

Bayside City Council

Submission to

**Senate Standing Committee on the Environment, Communications,
Information Technology and the Arts References Committee**



Australia's Urban Water Management - Inquiry 2001

Bayside City Council

The City of Bayside is located in Melbourne's southern bayside suburbs between 9 and 20 kilometres south of the Melbourne GPO. The municipality covers an area of 37 square kilometres and has a shoreline to Port Phillip Bay of 17 kilometres.

Bayside includes the suburbs of Beaumaris, Black Rock, Brighton, Brighton East, Cheltenham (part), Hampton, Hampton East, Highett (part) and Sandringham.

The estimated 2001 population of Bayside is 91 987.

Adjoining municipalities are the City of Port Phillip to the north and the Cities of Glen Eira and Kingston to the east and south respectively.

Development in the City of Bayside dates from 1841 when Henry Dendy purchased his 'special survey', which covers today's Brighton, and Brighton East. Josiah Holloway's "Gipsy Village" purchased at the Crown Land Auctions in 1852, became the nucleus of settlement in the Sandringham area, and the coming of the railway, to Brighton Beach in 1859 and to Sandringham in 1887, caused the acceleration of development. After the First World War the War Service Homes commission acquired property for subdivision and the resultant population increase was matched by similar projects after World War Two.

The City of Bayside was formed in 1994 by the amalgamation of the former cities of Brighton and Sandringham, and part of Moorabbin and Mordialloc.

The first councillors were elected in 1997.

Today the City of Bayside offers a diversity of activities and attractions with a commitment towards valuing heritage and cultural community development. The most significant land use in Bayside is residential, with 74% of the municipality zoned for this purpose. Key supporting features of Bayside's profile include:

- the leafy residential character so valued by our residents
- the vibrancy and health of our strip shopping centres
- the highly valued coastal environments and bushland reserves
- the legacy of past generations in our public and private heritage treasures
- the quality and range of our sporting, recreational and community assets, including the coast
- the healthy level of demand to live, work and play in Bayside

Bayside's role in urban water management

Bayside City Council, as with other Victorian councils, does not have responsibility for water supply or sewerage services. These are undertaken by water authorities, in our case South East Water is responsible for the local water supply and sewerage systems.

Melbourne Water Corporation has responsibility for the regional systems supporting South East Water's operations (ie Melbourne Water are responsible for the major water storages and trunk distribution together with trunk sewage collection and its treatment and discharge).

Bayside City Council is , however, a significant consumer of water resources, particularly for the maintenance of parks and gardens. Other Council assets, eg sporting pavillions, pre-schools, libraries, corporate centre, maternal and child health centres, vary in their water consumption and generation of waste water.

Some of the major water consumers in Bayside, golf courses and bowling greens, use some groundwater to supplement supplies drawn from the reticulated water supply system.

Responsibility for drainage is shared between Council and Melbourne Water. Council is responsible for local drainage systems - generally defined as drainage of catchments up to 60 Ha. Melbourne Water is then responsible for the larger drains - those servicing catchment areas greater than 60 Ha.

Bayside is in an interesting situation from a drainage perspective. Geomorphologically Bayside is a series of ancient dunes generally running parallel between the coast and the eastern boundary of Nepean Highway. This results in a series of small drainage catchments that are fully contained within the municipality. Unlike most other coastal municipalities Bayside is not the recipient of pollution from upper catchment municipalities.

The urban development of Bayside has seen the progressive engineering of former watercourses to hydraulically efficient underground drains. Consequently, there is little expression of surface water within the municipality and, despite the contained catchments, the connection between local drainage and outfalls on the foreshore is well obscured.

Bayside's interests

Bayside City Council is committed to environmental sustainability and is pursuing a triple bottom line approach that has been broadened to recognise the role that knowledge and understanding plays in the lives of the community.

In considering water resources and their management, Council's interest is not constrained to its direct responsibilities nor to the boundaries of the municipality. Council recognises that its use of resources, such as water, has effects on other environments where the water is sourced and stored and where wastewater is treated and

disposed of. Consequently Council's "footprint" for water resources extends to places well beyond the boundaries of the municipality.

In pursuing an environmentally sustainable approach to water resource management Bayside City Council is looking for:

- cost-effective solutions
- minimising the "ecological footprint" of services
- outcomes that contribute to social well being
- engagement and empowerment of the community to understand the various issues and take responsibility for driving improved outcomes.

Reforms and developments

The 1995 strategy paper *Green Cities*, published by the Australian Urban and Regional Development Review, provided a detailed analysis of the environmental issues and challenges facing Australian cities. Sections of that report dealt with the factors contributing to water issues and opportunities to address these. It is interesting to reflect, some six years later, on the progress that has been made to address these issues. Institutional reforms of the 1990s and the development of urban stormwater quality management emerge as the two key agents of change.

Institutional reform has brought significant changes to the management and operational policies and practices of local government and water authorities.

Councils, such as Bayside, have a different scale of operations and capacity for the development of strategic approaches compared to their predecessors. Through the New Format Planning Scheme, Bayside has established a Municipal Strategic Statement that sets a framework for environmental sustainability. Bayside is well positioned to take advantage of initiatives that will progress environmental sustainability.

The reform of Victoria's water industry has resulted in water authorities with a much sharper focus on the costs and benefits of the services that they provide. The commercial and regulatory scrutiny of the water authorities exposed many of the hidden issues of the past. While increased accountability for water usage, for example by metering and charging for all water services, creates a financial burden for Council, there are significant benefits from resource management and environmental performance perspectives. Regulatory controls, coupled with government policies for continuous improvement in environmental performance, combine to give customers of water authorities, including Councils, confidence that wastewater is being effectively managed.

The challenge facing Bayside, and other councils, is to find and exploit opportunities to build on the strengths of these reforms and drive further forward so that substantive improvements can be made.

The emergence of urban stormwater quality programs is a second key agent of change. The 1995 *Green Cities* report identified a number of impediments to addressing the environmental management of urban stormwater. Today many of these impediments are

well behind us and there are good prospects for addressing many of the impacts of urbanisation on stormwater quality. Bayside City Council, with funding assistance from Melbourne Water, has developed a stormwater management plan for the municipality. Bayside's complements those of other Melbourne municipalities to provide a comprehensive strategic approach for implementation of the Victorian Government's Best Practice Environmental Management Guidelines for Urban Stormwater (CSIRO 1999). The recent initial round of State Government funding under the Victorian Stormwater Action Program has helped to overcome some of the financial hurdles to effective stormwater management.

These measures represent a major change in the approach to stormwater management. They demonstrate that the roles and responsibilities of the various agencies and levels of government have been clarified and strengthened through partnership arrangements. These efforts are still generally reactions to reasonably obvious environmental problems. Bayside City Council, together with some other members of the Association of Bayside Municipalities, is now working on a ground -breaking approach to planning and development to ensure that the "Water Sensitive Urban Design" approach is applied to all new development (down to single building replacements and dual occupancy developments). Drawing on the expertise of the Cooperative Research Centre for Catchment Hydrology, the project is establishing performance targets that are applicable across a range of development scales and performance ratings for various stormwater measures. A second stage to the project, that will develop these concepts further so that the approach can be readily adopted by other municipalities, has been funded by the Victorian Stormwater Action Program. These efforts illustrate that there is still a way to go towards consistent "best practice" across all aspects of stormwater management.

Bayside City Council has taken a number of initiatives to improve stormwater quality, these include:

- porous paving requirements and guidelines
- proposed introduction of a Planning Scheme provision that 30% of the area of development sites is to retained as permeable surfaces
- comprehensive program of gross pollutant traps to protect the foreshore.

In all, Bayside City Council now has a funded strategic program for addressing existing urban stormwater quality issues and for pushing the boundaries further so that future redevelopment does not repeat the problems of the past. This represents a significant difference from the situation that existed only a few years ago. This example serves to highlight the progress that can be made when efforts are made to overcome some of the apparent impediments.

Potential to further improve water quality and environmental outcomes

The reforms and other developments of the last decade have resulted in a range of significant improvements in urban water resource management and, in particular, attention to the environmental issues of urban stormwater.

Significant challenges remain before a satisfactory level of practice (or best practice) or sustainability can be claimed. Urban environments cannot be self-sustaining. The density of population means that the community will be dependent on external environments for inputs and to take the outputs of the urban municipality. In an urban context environmental sustainability can be considered as the state where the “ecological footprint” of the community is minimised and is maintained at that level.

One means of reducing the ecological footprint of a municipality is to ensure that the most efficient and effective use is made of resources within the community. This is clearly not currently the case with water resources in urban environments. Opportunities exist within Bayside (and other municipalities) for:

- greater use of groundwater resources for non-potable uses
- infiltration of clean stormwater to replenish groundwater resources
- onsite water management – eg grey water reuse, retention of stormwater, reduced water consumption etc.
- wastewater reuse – even sites remote from existing treatment plants can access sewage (via sewer mining) for local treatment and reuse
- more effective use of water in parks and gardens (eg species selection and advanced irrigation techniques)

The most obvious benefit of these measures is to reduce the demand for water from the reticulated potable supply. Other benefits include reducing total volumes of wastewater for treatment and disposal and restoration of some of the pre-development hydrological processes.

The main impediment to adoption of these opportunities appears to be cultural. Existing arrangements produce the results required, so why change? Couple this with the relatively cheap cost for water and wastewater services and the conservative resistance to change is understandable. In addition, for most urban residents the hidden nature of plumbing means that there is little, if any, connection between the catchment and the tap or between the toilet and a wastewater outfall into Bass Strait. Likewise, in Bayside the underground drainage system obscures the connection between a drainage entry pit and the foreshore that is at the most a few kilometres away.

The Stormwater Management program has shown that councils, such as Bayside, can work in partnership with other agencies to bring about some remarkable changes in the understanding and approach to environmental sustainability issues. Councils are well positioned to be agents of change affecting the water management and use habits of residents and key members of the community (eg golf clubs, industry, etc). To fulfil this role Councils will need the support of State and Commonwealth agencies to ensure that they have the right tools (eg statutory controls, enforcement powers) and adequate resources (eg financial, information, etc) to complete the tasks.

Further information

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