2007, added Jan 2008.)

Fig 1. Thomson dam



A Victorian Government initiative

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Next steps

The *Part 2 - Hydrological studies* investigates the impact on water yield of various catchment management, bushfire and climate change scenarios. The forest management options will include immediately ceasing timber harvesting in water supply catchments, gradually phasing out timber harvesting, extending the time between clearfell harvesting events, maintenance of current harvest levels and practices as well as silvicultural options such as thinning.

Part 2 - Timber substitution study examines the feasibility and impacts of establishing an adequate area of substitute plantations outside of the State forest supplying water to Melbourne.

These studies will feed into a sustainability assessment of management options for the State forest supplying water to Melbourne.

The Sustainability Assessment

The issues around evaluating wood production and water supply are complex and difficult to resolve. The Sustainability Assessment will bring together the findings of the completed studies and be a tool to evaluate different forest management options.

The Sustainability Assessment will be conducted in two stages.

Stage 1: Developing a credible method for the assessment in consultation with stakeholders and interested community members.

Stage 2: Using the method to evaluate the economic, social and environmental aspects of State forests supplying water to Melbourne.

The Department of Sustainability and Environment has commissioned an independent consulting firm, URS, to develop a method for the Sustainability Assessment that will be fair, understandable and credible.

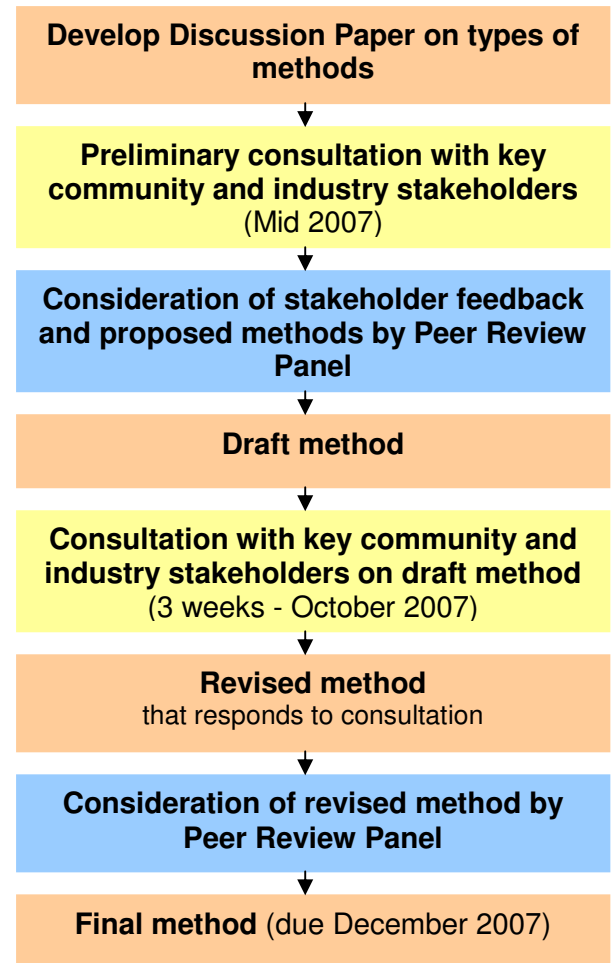
How can I be involved?

We are asking stakeholders and interested community members to help design the method to evaluate the social, environmental and economic aspects of management options for the State forests supplying water to Melbourne. See Fig 2 for a diagram of the process to develop the methodology.

Contact DSE Customer Service Centre on 136 186 to be involved in the development of the method for the Sustainability Assessment.

A five member Peer Review Panel has also been convened to provide independent feedback on the methodology. The members have significant experience regarding economics, the environment and social issues.

Fig 2: Process to develop the method for the Sustainability Assessment



The Sustainability Assessment will subsequently be carried out using the final method.

Making decisions

The results of the Sustainability Assessment will guide decision making for the future management of the State forests supplying water to Melbourne.

For more information:

To download the completed studies visit the DSE website (www.dse.vic.gov.au) or call the Customer Service Centre Ph. 136 186.

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For more information contact the DSE Customer Service Centre 136 186

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