



Submission to
Presiding Member
Development Policy Advisory Committee
Planning SA

concerning the proposed Development Plan Amendment
Charles Sturt (City) Development Plan
Cheltenham Park Racecourse.

This submission is made by the 'Friends of Gulf St Vincent'

This is a voluntary organisation, established in 2003, with a steadily growing membership of c. 90 individual and corporate members.

Many of our members have retired from professional involvement in policy and management of the State's aquatic resources. They have joined with environmental activists in the cause of the coastal and marine environment. Members live around the Gulf, and cover all age groups.

Our principal aim is to foster a unified community approach to the protection and wise use of the Gulf St Vincent.

OUR INTEREST IN THE CHELTENHAM SITE

Critical to the protection of the Gulf along the metro coast is management of stormwater. The principal problem with stormwater now is the effect of turbidity on the local beaches and seagrasses. This has been confirmed through the Adelaide Coastal Waters Study, completed recently by the State Government and CSIRO. The effect of NOT having discharges of turbid stormwater has been observed through last summer with its low rainfall, by regular beach users, who remark that many of the beaches were much more pleasant, and safer for children, because of their clear waters. This has been a reminder of what beach waters were like before the drainage across the Adelaide plains was drastically altered.

When the State Government indicated that the Cheltenham Race Course site could be available for conversion to other public use, including stormwater management, the 'Friends' sought the advice of several eminent engineers. A submission was prepared for that site that could provide significant public amenity and harvest rainwater for delivery to one of our depleted aquifers for reuse.

The basic details were - that the urban area to the south east of Cheltenham (Woodville through to Brompton) could realistically be drained to Cheltenham Race Course site. This drainage area is about 2300 ha.

The total area (pond area plus surrounds) required to treat the run-off from the catchment would be about 54 ha. It would yield about 2.5 ggalitres of useable water, annually.

This water could be injected into the underlying aquifer. When withdrawn by irrigators, its extraction would yield a return of c. \$1.5m pa (at a nominal cost of \$0.60/kL) less the cost of running the wetland (conservatively, 5-10% of expected revenue).

In February 2006, the 'Friends' made presentations to the City of Charles Sturt when Council was considering its motion *inter alia* to -

map all Parks, Gardens, Ovals and Green Space either owned by Council or State Government including privately owned Golf Courses and racing tracks.

investigate the possibility and feasibility of creating stormwater wetlands/retention basins of all areas identified to enable improvement of water quality before it enters Gulf St Vincent and enabling water recharging the aquifer.

and that the City Charles Sturt amend its Development Plan to require all new buildings, dwellings and industry enterprises to retain all storm water on site.

That City of Charles Sturt advise the Minister for Development and Planning to Legislate for all new dwellings, buildings and industry enterprises to retain all storm waters on site.

THE STATE GOVERNMENT POSITION

On October 18 2006, Premier Rann issued a press release which included

- "the Government is prepared to give approval for the SA Jockey Club to sell the Cheltenham Park Racecourse but only if developers allow for 20 hectares of open-space.

"Initially, the Government demanded a minimum of 30 per cent open space – but we believe it's possible to do better than that and this proposal equates to 40.6 per cent.

"If the SAJC won't agree to the increase in open space, then we won't approve the sale."

Subsequently, the 'Friends' were advised that this 'demand' had been reduced to 35%, as some kind of sanction on City of Charles Sturt for not contributing extra funds to the Cheltenham Development.

PROCESS WITH THE LAND MANAGEMENT CORPORATION

A supposed 'consultation' that works through *pro-forma*, in which the agency nominates the issues, does not inspire confidence in the community. Neither is it likely to elicit innovative ideas from the community. The 'Friends' made a submission - not on *pro-forma* - to the LMC, but see little evidence of serious consideration of public comment in this rezoning proposal.

For those reasons, we submit there is a case for a public meeting, and the 'Friends' would ask to be heard at that meeting.

THE PROPOSED AMENDMENT TO CHARLES STURT (CITY) DEVELOPMENT PLAN

For this submission we take the site area as 49 hectares; essentially equivalent to the area required to treat water from the entire local drainage.

We note recognition of Metropolitan Wide Policies - Water Resources at p. 12, and draw attention particularly to -

- 4 *Ensure coordination of multi-objective management of stormwater by considering it both as a resource and potential hazard.*

We note also the objectives of *South Australia's Strategic Plan 2007* beginning at p. 14, and specific mention (Objective 3 - Attaining sustainability.) of stormwater management and water conservation.

We commend these broad statements, but would hope to see them recognised positively in Development Plan Amendments proposed at a time of serious water scarcity, and with the understanding now available to the State Government from its own Adelaide Coastal Waters Study, on the detrimental effects of stormwater runoff to the metropolitan coastal waters.

We draw attention to the identification of stormwater as a potential hazard. If the Government does not use the Cheltenham site to manage the hazard of flash flooding, we challenge it to show where else it might do this.

PHYSICAL AND SOCIAL INFRASTRUCTURE CAPABILITY

Given the intentions of City of Charles Sturt in February 2006, and general thinking on managing urban rainwater, we take issue with the 'fundamental principle' (p. 33) that outflows from the developed site should not exceed outflows from the undeveloped site.

This statement basically supports the status quo, with no real recognition that it is both feasible and desirable to achieve an outcome that improves upon the current situation.

We would submit that there should be no outflow from the developed site, except to or through some supply arrangement, including through an aquifer.

We note the admittedly coarse study of aquifer storage by URS. The last two paragraphs of the Executive Summary of 11 May 2006 identify the technical limitations of that study, and show that this is far from definitive. The particular case study was developed using 4-6 hectares of open space.

This number seems to reflect a 'rule of thumb' allocation of space. There is some question that this would be an adequate area to treat even the water that would gather on the Cheltenham site. With likely rates of injection to the aquifer in a range 5-10 megalitres a day, there would be need to maximise surface storage. From experience in the northern suburbs, we know that such storage would allow further natural treatment of the water to surprisingly high quality. There are indications that the rainy season in Adelaide may be becoming shorter, with more intense falls. If that is happening, and with other development on the Cheltenham site increasing runoff from roofs and hard surfaces, any future uses should allow for increased surface storage. Our advisers suggest that something like 35 hectares would provide storage and treatment for expected peak local runoff with no water leaving the site.

But this need not be an impediment to other kinds of development.

For this site, the 'Friends' believe that innovative designers should be able to suggest exceptionally attractive housing, fronting, or even built over, wetlands. Such housing is being offered right now in avowedly 'up market' developments around the state. To draw on existing skills and technology, the 'Friends' suggest an open competition to show how housing of the kinds proposed in this amendment could be integrated with a much greater allocation of space to wetlands - in increments of 10 and 20 hectares, as a guide.

We have never seen an explanation for the disagreement between the State Government and City of Charles Sturt over the reduction of open space from 40% to 35%, other than that it is to do with a contribution of \$5 million towards unspecified 'management'.

The State Government proposes reverse osmosis desalination to supply 50 gigalitres of water a year to Adelaide, from a plant with capital cost of the order of \$1.4 billion. That is a capital cost of c. \$28 million per gigalitre produced. If the State Government were truly to 'demand' the further 5% of open space - another 2.5 hectares - then at least 8.5 hectares should be available to harvest rainwater. This should be able to process c. 400-500 megalitres for delivery to the aquifer, but such a scheme could be scaled up.

To use the Cheltenham site primarily to harvest water, and fit other amenities, including some housing, around the ponds and wetlands, could deliver several gigalitres of water to the aquifer, with much less cost of collection, processing and delivery than through a reverse osmosis plant. Water delivered to Cheltenham would not have required expensive pumping many metres from the sea to a processing plant, then further pumping up a considerable gradient, to storages.

The site could also provide the important community service of flood mitigation, and a significant reduction in direct environmental impact on the coastal waters. All these benefits should be considered in any rigorous economic comparison of hi-tech reverse osmosis desalination against harvest of rainwater - which is already fresh, delivered by gravity, to ponds, where nature would continue to treat it for free!

The urban environmental problems of Adelaide are common to most cities. Already, success of the wetlands to treat stormwater in the northern suburbs, have attracted world attention. The Cheltenham site could provide a test area for Universities and private enterprise to further develop and refine water management techniques, and to integrate them into an established city. Such services are in demand worldwide. Are we not able to imagine Cheltenham as the showcase for inspired, truly sustainable, urban development?

RESIDENTIAL ZONE (CHELTENHAM PARK POLICY AREA 69)

Objective 6 - Sustainable development outcomes through innovation in stormwater management, waste minimisation, water conservation, *etc.*

Because this does not identify measurable outcomes, it suggests that water management will be pursued to the capacity of land arbitrarily allocated. That is, the water management will be made to fit what land is left over, rather than the land be allocated to accept the available water.

The Principles of Development Control - #36.p. 57 - seem a little more prescriptive, and appropriate, but still do not positively promote the opportunities this site offers.

We accept that the SAJC wishes to maximise its financial payoff from rezoning this land. It would be naive to expect that its nominated developers would seek long-term community benefit over short term profit maximisation at any step of this development. Objectives and Principles as fuzzy as these just make it so much easier to maximise immediate capital gain - on the last large site ever likely to be available in this area.

The SAJC has projected amounts it might realise, nett, from housing development. If the cost of technology to produce each gigalitre of freshwater from reverse osmosis is of the order of \$28 million, then using the 49 hectares at Cheltenham to deliver several gigalitres of fresh water, coupled with measurable benefits in reducing flood hazard, provision of other amenities to this part of greater Adelaide, and reduction in direct damage to the coastal waters, offer tangible benefits of similar value. It would also provide evidence of wanted, hence saleable, technologies to other cities.

Have the State Government and the new Federal Government explored the possibilities of providing SAJC with the funds it seeks without this dramatic change in land use, but to provide the water, and positive environmental benefits that are possible with the land at Cheltenham, and to reduce the flood hazard?

SUBMISSION FROM 'FRIENDS OF GULF ST VINCENT'

The overall proposal is for a quite dramatic change in use of 49 hectares of open space. We cannot see why State and Federal Governments could not allow time to further explore the potential of the Cheltenham site for the benefit of greater Adelaide, as well as for the benefit of the horse racing industry which has had use of the land to date.

We do not believe that the idea of using the entire site primarily for water management, but allowing other uses, and developing amenities consistent with that prime use, has been fully explored. Considering flood hazard, resource and environmental benefits that could be foregone, we ask that the entire use of the site be reconsidered.

If the Government is committed to proceeding in the arbitrary way of the proposed amendment to the Development Plan, we ask that the open space allocation on this site be brought back to the Premier's 'demand' of 40% of the total area - 20 hectares - at no extra cost to City of Charles Sturt.

We ask that there be an open public call to innovative architects and suitably qualified planners/designers, to submit ideas for housing, consistent with the rest of this proposed Plan Amendment, around allocations of 10 hectares and 20 hectares to harvest rainwater, including from the same catchment but outside the site boundaries.

- and that these ideas be circulated for open public comment.

We ask that no stormwater leave the site except by transfer through the aquifer.

We support a public meeting to be called for Thursday, January 24 2008. 'Friends of Gulf St Vincent' ask to be heard at that meeting.

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