

## **Australian Native Forests and Water**

### **IFA Forestry Policy Statement 5.1**

The Institute of Foresters of Australia (IFA) advocates that forested water-supply catchments be managed according to the principles of sustainable forest management to maintain water quality and quantity. Native forested catchments produce high quality drinking water and essential environmental flows for riverine systems. Water yield and quality can be adversely affected by high intensity wildfires or inappropriate forestry practices. However, silviculture and other forest management strategies can maintain or enhance water quantity and quality.

#### **The Issue**

The management of water quality and quantity is an important objective in forested catchments. The extent of the impacts varies according to the proportion of the catchment affected by the disturbance event and the post-harvest silvicultural treatments.

#### **Background**

The acceptable range that determines water quality for human, domestic and agricultural use is well documented. However, there is limited knowledge of the tolerances of aquatic and riverine organisms to changes in water quality and quantity. In Australia, forested catchments are major sources of high quality water. Both the quantity and the quality of water in streams are determined by soil type, vegetative cover, land use and catchment conditions.

Water quality and quantity from forested catchments can be affected by natural events and/or management actions. The most significant disturbances due to forest management and timber harvesting come from road construction and poor maintenance. This impact can be minimised through road drainage and observing Codes of Forest Practice.

#### **Policy**

The IFA supports and encourages:

- Recognition in forest management plans of community expectations about water quality and quantity while also maintaining the economic benefits from forestry
- Protection of water quality by maintaining streamside reserves of an appropriate width depending on the order (size) of the stream, topography, soil type and adjacent land use
- Strategies, such as limiting the area treated in any one year and dispersing treated areas in space and time, to minimise the impacts of forestry on water yields from water-supply catchments
- Management practices (including thinning, longer rotations or prescribed burning) to maintain or enhance water yield in domestic water-supply catchments
- Forest management practices that minimise adverse impacts on water catchments from wildfires
- Limiting reductions in tree density in catchments where salinity is a potential problem
- Ongoing research into relationships between land use, forest management and water yield and quality.

The IFA considers that:

- Sustainably managed forests generally provide the best form of vegetative cover for water catchments where protection of water quality is of primary importance
- Appropriate management plans and Codes of Forest Practice for timber harvesting and road construction should be observed to protect water yield and quality
- Water yield decreases in some mature wet sclerophyll forests following extensive disturbance, which results in regrowth forests
- Water yield can be increased through silvicultural treatments.