

Submission for the Sustainable Water Strategy for the Central Region and the Water Supply-Demand Strategy for Melbourne 2006-2055

Sustainability Victoria is pleased to provide this submission in response to the Sustainable Water Strategy for the Central Region and the Water Supply-Demand Strategy for Melbourne 2006-2055.

The submission has been divided into three sections:

1. Introduction - the role of Sustainability Victoria;
2. Overview - response to the main principles and issues in the two strategies; and
3. Response to Specific Proposals - itemised response to proposals and recommendations within the two draft strategy documents.

1. Introduction

Sustainability Victoria is a statutory body, created in October 2005 as one of the first initiatives under the Victorian government's environmental sustainability framework, *Our Environment, Our Future*.

Formed out of the merger of the Sustainable Energy Authority Victoria and EcoRecycle Victoria, it has been charged with the responsibility of helping Victorians build a sustainable future; working across energy, materials and water.

Sustainability Victoria's vision is for a Victoria that demonstrates sustainable resource use which supports a thriving community and economy.

Under the *Sustainability Victoria Act (2005)*, the organisation has a range of functions including:

- Facilitation, promotion and investment;
- Supporting policy and strategy development;
- Education, awareness and advice; and
- Monitoring and reporting.

With the establishment of Sustainability Victoria, Victorians now have an organisation dedicated to showing the way to a sustainable future through the delivery of effective education and behaviour change initiatives and development of innovative technologies and practices.

Sustainability Victoria is in the process of finalising its first strategy and business plan 2006-9 (due for release in July 2006). This business plan sets out three key strategic directions:

1. Engaging Victorians

Sustainability is about people. It is critical that all Victorians take action to live and work sustainably - whether they are the manager of a business or an individual in the community.

If Victorian businesses and individuals are to change their behaviour, it is critical they have easy access to realistic solutions that achieve sustainability benefits.

Sustainability Victoria will make it easier for Victorians to take action to adopt sustainable practices in everything they do. We will work with all Victorians on initiatives that will fundamentally shift the way we use resources in the long-term. We work across all industry sectors, as well as with schools, local governments and community groups to promote and encourage environmental sustainability.

2. Transforming markets

Sustainability is also about the systems and markets that govern the supply of our goods and services.

Over the last few decades a fundamental shift in the way markets and technologies interact has occurred. There is an increasing demand for everything to be 'faster, better, cheaper'.

Sustainable businesses consider long term creation of business value as well as short term profitability. By thinking differently about energy, materials and water use, opportunities are created for both the environment and the economy through new ways of doing things.

Sustainability Victoria is working to transform the way in which markets operate to help deliver sustainable outcomes. We will also be working to support a stable policy and regulatory environment that provides the investment certainty needed for industries to invest in sustainable technologies and practices.

3. Making connections

We are not alone in working to address the sustainability challenge. Around the world, and locally, considerable experience and expertise exists that we can leverage to inform activities in Victoria.

Our connections with Victorian businesses and individuals are critical to our role. As we build our knowledge through our partnerships and collaborations, a priority is to provide all Victorians with access to sustainability information and assistance.

By making connections with leading thinkers to share knowledge and lessons learned, Sustainability Victoria will be a key hub for the exchange of knowledge and expertise. This helps drive innovation and builds on sustainability successes already achieved.

It is also critical that Sustainability Victoria's own operations exemplify our values. We will set ourselves challenging targets for our own operations and are ready to be held to account.

Significantly, the Sustainable Water Strategy for the Central Region and the Water Supply-Demand Strategy for Melbourne 2006-2055 articulate the need for these same three directions.

In order to conserve and achieve a sustainable water supply all Victorians need to be engaged – business, community and government. Some fundamental structural market transformations need to take place – trading, pricing, monitoring and infrastructure. Furthermore, working in partnership with local and international expertise, using the best ideas and technologies will yield the best solutions.

2. Overview

Sustainability Victoria supports the development of the Sustainable Water Strategy for the Central Region and the Water Supply-Demand Strategy for Melbourne 2006 – 2055. These will be referred to throughout this submission as “the Strategies”. The Strategies are key in planning for a sustainable water future for Melbourne and the Central Region and ensure that communities, industry, business, local government, environment and other stakeholder groups are consulted as part of the decision making process.

2.1 Climate Change

Water supply and therefore the Victorian Water Industry, has been identified as a sector that is highly vulnerable to climate change as is outlined in the Strategies. Reduced security of supply of water and increased population growth will require new thinking if the needs of future generations are to be provided for. Critical assumptions such as per capita household water use, recycling of treated water for drinking and current agricultural and industrial practices will need to be challenged. All of this will be occurring at a time when the world faces changes to the way energy is provided and its use and impacts are priced.

The Water Industry is a key consumer of electricity in Victoria, with water businesses being counted amongst the top twenty electricity consuming businesses. Growth of electricity consumption by this industry is expected to increase from 1990 levels by up to 50% over the next ten years due to population growth, increased community standards for water and wastewater treatment and development of water recycling schemes. Consequently in 2004-05 the Victorian Water Industry was responsible for more than 810,000 tonnes of carbon dioxide equivalent (CO₂e) emissions.

The Victorian Water Industry is also a key player in the renewable electricity supply industry hosting up to 70% of current renewable generating capacity. This equates to approximately 640 megawatts (MW) of renewable energy capacity in Victoria with an estimated further 37 MW generating capacity planned to be installed by 2009.

To respond to the challenge for the Victorian Water Industry to reduce greenhouse emissions whilst providing services to a growing population with a reduced water supply, a number of Water Authorities have come up with innovative ways to manage greenhouse emissions and electricity consumption. These projects should be encouraged and the investigation of future potential projects accelerated.

The key objective of the Strategies has been outlined as to being able to provide future water security for the Central Region and Melbourne in particular. Based on the emerging impact of climate change on the Water Industry, Sustainability Victoria recommends that an additional objective be included:

“To reduce the impact of climate change by the Victorian Water Industry due to greenhouse gas production.”

The Strategies can then be developed in alignment with a Sustainability Framework rather than a single issue water supply strategy as they are currently structured.

A number of the new projects recommended in the Strategies to increase water supply will cause significant increases to greenhouse gas emissions. These proposed projects include the Eastern Water Recycling Project and Seawater Desalination.

These projects should not be investigated in isolation of their impact on climate change when in some cases they are being implemented to mitigate reduced water supplies as a result of climate change. Sustainability Victoria believes that all new infrastructure projects should be required to mitigate any additional greenhouse gas increases that result from these projects rather than to rely on predicted future greenhouse emissions savings from water conservation as an offset.

The implications of this recommendation are that:

- Targets will be set for greenhouse gas reduction in the Victorian Water Industry over time;
- Projects with greenhouse gas reduction impacts will be brought forward;
- The cost of increased greenhouse gas emissions will be included in evaluation for investment;
- New projects will have to mitigate any additional greenhouse gas increases and not rely on past project savings or predicted water conservation savings as offsets; and
- Opportunities for biosolids use as a renewable resource will increase.

2.2 Water Conservation

Sustainability Victoria supports the principle of maintaining the existing water conservation savings and increasing these over time to ensure that Victorians continue with their responsibility to use water efficiently at work and at home.

In particular, Sustainability Victoria would encourage that the successes that have been made in water conservation in the Melbourne metropolitan region are expanded to include regional Victoria. This is particularly relevant for implementation of incentive schemes for water conservation appliances such as water efficient showerheads and washing machines.

Continuing the successful *Our Water Our Future* advertising and education campaign is an important part of this process as it has created broad public awareness of the need to conserve water and the steps that can be taken to do so. Sustainability Victoria supports the campaign continuing and recommends that the capacity be broadened to take up other related water issues such as:

- Water conservation being the first priority over infrastructure investment
- Cleaner stormwater through litter reduction campaigns and backlog sewer programs
- Reducing discharge of chemicals to the sewer by residential and industrial customers

Sustainability Victoria also supports the concept of adaptive change to water conservation and the use of the 7 year buffer for water storages to ensure adequate supply to meet short term supply-demand changes.

The setting of new water conservation targets for Melbourne and setting of targets for urban regional centres is a concept of particular importance to Sustainability Victoria. As Melbourne is already achieving a 22% reduction in water use, it is recommended that the water conservation targets should be brought forward by a minimum of five years to a shorter timeframe of 25% by 2010 and 30% by 2015.

In addition, the setting of targets and timeframes for phase in and out of appliances and systems is supported however it is encouraged that the targets set are more ambitious. Furthermore that targets and timeframes are set within other draft water strategies for regions outside of Melbourne. This would interface with the objective to ultimately have consistent standards across interconnected catchments such as the Central Region.

In particular:

- Water efficient showerheads to be the only option available in the market by 2012;
- Air conditioners, in particular evaporative, to have a consumer water rating by 2012, and the minimum standard of 4 stars for water is required by 2015; and
- Water friendly gardens are promoted and encouraged, particularly local indigenous plant species.

2.3 Improving River and Aquifer Health

Sustainability Victoria supports the concept of improving/maintaining river and aquifer health through improved stream flow and water harvesting rules. In particular, through the extension of the environmental contributions scheme by water authorities post 2008-09.

It will be necessary for a clear process for expenditure of this money to be outlined as part of the review process scheduled to be completed by 1 July 2008.

2.4 Water Use in Industry

Sustainability Victoria supports the successful Pathways to Sustainability Top 200 water users program being increased to the Top 1,000 water users in Melbourne.

It is recommended that this Melbourne program should be expanded to include regional businesses particularly power generators/producers who are a significant consumer of water in the Central Region.

2.5 Alternative Water Supplies

Sustainability Victoria encourages the use of alternative water supplies such as recycled water and stormwater for fit for purpose applications such as open space irrigation and toilet flushing. Investigating large scale options to utilise alternative water sources in more detail will also be an important part of this process. However it is critical that potentially increased greenhouse gas emissions and local impacts on the environment as a consequence of these infrastructure projects are fully considered as part of the decision process.

3. Response to Specific Proposals

3.1 Response to Proposals in the Sustainable Water Strategy - Central Region

| Ref | Summary of Proposal | Response |
|-------------|--|---|
| Ch 5 | Foundations of the Strategy | |
| 5.1 | Alternative water sources not included in bulk water entitlements | Support |
| 5.2 | Property owners have right to use alternative water | Support |
| 5.5 | Water accounting | Support |
| Ch 6 | The Strategy at a Regional Level | |
| 6.1 | Environmental water reserve | Support |
| 6.3 | Environmental health protected when issuing new bulk entitlements | Support |
| 6.4 | Priority stressed rivers enhanced with new flow regime and monitored | Support |
| 6.16 | Approaches to climate change impact on rivers | Support |
| 6.17 | New aquifer extraction licences issued only if sustainable | Support |
| 6.20 | Water targets for Melbourne Water targets to be developed for other urban centres | Support – proposed water targets should be brought forward minimum 5 years |
| 6.21 | Continue education and incentives, if necessary adjust permanent water saving rules Encourage adoption of efficient appliances Continue water education campaign | Support – Our Water Our Future campaign expanded to include alternative water sources and clean up sewers |
| 6.22 | Propose aspirational 50 year reduction target for Central Region and expand target to all sectors | Support - proposed water targets should be brought forward |
| 6.23 | Continue management of water for primary industries; including capping, trading, efficiency | Support |
| 6.24 | Industry data collection, best practice benchmarks, substitute recycled for potable water, alternative pricing structure, open disclosure of water use | Support |
| 6.26 | Interconnection of catchments in region | Support to provide equity and care for regional communities Involves great financial cost and energy use for pumping and treatment. Create water conservation & efficiency measures first to offset these. |
| 6.28 | Investigate large-scale stormwater treatment, Eastern Water Recycling proposal, monitor emerging technologies | Conservation to be given priority over transfer of water over large distances – see comments in Section 2 |
| 6.29 | Eastern Water Recycling Project feasibility by 2006 | Conservation to be given priority over transfer of water over large distances – see comments in Section 2 |
| 6.30 | No pursuit of large-scale desalination - monitor technology | Support |

| Ref | Summary of Proposal | Response |
|---------------|--|---|
| Ch 7 | The Strategy at Local Level | |
| 7.1 – 7.14 | Greater Ballarat, Greater Geelong, Inner West, Greater Melbourne, West Gippsland, Westernport, | No comment on specifics on river or aquifer levels, nor on interconnections. Consistent principles need to apply: conservation and improved management first, finally substitution or augmentation with minimal environmental, public health or greenhouse gas impacts. |
| Ch 8 | Implementation Considerations | |
| 8.1 | Water authorities required to make environmental contributions | Support |
| 8.2 | Melbourne Water to fund river improvements in catchment through waterways and drainage charge | Support |

3.2 Response to Proposals in Water Supply-Demand Strategy for Melbourne 2006-2055

| Ref | Summary of Proposal | Response |
|----------------|--|---|
| Act 1 Rec 1 | Metro water utilities will invest \$12M p/a in conservation programs Monitor and report savings and review effectiveness Invest \$5M over 5 years in water use studies on how and where water is used Develop expanded educational, behaviour change and communications by mid 2007 at \$5-11M p/a | Support – Sustainability Victoria is able to provide a supporting role on this initiative |
| Act 5 Rec 2 | Water savings at home Victorian Government to: - work with other states and Commonwealth on minimum efficiency standards for showerheads, washing machines and evaporative air conditioners - investigate regulating water efficiency in existing homes at time of sale or lease | Support – Sustainability Victoria is able to provide a supporting role on this initiative |
| Act 6 | By 2010 assist large water users (10ML/a) to initiate water conservation plan By Dec 2006 investigate cost-benefit of efficiency incentive program for commercial and industrial By Dec 2006 complete research into pricing reform for business and open space managers for next pricing review Continue measurement for benchmarking | Support – recommend that this initiative is expanded to include key regional water users such as power generators/suppliers |
| Rec 3 | Consider development of minimum performance standards for new and renovated commercial buildings | Support - also encourage timeframe and targets be drafted by 2009 |
| Act 7 | From 2008 double water leak detection program from 3,000 km to 6,000 km Assess opportunities for pressure management | Support |
| Act 8 | Metro Water Utilities by June 2007 to develop plan for local water sources By 2011 investigate stormwater as local water supply | Support |
| Rec 4 | Research expansion of state building and plumbing regulations to set minimum efficiency standard that encourages local water use in all new homes | Support – Sustainability Victoria is able to provide a supporting role on this initiative |
| Act 11 | By Dec 2006 investigate large-scale alternative supplies to Melbourne for inclusion in Water Plan to ESC Enhance programs to protect the quality of future water sources (recycled, storm and groundwater) including sewage, trade waste and stormwater management programs | Support – encourage the use of alternative water sources such as treated recycled water and storm water |

| Ref | Summary of Proposal | Response |
|--------|--|---|
| Act 12 | December 2006 – Metro water utilities to prepare carbon management proposal for how greenhouse gas savings from water conservation could be accredited as offsets | Support – Through the Greenhouse Challenge for Energy, the Victorian Government outlined its support for a National Emissions Trading Scheme. Through the National Emissions Trading Taskforce, the Victorian Government is working with the other States and Territories to develop and implement a National Emissions Trading Scheme. |
| Rec 6 | Victorian Government develop national carbon trading scheme with States and the Commonwealth | Support – Sustainability Victoria is able to provide a supporting role on this initiative |
| Act 13 | Metro water utilities to improve knowledge of how and where water is used in Melbourne Continue to monitor water consumption and demand Monitor status of water supplies and future impact of climate change | Support |
| Rec 7 | Set targets for residential use including all urban areas in the Central Region | Support |