CITY OF GREATER GEELONG
PO BOX 104
GEELONG 3220 AUSTRALIA
DX 22063 GEELONG

TELEPHONE 03 5227 0270
FACSIMILE 03 5227 0277
www.geelongaustralia.com.au

CITY OF GREATER GEELONG

Essential Services Commission
Level 2, 35 Spring Street
MELBOURNE VIC 3000

09 May 2008

Doc No:
Our Ref: TD:ko
Your Ref:

Dear Sir

Re: City of Greater Geelong submission to Essential Services Commission 2008 water price review – Regional and Rural Businesses Water Plans 2008 – 2013 draft decision

I refer to the above decision to which you invited comment/submissions from interested parties.

The City of Greater Geelong has prepared a submission in relation to the plan specifically as it impacts on Barwon Water as the regional water authority for Geelong.

The City continues to work with Barwon Water in respect to the most appropriate means to service the expanding regional city of Geelong along with coastal hinterland townships, and we trust that this submission will be of assistance in the Essential Services Commission review of their strategic directions moving forward.

The City would welcome the opportunity to expand on this submission at your convenience.

For further contact please call Terry Demeo as per the details listed below.

Yours sincerely

TERRY DEMEO
MANAGER

PLANNING STRATEGY & ECONOMIC DEVELOMENT
CITY OF GREATER GEELONG
131 MYERS STREET GEELONG VIC 3220
TELEPHONE 03 5227 0905
FACSIMILE 03 5227 0855
tdemeo@geelongcity.vic.gov.au

Attach: Submission

SUBMISSION TO THE ESSENTIAL SERVICES COMMISSION 2008

WATER PRICE REVIEW – DRAFT DECISION

BY

THE CITY OF GREATER GEELONG

CITY OF GREATER GEELONG

Acknowledgements

The City of Greater Geelong would like to acknowledge, and thank, Dr Peter Coombes (Director-Bonacci Water Pty Ltd) for his advice on the interpretation and implications of the Essential Services Commission 2008, *2008 Water Price Review, Regional and Rural Business Water Plans 2008-2013* – Draft Decision.

CITY OF GREATER GEELONG

SUBMISSION OUTLINE

PURPOSE

The City of Greater Geelong is making this submission to highlight critical issues that impact on the Essential Services Commission decisions from the perspective of the Council including:

- The need for rapid and efficient delivery of essential water and sewerage trunk infrastructure to urban growth areas in the Greater Geelong region; and
- A requirement for local, precinct based “state of the art” infrastructure and opportunistic solutions that significantly reduce the impact of urban growth on existing water, sewerage and storm water infrastructure, and the environment.

BACKGROUND

The population of the Greater Geelong region is forecast to increase by 28% (more than 68,000 new residents) by 2030[1]. A majority of these people will be housed in new residential developments in farm land that is currently not serviced by water, sewerage and storm water infrastructure. A smaller proportion will be housed in infill or redevelopment projects. Significant examples of growth areas are planned for the following locations in the Greater Geelong region:

- Ocean Grove
- Jetty Road (Drysdale/Clifton Springs)
- Lara
- Point Lonsdale
- Fyansford
- Armstrong Creek

At the same time, a key issue for Council is the current limited supply of serviced land that is available for immediate residential development in the Greater Geelong region. Whilst it is common practice to have land available for 10 years residential growth Geelong has just four years supply. Research suggests that limiting the availability of land creates premium price scenarios in the market and Council is concerned that the limited supply of serviced land will lead to decreases in the affordability of residential land. (The above urban growth and redevelopment areas are at various stages of planning by Council and land developers, but they are largely unserviced.)

A key priority for Council is, therefore, to significantly increase the supply of serviced developable land that is available for immediate development and to ensure that the land released facilitates development on multiple fronts that is consistent with market demands. A critical path activity in this process is the timely delivery process for primary (trunk) water and sewerage infrastructure.

As part of this increased focused on the supply of serviced land, Council has recently revised the planning framework for delivery of trunk water and sewerage infrastructure to the Armstrong Creek Urban Growth development to a 10 year period (2009-2019)[2]. This is a substantial change from the for development over a twenty five to thirty year period that Council had previously advised Barwon Water for the preparations of their five year plan (for submission last October).

Armstrong Creek is the largest contiguous development in Victoria, and it is highly likely that Council will request a Ministerial Amendment to rezone the land to an Urban Growth Zone[3] by the end of July 2008. This will allow Council to enter into a streamlined planning process that considerably reduces planning timelines for urban growth areas, and hence will place even greater pressure on the timeliness of infrastructure roll out.

The City of Greater Geelong faces a significant challenge with the pressure to rapidly increase the supply of serviced developable land and responsibility for ensuring urban growth that is environmentally, socially and economically sustainable. Council is, therefore, simultaneously focusing on the rollout of essential water/sewerage services and on encouraging sustainable urban growth solutions that will reduce the impact of the urban growth on existing water, sewerage and storm water infrastructure, and the surrounding environment. Council is exploring options for implementing local, precinct based, recycled water and storm water management solutions[4].

---

[1] G21 population and household forecasts by ID prepared for the Greater Geelong region are published on www.g21.com.au

[2] Armstrong Creek will be the major urban growth area for Geelong in the foreseeable future and is currently unserviced farming land. When fully developed it will provide 22,000 households and employment areas for 22,000 jobs.

3 The Urban Growth Zone was recently announced by the Victorian Premier as being applicable to all proposed new urban areas in the State

[4] Bonacci Water (2008). Responsible water use at the Armstrong Creek development – analysis of integrated water, storm water and wastewater options. Report for City of Greater Geelong.

CRITICAL ISSUES

Council Role in Managing Urban Water Demand

The City of Greater Geelong is currently on Level 4 water restrictions and Council notes that the region has experienced an excellent response from the community in reducing the average annual household water from 216 kL to 169 kL. Planning for the region proposes that average annual household consumption will range from 158 kL to 175 kL until 2013[5] implying that level 4 water restrictions will continue for the next five years.

Ongoing reductions in urban water demands will be greatly assisted by "third party" organisations such as the City of Greater Geelong. The actions of local planning authorities (such as City of Greater Geelong) in promoting water conservation and sustainable development can significantly assist the region to reach targets of lower household demand for mains water. Moreover, the wider land use planning responsibilities of the City of Greater Geelong allow for integrated water cycle solutions. For example, a council requirement for rainwater tanks to assist with management of the flooding and environmental impacts of urban growth also provide considerable reductions in demand for mains water of about 20% in the Greater Geelong region and associated improvements in water security.[6] Similarly, a requirement for storm water harvesting can provide storm water management, environmental and water conservations benefits.

Council requests the ESC explore mechanisms beyond water pricing and cost recovery from the perspective of water monopolies to allow for, and maximise, these integrated water cycle management opportunities.

Storm Water Harvesting & Urban Water Trading

New urban developments and the densification of existing urban areas create large increases in the volume of urban storm water runoff. This results in the diminished levels of service provided by existing storm water infrastructure and increases the impacts on the environment.

The process of urban redevelopment, and development in new growth areas remote from services, provides, however, considerable opportunities for urban water exchange/trading. These are usually integrated opportunities that involve transfer of storm water between adjoining properties or estate scale storm water harvesting by Council for supply to a range of domestic, commercial or industrial end users. Urban water trading provides the opportunity for management of urban flood risks and for protection of the environment whilst optimising the use of locally generated water supplies and hence reducing the demand on regional water infrastructure and supply.

[5] ESC (2008). 2008 water price review draft decision. Volume II: Barwon Water, March.

[6] Coombes (2008). Rainwater tank evaluation study for metropolitan Melbourne – briefing note on Stages 1 and 2: Analysis of climate, water demands, rainwater yields and stormwater impacts. DSE.

Case Study: Storm Water Harvesting / Urban Water Trading

Coles have a 16 hectare site at a Major Activity Centre (a proposed Priority Development Zone) on the Surf Coast Highway in Armstrong Creek, and propose to develop a major retail centre with significant sized roof area.

Across the road, a Lutheran P-12 School is being built with generous grounds and sporting facilities.

Coles proposes to harvest its storm water for the Lutheran School to use externally to maintain their gardens and sporting grounds in premium state, and for use in flushing toilets. In exchange, it is proposed that in 20 year storm events, Coles will utilise the Lutheran Football Field as a storm water detention basin.

Coles has similar storm water harvesting/detention arrangements with adjacent entities in Queensland with excellent results.

Urban water trading opportunities of this nature are usually outside the current monopoly pricing and cost recovery structures. The current structure of State legislation and the focus on cost recovery by water monopolies in the draft ESC decisions will limit or prohibit these important opportunities.

Council requests that the ESC make rulings to facilitate these urban storm water harvesting and trading processes, and where it is deemed necessary provide adjudication on strategies proposed.

Recycled Wastewater

In new developments on the fringe of existing urban areas the provision of traditional trunk infrastructure can involve considerable investment, and the transport of water and sewerage over long distances often has higher associated operating costs. In addition, the land development market is reluctant to accept brown developments and observes that the provision of third pipe wastewater recycling systems allows green developments with viable gardens and open space, and has significant value to a rapidly growing market cohort. Such developments deliver a high amenity to society whilst reducing household water demands for mains water. Council views the value of recycled wastewater is far greater than a perceived sale price and is part of responsible urban growth.

The use of local wastewater plants can deliver green developments, improve regional water security and, with optimum placement, minimise trunk infrastructure costs. These innovative projects are increasing attractive to “third party” proponents such as land developers and private infrastructure providers.

Barwon Water has advised Council that it would consider commercially viable third party developed local wastewater plants (where the third party takes the risk) but that Barwon Water would prefer to operate them.

Current pricing and cost recovery processes do not, however, allow for these types of business strategies to deliver these projects.

A Case Study – the Fyansford project

The Fyansford project involves the redevelopment of adjacent quarry sites on the fringe of Geelong's urban area to provide about 2,000 dwellings. The local water utility, Barwon Water, can provide drinking water supplies from its existing trunk infrastructure but cannot, without significant works, provide wastewater services. The land developer, Moltoni Corporation, is keen to provide a sustainable development that includes low water demands and wastewater discharges whilst minimising stormwater discharges. The aim is to also minimise impacts on the environment, including the Moorabool River. This strategy will produce much needed housing with minimal impacts on regional water resources.

Bonacci Water have developed an integrated water management strategy that includes water efficient appliances, rainwater tanks, stormwater harvesting and wastewater reuse from a local treatment plant. This strategy will result in reductions in water demands of over 70% and the supply of highly treated wastewater to the site and the nearby Queens Park golf course. This strategy is dependent on the developer providing the wastewater treatment plant and associated recycling infrastructure. It is envisaged that this strategy can be provided by a variety of business strategies ranging from the full ownership and operation of a local wastewater treatment plant by Barwon Water to private sector ownership and operation of the wastewater system.

In any event, each of the business strategies is reliant on flexible and proportional access to headworks, service, connection and usage charges for wastewater treatment and supply of recycled water. It is noteworthy that the integrated strategy proposed by Bonacci Water involves trading in infrastructure capacity and savings of over $7 million. These processes will be dependent on clear rulings from the ESC on contribution charges that incorporate partnerships between third party infrastructure providers and water monopolies.

Council request the ESC consider processes to allow viable business models for the delivery of third pipe recycled wastewater from entities other than water monopolies or for partnerships with water monopolies. In some cases this would require that the ESC adjudicate or act as a broker on deferral or avoidance of the requirement for local monopoly infrastructure due to the provision of third party infrastructure.

It is envisaged that the ESC decisions will need to provide mechanisms to allow:

- "Third party" access to headworks and operating charges for the provision of wastewater services and the supply of recycled wastewater. It is noteworthy that local precinct scale wastewater treatment plants provide both wastewater treatment services and delivery of recycled water.
- Fair and equitable partnerships between the private sector, local government and water monopolies to deliver precinct scale recycled water projects.
- Innovative infrastructure strategies that include balanced assignment of infrastructure capacity between water monopolies and third party infrastructure providers.
- Equitable financial strategies that are likely to involve proportional access to headworks, service, connection and usage charges based on the services provided by both water monopolies and third party infrastructure providers.
- Recognition of the full range of benefits provided by strategies that incorporate recycled wastewater including reduced demands on regional water supplies, reduced requirements for traditional (trunk) infrastructure, provision of wastewater treatment services and recycled water.

The Proposed Customer Contribution Charges

The draft ESC decision allows for three customer contribution categories; namely for developments with minimal impact on future water demands, for developments with Water Sensitive Urban Design requiring additional infrastructure within six years, and for developments that will create water demand above that of high density water efficient homes.

It is acknowledged that the proposed three tier contribution charges systems has the potential to provide the necessary flexibility to allow financing of sustainable developments by third party or monopoly interests. It will be important, however, for the ESC to provide clear definitions of the following:

- What is the relative water use of a development that will provide minimal impacts on future water resources? The specification of lot sizes less than 450 square metres does not appear to define the potential for minimal impacts. It would be preferable to nominate a reduction in average annual water use of (say) 50%. Such a definition would avoid disagreement on future impacts.
- Will the proposed contributions strategy result in potential sustainable developments that incorporate WSUD or integrated water cycle management strategies (such as wastewater recycling, rainwater tanks, storm water harvesting and water efficient appliances) that achieve minimal impact on future water demands being classified as category 1?
- Will this classification then limit access to, or trading of, contributions funds that would allow funding of these strategies?
    - Or is it intended that the difference between category 2 or 3 charges and category 1 charges can be used to facilitate sustainable developments by third party proponents with the category 1 charges being paid to water monopolies in any event?
- Can the need for further investment in infrastructure within 6 years in category 2 be more clearly defined? A wide range of WSUD projects do not require additional investment in infrastructure. How is this type of development encouraged in the contributions scheme?
- The definition of the relative water use of a “water efficient home” is required to clarify the adoption of category 3 charges. Again this can be transparently described as a reduction in average annual water use.
- Each category needs to provide customer charges regime for recycled water.

Council requests the proposed contributions scheme includes mechanisms to enable innovative and sustainable infrastructure strategies that can be delivered by water monopolies, third party infrastructure providers, home owners or diverse partnerships of the aforementioned.

Facilitating Optimum Infrastructure Strategies

The City of Greater Geelong would like to see the provision of optimum infrastructure strategies at least cost, rather than the traditional approach that results in the provision of excess infrastructure capacity and additional investment that would not constitute optimum use of funds.

In consultations with the Developers with Land Interests in Armstrong Creek, a reoccurring theme was their frustration at the unnecessary and excessive cost of implementing recycled water and storm water management strategies due to the requirement to adhere to parameters set by the water utilities that did not recognise the contribution of alternative (locally provided) water sources and/ or treatments.

Barwon Water have advised the Council that they would, however, be willing to consider integrated network analysis of combined water/ sewerage/storm water management systems.

Council requests the ESC provide guidance on the parameters for optimum provision of infrastructure and financial investment. Such a strategy would involve mechanisms to allow trading of infrastructure capacity that can be informed by modern science and methods of analysis.

FURTHER INFORMATION

Further information on this submission can be obtained by contacting:

Terry Demeo
Manger Planning Strategy & Economic Development
Development Sustainability
City of Greater Geelong
(03) 5227 0905 or tdemeo@geelongcity.vic.gov.au