



*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

25th May 2007

Dear John,

SUBMISSION – DRAFT SUSTAINABLE ENVIRONMENT PLAN 2007 - 2012

On behalf of the Claise Brook Catchment Group I would like to submit the following comments on the Town of Vincent's Draft Sustainable Environment Plan 2007-2012.

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 following matters are important to achieve better environmental outcomes within an inner city area like the Town of Vincent:

- Sustainable landscaping which is hardy, waterwise and requiring little fertiliser while also being aesthetically pleasing;
- Greater use of Water Sensitive Urban Design features in buildings, landscaping, car-parks and streets;
- Identification and management of contaminated sites to prevent the mobilisation of contaminants into surface or groundwater;
- Identification and management of areas at risk of developing acid-sulphate conditions;
- Increasing available native habitat within the urban area through a greater use of indigenous vegetation in private and public landscaping and creating habitat connectivity between larger vegetated areas; and
- Education of the community to raise awareness of environmental issues particularly relating to water quality and native habitat and facilitate the uptake of new behaviours to the benefit of the local and wider environment.

We consider that local government has a key role to play in achieving better outcomes in these areas.

Our group was formed in 1997 and since that time has undertaken a number of projects within the inner city, many of them in partnership with the Town of Vincent including the restoration of indigenous vegetation to Smith's Lake to improve water quality and provide habitat; the construction of a wetland at Robertson Park to achieve similar outcomes; 'Yellow Fish' drain marking to raise community awareness of issues surrounding stormwater; preparation of a Local Plants brochure for Town of Vincent residents, support of local plants sales and community walks to name a few.

Our group is the only community environmental group in the Town of Vincent and is known widely throughout the community.

General Comments

We congratulate the Town of Vincent for preparing this important strategy which contains many valuable objectives and actions. It is important that clear priorities are set, either in this Strategy or in the Implementation Plan so that time and resources are spent on the actions which will have the greatest impact.

Involvement of the community is key to achieving many of the actions listed in the plan. Therefore, in addition to community engagement within individual focus areas and actions, we strongly recommend that the Town commits to an effective method of engaging the broader community to raise awareness over a range of environmental issues with a focus on areas where individuals can have real impact through the adoption of new technologies or through behaviour change within their own homes and workplaces. The method of engagement must achieve real and measurable change such as has been achieved by Travelsmart.

We strongly suggest that this is more important in the first five years that the proposed Awards program. There are a few programs already in use which should be investigated such as the “Switch your thinking” and “Living Smart” programs (www.switchyourthinking.com; www.livingsmart.org.au) as a model for a program within the Town of Vincent.

Recommendation: Develop and implement a community engagement strategy to facilitate behaviour change and uptake of “green” technologies by residents and businesses within the Town of Vincent.

We also consider that there are many people in the Town, individuals and companies, who are already doing environmental work which may be of interest to others. This could be showcased through a series of winter talks where each week a different presenter speaks on a different topic. For example a seven week program in the first year could include the following speakers who live or work within the Town of Vincent:

- Bob Humphries of the Water Corporation explaining how sustainability is being incorporated into their organisation
- Brian Fleay speaking of the end of cheap oil and how that will affect us all
- Men of the Trees and Carbon Neutral explaining carbon offsets
- Bob Roberts of Fair Go Trading speaking about Fair Trade
- Warren McGrath speaking about local community projects undertaken by the Claise Brook Catchment Group
- Antonietta Torre speaking about Water Sensitive Urban Design
- Town of Vincent staff and others speaking about the benefits of gardening with Local Plants

Recommendation: Draw on local knowledge and expertise to raise awareness of environmental and sustainability issues through a regular series of talks each winter.

Specific Comments

On page 5, reference documents for the plan are listed. We would suggest that the following additional three reports should be included.

1. “Water Pollution in the Claisebrook Catchment: Sources, Types and Recommendations for Future Monitoring”. Catherine Kesteven 2000
2. “Historic Land Use Survey of the Claise Brook Catchment”. Jeanette Conacher. 2000
3. “Vincent Habitat Project – Technical Report”. November 2004. Prepared by Syrinx Environmental for the Town of Vincent & Claise Brook Catchment Group

Water

The section on water focuses primarily on water consumption however management of water resources and stormwater is just as important an issue within Perth. Many wetlands and the Swan River are suffering from declining water levels and increasing nutrient levels with resulting algal blooms which are a threat to animal and human health. This has been highlighted in recent years with problem algal blooms in lakes such as Hyde Park which necessitated the erection of warning signs.

We suggest the following changes to the preamble of the Water section p9

High water consumption rates within the greater Perth metropolitan region and the significantly reduced rainfall since 1975 current drought have resulted in less runoff into dams, permanent water restrictions, and declining groundwater levels. In addition, a As global warming intensifies, it is predicted that the yield of water from Perth's water catchments may fall even further in the future and many wetlands within Perth may dry out. by up to 5% by 2020.

In addition increased nutrients in surface and groundwater supplies are contributing to poor water quality in local lakes such as Hyde Park and Smith's Lake and ultimately the Swan River.

Change in "Current Initiatives" p9

While the community appreciates this convenient use of water, the Town recognises that groundwater supplies are not unlimited and that they need to be used carefully with similar constraints as with scheme water. it is not a good use of resources, and is increasing the contamination of the environment.

Addition to "Current Initiatives" on p9

To improve water quality within Vincent, the Town, in partnership with the local community, has restored indigenous vegetation to Smith's Lake. Sedges take up nutrients from the water and filter out pollutants resulting in cleaner water within the lake. A constructed wetland at Robertson Park acts as a detention basin and filter for stormwater runoff from surrounding streets.

Yellow fish marked on stormwater drains raise awareness within the community that stormwater drains are connected to waterways and therefore should only carry clean rainwater.

Changes to "Objectives" on p9

- Ensure effective and efficient management of the town's water supplies to make the best use of available resources
- Protect and improve the quality of surface and groundwater resources in the Town.

Questions re "Objectives" on p9

- Reduce the Town of Vincent's annual water consumption by 30% by 2010 compared to current levels. (Question: is this referring to all water use including reticulation from bores or only mains water use – please clarify. Is it referring to use by all services including the depot, Beatty Park, street tree watering? Please clarify)

Change and questions re "Actions" p9

Measure Monitor the water consumption of all Town facilities (Question: and services? What about road resurfacing, watering street trees, will they all be included? Please clarify).

“Prepare and implement a Stormwater Management Plan” should be moved from Current Actions on p9 to “Actions” on page 10/11 with separate target dates for the preparation of the plan and the implementation.

Additions to “Actions” p9

- Regularly monitor surface water quality in Hyde Park lake, Smith’s Lake and other water bodies under the Town of Vincent’s management
- Maintain indigenous vegetation at Smith’s Lake and Robertson Park wetland to improve water quality
- Minimise fertiliser use in parks and reserves, especially around water bodies
- Continue activities to encourage a greater use of local plants by Vincent residents in home gardens and general landscaping which will benefit water quality through lower fertiliser requirements.

Question: The second Action on p9 is “Implement the Sustainable Water Management Strategy”. What is this strategy? Is this a current and ongoing action or is it something new and the strategy needs to be developed? If it is a new action then it should be listed on page 10/11 as “Develop and implement Sustainable Water Management Strategy” with separate target dates for the developing and implementing the strategy.

P10 Water - Actions

1. Street Trees: Our members are concerned about the widespread use of deciduous trees, particularly for street trees. Deciduous street trees are a major contaminant of urban stormwater, resulting in increased nutrient levels in receiving waters in addition to other problems such as drain blockages. Our members have observed that the non-deciduous Queensland Box trees are slowly being replaced with deciduous species such as Jacarandas, Chinese Tallow or similar. We appreciate that individual ratepayers may express a preference for these exotic trees, unaware of the cumulative impact on surface water quality and ultimately the Swan River. We consider that local authorities have a responsibility to offer responsible choices to ratepayers which take account of all the impacts of the selected tree including impacts to water quality.

With many street trees across the Town experiencing stress from the drying climate, in addition to possible requests for new street trees in areas which have recently have the powerlines put underground, we consider that the Town urgently needs to revise the current recommended species for street trees. Deciduous trees should only be used where there is a strong case such as away from stormwater drains, where the majority (>75%) of existing trees are deciduous or where there is a demonstrated requirement for winter sun.

It is also possible that native trees as compared to deciduous trees may have some advantages in terms of battling global warming. As deciduous trees drop all their leaves in winter they provide no role in converting carbon dioxide (a greenhouse gas) to oxygen during these months. Native trees continue to take up carbon dioxide through photosynthesis from the atmosphere throughout the year (Note: the benefits of native trees in this regard is still being looked at and the group is seeing if there is any research that can clarify this matter).

2. Sustainable Landscaping: Our members also consider that the Town should prepare a Sustainable Landscaping Policy to guide landscaping undertaken by the Town. The EMRC has prepared a policy which may be a useful starting point.

3. Contaminated sites: Within the Town of Vincent are many places which formerly were used for industry, landfill or other uses which may have resulted in contamination of the soil or groundwater. When these sites are developed there is a risk that contaminants will be mobilised into the surface or groundwater. Information about suspected contaminated sites is available through historical sources including the “Historic Landuse Survey of the Claisebrook Catchment” (2000) by Connacher. Planning approval for developments on suspected

contaminated sites should include conditions requiring soil testing to determine whether the site is contaminated.

The Environmental Plan should address how the Town of Vincent is addressing the requirements of the new WA Contaminated Sites Legislation in term of reporting and investigation for known sites owned by the Town.

4. Acid-sulphate soils: Much of the lower-lying areas of the Town of Vincent are located where formerly there were wetlands. There are areas that are considered as having a high risk of potential acid-sulphate soils within three metres of the ground surface according to the Department of Environment and Conservation (DEC). (Note: A map showing areas of potential acid-sulphate soils (PASS) is available from DEC)
When these sites are developed there is a risk that acid-sulphate conditions will develop leading to acidification and contamination of groundwater by heavy metals. Planning approval for developments on PASS should include standard conditions requiring the preparation of an Acid-sulphate management plan.

5. Water Sensitive Urban Design: Water Sensitive Urban Design (WSUD) is about integration of water cycle management into urban planning and design. The Town undertakes considerable engineering works every year with streetscape upgrades, road resurfacing, replacement of footpaths, kerbs, new landscaping in addition to building new facilities and refurbishing existing facilities. By incorporating Water Sensitive Urban Design principles in these works, environmental benefits including improved stormwater quality, water reuse and reduced reliance on scheme water could be achieved. We suggest that educating staff in the benefits would be the first step to increasing the use of such features within works within the Town. We suggest that such principles could be adopted over a two year period with the aim of applying them to all works within the Town. CSIRO has published WSUD Engineering Procedures: Stormwater (CSIRO 2005) which is an excellent reference for the Town's engineering staff and gives practical engineering solutions to those who need to implement WSUD. <http://www.publish.csiro.au/pid/4974.htm>
The Department of Water's Stormwater Management Manual for WA, especially Chapter 6 Retrofitting is another useful resource.

6. Community involvement and education: The community, both business and residents, need to be involved to achieve greater reductions in scheme water consumption and improvements to environmental water quality than can be achieved by the actions of the Council alone. As for all the focus areas within the Environment Plan, a clear and effective strategy for engaging the community and facilitating the uptake of new technologies and changed behaviour is vitally important.

In particular, to protect water quality, the community needs to be educated about the stormwater system and how their behaviour at home and within their local area can impact on water quality in nearby lakes such as at Hyde Park. In addition, the community needs ongoing education about the negative impact of feeding wildlife which not only has a negative affect on the health of wild animals, but also negatively impacts on water quality when the animals being fed are waterbirds.

Suggested amended and new actions

- Review current practices and policies in relation to Street Trees to ensure the protection of surface water quality and reduce reliance on water while achieving the community's aspiration expressed in Vincent Vision 2024 for "shady, tree-lined streets".
- Trial different species of Western Australian trees, which are naturally waterwise and fertiliser-wise, to ascertain their suitability as street trees.
- Develop a Sustainable Landscaping Policy to minimise water and fertiliser use of landscaping within Vincent.

- Incorporate Water Sensitive Urban Design (WSUD) principles into all new works undertaken by the Town of Vincent including street upgrades, road resurfacing, car-parks, buildings and landscaped areas. Seek external funding to incorporate WSUD principles into the Loftus Centre Car-park.
- Investigate opportunities to establish indigenous vegetation in the Hyde Park lakes and other water bodies in the Town to improve water quality.
- Reduce the sources of stormwater contamination through physical interventions, community education and enforcement of the Unauthorised Discharge regulations.
- Educate the community on water quality and how they can personally contribute to improved water quality within their own area including simple messages such as sweeping up at home, picking up pet poo and not feeding ducks.
- Increase awareness of waterwise and fertiliser-wise gardening practices through the Town of Vincent Annual Garden Competition and the Local Plant initiatives.
- ~~Continue to~~ Foster joint partnership with Water Corporation in promoting waterwise practices to the community and within the Town through the Town of Vincent Garden Competition and Local Plants Initiatives.

Biodiversity

One aspect of the Town's Greenway/Wetlands Heritage Trail is the enhancement of biodiversity through the creation of green "corridors" connecting existing parks to assist the movement of animals from one area to another. This important initiative should be mentioned in the preamble. In addition, the existing Local Plants initiatives also encourages a greater use of indigenous plants in private gardens and public landscaping which would also result in improved biodiversity.

In 2004 the Town, together with the Claise Brook Catchment Group, commissioned the *Vincent Habitat Project – Technical Report* which contained 30 recommendations to improve habitat within Vincent. While the DRAFT Environment Plan has proposed a lot of excellent actions for biodiversity, we are concerned that no direct reference has been made to the Habitat report prepared in 2004. We would ask that the actions in the Draft Environment Plan be reviewed together with the recommendations in the *Vincent Habitat Project – Technical Report* to ensure that the proposed actions are those with the highest priority and likely to have the greatest impact.

In addition to these initiatives we would suggest that any policies, guidelines or brochures which include plant selection recommendations (such as street tree policies, verge policies, landscaping policies) should be reviewed to give greater emphasis to indigenous species which will provide food and habitat for native animals unlike exotic species which are more likely to foster large populations of non-indigenous problem species from insects to birds and mammals.

Biodiversity initiatives have great potential to engage the community who are easily inspired by growing indigenous plants to attract birds and butterflies even though there are other significant benefits of reducing water use and protecting water quality through reduced fertiliser use. We suggest that Biodiversity can be used to engage the community while delivering multiple other benefits such as reduced water consumption and improved water quality through better gardening practices.

Suggested amended and new actions – Biodiversity

- Review the recommendations of the *Vincent Habitat Project – Technical Report*. Schedule the recommendations to be implemented over the next 5 years and use this report as a guiding document to enhance biodiversity within Vincent.

- Review the verge policy, street tree policy and brochures recommending plant selections to recommend more indigenous species which provide habitat for native animals and less exotic species which attract feral and problem species.
- Continue and expand the Local Plants initiatives to facilitate greater use of local plants within local gardens. Use community interest in biodiversity to attract more people into growing local plants and improving garden practices.

Waste Management

General litter discarded on streets and footpaths contributes to the pollution of stormwater and blocking of drains. While our group has organised community “Clean Up” events in the past, we have noticed that a significant amount of litter, including glass and plastic drink bottles, comes from a few sources particularly from licensed establishments. While we continue to encourage the community to pick up litter within their local area, we consider that more pressure should be put on the establishments which are the source of the litter including hotels, clubs and bottle-shops. If each establishment was responsible for cleaning up the litter within a suggested 300m radius of their premises, together with greater enforcement of the littering laws, this would go a long way to reducing the amount of litter on the streets. While glass and plastic are inert substances and do not impact on water quality the litter is unsightly and broken glass is a hazard.

Suggested amended and new actions – Waste Management

- Develop a strategy to reduce littering within the Town with more responsibility for collection placed on establishments which are the source of significant amounts of litter.

And finally, we suggest that the imagery on the front cover of a path winding between exotic trees with a background image of ivy could be reconsidered. While many of Vincent's parks do contain exotic trees, many would now consider ivy to be more of a problem weed than a desirable plant. We would like to offer our photos of wildlife at the restored Smith's Lake, local residents planting at Robertson Park or everlastings flowering at Hyde Park (attached) for your consideration as an alternative cover image for this report. High quality digital images can be provided on request.

Thankyou for the opportunity to comment on this important strategy and our members look forward to being involved in the development of the implementation plan.

Regards

Warren McGrath
Chair