



*Working to conserve and
restore water quality and
wildlife habitat in the
Perth inner city catchments*

John Giorgi
Chief Executive Officer
Town of Vincent
PO Box 82
Leederville WA 6902

31st August 2007

Dear John,

SUBMISSION – LEEDERVILLE MASTERPLAN

On behalf of the Claise Brook Catchment Group I would like to make the following submission on the Town of Vincent's Leederville Masterplan.

The Claise Brook Catchment Group is a community based environmental group working to improve water quality and habitat within Perth city and the inner city. The group considers that the landscaping throughout the Masterplan area is an important component of the infrastructure contributing to amenity, aesthetics and creating a 'sense of place' within the area. In addition, inappropriate landscaping can have significant environmental impacts, particularly on water quality within the broader catchment. Poor stormwater management can also affect water quality within the catchment although we note 'water quality' was not included in the Environmental Sustainability Outcomes of the Masterplan. Both landscaping and stormwater management are important factors within any part of the Swan catchment due to the potential impacts on the health of the Swan River.

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.

The area covered by the Leederville Masterplan falls primarily within the Perth CBD catchment (incorporating the Mounts Bay sub-catchment) with a small section being within the Claisebrook catchment. This means that stormwater flowing into street drainage will eventually flow into the Swan River either via the Mounts Bay Main Drain or the Claisebrook Main Drain. Mounts Bay within the Swan River currently has elevated nutrient levels caused by nutrients flowing into the river from the Mounts Bay Main Drain. Given current proposals to develop the Mounts Bay foreshore it is very important not to further reduce water quality through the use of inappropriate landscaping such as deciduous street trees within this catchment.

In addition Leederville is currently characterised by mature "Australian gum trees" down the centre of Oxford Street, on the Water Corporation land, at the Town of Vincent Administration building and Loftus Centre and at TAFE. In fact Leederville contains the only remnant of indigenous woodland within the Town of Vincent; at Keith Frame Reserve. We consider that this gives Leederville a unique 'Australian' character, which is part of what sets it apart from other café districts within Perth. We consider that maintaining the 'Australian' theme in the landscaping throughout Leederville will significantly contribute to giving the area a unique

'sense of place'. We consider that choosing 'Australian' trees of different sizes will allow shade to be provided at street scale, avenues to be formed throughout the area as well as landmark trees which are visible from a distance.

The group notes that the existing Oxford Street Reserve will be built over and a new 'Piazza' provided slightly to the north on the present reserve. In 2003 our group assisted with the upgrade of the landscaping within the reserve, organising for sub-surface irrigation and grass trees to be provided at a reduced cost to facilitate the enhancement of the landscaping in an 'Australian' theme to add to the existing remnant trees along Leederville Parade. While we are disappointed these trees will be removed, we request that the landscaping in the proposed 'piazza' uses species indigenous to the area to create a place celebrating the floral heritage of the area. This has environmental benefits as explained above and also will contribute to the area's 'sense of place'.

We request that seeds be collected from the indigenous trees in the reserve so that seedlings can be grown from this local 'provenance' seed. Using trees grown from locally sourced seeds has a number of benefits. Local provenance trees are naturally suited to the local soil and climate and therefore require less additives in the form of water and fertiliser to survive; they conserve an important, though often overlooked, aspect of the heritage of the area; they contribute to a 'sense of place', reminding residents of visitors of the long history of the area and they enhance the biodiversity of the area. Seedling trees could also be sold to Leederville residents to grow on their own properties, increasing the habitat and 'sense of place' benefits.

None of the environmental objectives in the Leederville Masterplan relate to water quality, however we consider that given the importance of the health of the Swan River to Perth residents, this should be a consideration for all developments within the Swan catchment, including within urban areas. We urge the Town to set a target of ensuring that the area has no negative impact on the Swan River through ensuring that there is no net increase (and preferably a net decrease) in nutrient flow from this area, through stormwater drainage or groundwater to the Swan River. Similar targets have been set by the East Perth Redevelopment Authority for the Riverside, East Perth and by the State Government for development at Southern River.

Hardstand areas such as carparks and roads invariably build up material containing heavy metals and particulates that can also affect river water quality if directly discharged into the stormwater system. Incorporation of Water Sensitive Urban Design measures, as detailed in the Department of Water *Stormwater Manual* should serve to reduce the potential for such impacts. An example of this is a *Humes interceptor*, which can be used to divert the first 'flushes' of runoff from hardstand areas after summer allowing the collection and treatment of contaminated stormwater.

Water conservation is becoming increasingly important with Perth's drying climate. We consider that measures should be taken in the public and private domain to reduce scheme water consumption and facilitate reuse of stormwater.

Recommendations:

1. A landscaping theme is developed for the Leederville Masterplan area based on maintaining an 'Australian theme' using Australian and Western Australian trees and plants for public landscaping and private landscaping visible from the public domain recognising that such landscaping will:
 - a. Create a unique 'sense of place' within Leederville;
 - b. Reduce water consumption through the use of species suited to the local climate;
 - c. Contribute to improved water quality within the catchment and the Swan River;

- d. Celebrate the floral heritage of the area;
 - e. Be in sympathy with the remaining indigenous woodland at Keith Frame Reserve;
 - f. Provide habitat in an otherwise highly urban environment;
2. A variety of trees be selected to provide the most suitable species in different locations from small and medium trees to provide shade at the street level through to larger trees for landmark locations. Selections will be Australian species, primarily Western Australian species.
 3. Existing trees within the Masterplan area to be inventoried, valuable trees in accordance with the 'Australian theme' identified and means taken to ensure their protection and incorporation into future landscaping, streetscape and building plans.
 4. Set an Environmental Objective '*Water Sensitive Urban Design (WSUD) will ensure that there is no environmental impact on the Swan River through*' for the Leederville Masterplan area
 5. Incorporate WSUD measures into stormwater system
 6. Investigate methods to achieve the above objective including policy development (for example: *A policy to ensure that no deciduous trees are planted within the street reserve or on private property where the leaves can wash into street stormwater drains*).
 7. Develop policies to require a high standard of landscaping for all developments. A landscape plan is to be submitted with all development applications demonstrating waterwise landscaping in accordance with the landscaping theme of the Leederville area. Accompanying the landscape plan will be a maintenance plan demonstrating that no fertilisers or organic matter (lawn clippings, mulch) will impact on surface or groundwater quality such as through washing into stormwater drains.

We consider that the suggestions above will set a high standard for innovative development and truly achieve the creation of a uniquely Leederville 'Sense of Place' for this area. Thankyou for the opportunity to comment on the Masterplan.

Regards

Warren McGrath
Chair