CLAISE BROOK CATCHMENT GROUP

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Tracey Ovington Asset Management Officer Main Roads PO Box 6202 East Perth WA 6892

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Dear Tracey,

I am writing to you as the Chairperson of the Claise Brook Catchment Group in regards to the proposed replacement of the trees in the median island on Charles Street between Vincent and Newcastle Streets, Perth.

The Claise Brook Catchment Group is a non-profit community environmental group working in partnership with local government and state government departments to address catchment management issues within the inner city. The group has an interest that includes the Swan River and inner city catchments including the Mounts Bay and Claise Brook Catchments.

We understand that proposed replacement of the trees on Charles Street was recently considered by the Town of Vincent who resolved to support the replacement of the existing *Eucalyptus maculata* with *Jacaranda* trees, a choice which was also supported by a local resident's group. We are concerned at the replacement of the existing trees by an exotic species for a number of reasons, particularly the potential impact on stormwater quality and the lack of native habitat value provided by Jacaranda.

Stormwater Quality: The Swan River flows through the heart of Perth and is highly valued by both residents and visitors to Perth. The importance of the Swan River to the Perth community was recognised when it was declared Western Australia's first heritage icon in 2004. However the Swan River is under stress from increased nutrients flowing from rural and urban catchments. A significant source of nutrients in urban catchments is related to the widespread use of exotic vegetation in gardens and public landscaping, particularly deciduous vegetation. Deciduous plants drop all of their leaves over a short period and decompose quickly, resulting in an excessive release of nutrients into water bodies. Street trees are of particular concern since most of their foliage will end up being washed into the stormwater drainage system.

Exotic plants are also more likely to require fertilising, because of their unsuitability to the low nutrient levels naturally found in the Swan Coastal Plain soils. Some of the applied fertiliser is likely to make its way into stormwater or groundwater, and ultimately into the Swan River contributing to elevated nutrient levels.

The section of Charles Street, south of Vincent Street is part of the Mounts Bay Drain catchment which empties into Mounts Bay in the Swan River. The water in this drainage system has been found to be higher in nutrients than the river and exceeds the target levels which have been set by the Swan River Trust under *Riverplan*. While thirty-six trees may seem insignificant overall, it is a backward step to replace Australian native trees with deciduous exotics which may have a negative impact on water quality in this catchment and the Swan River.

Habitat: A second focus of interest for the catchment group is improving habitat for native fauna within the inner city, through improved plantings within parks, reserves and private gardens and particularly finding opportunities to link habitat areas through the use of Australian trees and

shrubs along roads, freeways and railway lines. While local species are preferred, Western Australian or Australian tree species can also be beneficial in creating linkages for mobile species such as birds, bats and insects. In 2004, the Town of Vincent and the Claise Brook Catchment Group commissioned a report on improving habitat within the Town of Vincent. The *Vincent Habitat Project Technical Report* (Syrinx, November 2004) identified the importance of plantings in streets verges and medians for linking larger habitat areas.

Immediately to the north of this section of Charles Street, the Town of Vincent is developing a Wetlands Heritage Trail which is an environmental and social trail, connecting parks which lie along the path of the former wetlands north of Perth city. The nearest section, at Royal Park, is partly planted with Tuart trees. To the south of this section of Charles St, is the Hamilton Interchange which contains three small lakes surrounded by thickets of Melaleuca, Casuarina and Eucalyptus species. A study of fauna use in the Hamilton Interchange in 1997 found a total of thirty-eight bird species using the area (*Fauna Use and Water Quality Measures in Six Compensation Basins in Perth*: Eddy Cannella, September 1997). Our catchment group is also currently re-landscaping nearby Piazza Nanni, adjacent to St Brigid's Church, entirely with local Western Australian plants. The street trees on Charles Street provide almost the only vegetative link between the Hamilton Interchange and Royal Park. While this section of Charles St was not identified as a possible link in the *Vincent Habitat Report*, this may have been because the report was focussed primarily on possible links within Vincent rather than into neighbouring local authorities.

Best Management Practice Guidelines: The Department of Environment has recently released guidelines to manage stormwater to achieve multiple outcomes including improved water quality management, protecting ecosystems and providing livable and attractive communities. In regards to landscaping, the guidelines recommend:

- ✓ **Plant local native species.** This will reduce the risks of grass cuttings, deciduous leaves, nutrients and pesticides entering water bodies. Local native plants require less irrigation and maintenance (e.g. little or no nutrient or pesticide application) than exotic species and provide habitat and food for native fauna.
- ✓ Where local native species are not planted: Minimise the use of deciduous plants.

 Deciduous plants drop all of their leaves over a short period and decompose quickly, which results in an excessive release of nutrients into water bodies. The leaves also clog stormwater systems. Deciduous plants also change the local habitat values, such as altered shading levels over waterways and reduced micro-habitat zones on the plants. See Water Note 25: The effects and management of deciduous trees on waterways (Water and Rivers Commission, 2002) for more information.
- ✓ Minimise the extent of water-consuming planting.
- ✓ Match the plants to the soil type.

Our group strongly advises against replacing the *Eucalyptus maculata* trees on Charles St with an exotic deciduous tree species and requests that Main Roads chooses a Western Australian species of tree, preferably a local species, in accordance with the recommendations of the Department of Environment's Stormwater Management Guidelines and the *Vincent Habitat Project Technical Report*.

If you would like to discuss this further please do not hesitate in contacting me on 9228 6916.

Yours truly

Warren McGrath Chairperson