Introduction

The Water Corporation of Western Australia is a State Government-owned corporatised water utility, operating over the huge 2.5 million square kilometre area of Western Australia. The business has a large influence on the health and wellbeing of people, the natural environment and the economy of the State, and an ethical responsibility to act as sustainably as possible.

The Corporation provides water supplies, wastewater conveyance, treatment and disposal, drainage and irrigation bulk water services a population of about 2 million people throughout Western Australia. It has 2200 employees, an asset base of about AUD 10 billion, and has an annual turnover of over AUD 1 billion.

Over the past several years the Water Corporation has taken major steps to create a sustainable organisational culture, and to reduce adverse social and environmental effects of its business activities. This focus on long-term sustainability was catalysed by a combination of both the significant decline in the yields of the surface water available in South-Western Western Australia – by about 66% over the past 25 years, and an increase in demand of more than 3% per year. In some areas groundwater is also in decline.



Figure 1 Annual inflow to Perth's reservoirs, 1911-2005, showing that the current mean yield is 66% lower than the long-term mean.

Other challenges to the Corporation maintaining a 'business as usual' approach included:

- a recognition of the finite capacity and the declining condition of the Western Australia's environment
- increasing community concern over environmental issues, particularly global

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warming and climate change

- increasing diversity of social values around water
- industry reforms and increased regulation
- restrictions on budgets
- increased demands on employees
- changing community expectations regarding levels of service and consultation on business activities
- difficulties in recruiting and retaining talented staff during an economic boom.

These pressures resulted in the acceleration of the Corporation's capital expenditure of around AUD 1.3 billion in the effort to re-establish the security of public water supplies in the south west.

The Corporation views the conscious pursuit of improved sustainability simply as a transformational approach to business excellence (rather than continuous improvement), and has a Sustainability Strategy which has already produced many positive environmental, social and economic benefits. It also strongly encourages its staff, customers, regulators and business partners to join it in this journey.

The strategy is being implemented through a structured change management process across the organisation. Fundamental to this process has been the development and use of a set of Business Principles, supported by a series of targets to drive improvement in key areas of the business. One of the most important of these is a commitment to achieve carbon neutrality by 2030, although there are also targets in the financial, health and safety, water recycling and other areas. New targets are under development.

An insight into the Water Corporation's concept of sustainability and a description of its approach are given in the appended papers by Humphries et.al (2007) and Ferguson (2007).

Observations on the Concept of Sustainability, and its Implications for Governance

There is much confusion about what sustainability is, and how the concept may be practically applied. In reality, the answer is simple – all of humanity and all other forms of life depend upon the ongoing healthy functioning of the Earth and the diversity of living things on it – to produce oxygen, to grow food and fibre, to provide clean water and the clean air we breathe. Without these free "ecosystem services" most life forms, including human life, would not be able to continue.

It is increasingly obvious that humanity is placing more stress on our planet than it can sustain. The recent Millennium Ecosystem Assessment of the world entitled 'Ecosystems and Human Wellbeing' made this point clearly. This means that for long-term survival, human society at all scales of organisation must 'pay for' the ecological debt of their existence, and operate within the renewal capacities of the biosphere. This need is particularly urgent given the increasing gravity of the threat posed by global warming and consequent climate change.

In recognition of this concept of sustainability, the Corporation's Sustainability Strategy has been developed to reflect the concept of 'natural capitalism' described in Natural Capitalism – The Next Industrial Revolution (Hawken, Lovins & Lovins, 1999) which recognises four types of capital:

Human capital

- labour and intelligence, culture and organization;

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Financial capital	- cash, investments and money;
Manufactured capital	- infrastructure, machines, tools and factories; and
Natural capital	- natural resources, living things and ecosystem
	services' such as the production of oxygen by plants.

'Natural Capitalism' recognises and overtly values these four types of capital and acknowledges that for any activity to be truly sustainable the overall value of all forms of capital must be enhanced and not degraded.

To continue in the long-term, any business must recognise that first three forms of capital above must not exist at the expense of natural capital, because society, the economy and the Water Corporation all depend on a healthy stock of natural capital for their continuing existence. Porritt's view of sustainable systems provides the conceptual framework for defining the Water Corporation's concept of sustainability (see Figure 2 below, adapted from Porritt (2005), p.46).



Figure 2. The conceptual model of a sustainable system, after Porritt (2005).

The Corporation recognises that it must ethically play its part in systematically reducing, and then reversing, the harmful effects of its business on society and the environment. This means that to be truly sustainable in the long-term, the business and the community it serves must operate within the limits imposed by the biosphere, and this means by cooperating to deliberately and systematically reducing its ecological footprint (see Rees, 1992; Wackernagel and Rees. 1996; Lenzen and Murray, 2003). It must also subject all decisions to a social benefit test, and attempt to mitigate harm if this occurs.

Sustainability is a concept bound by its context, and is not absolute. For example, if a single business or country achieved carbon neutrality, this alone would not be sufficient to check the progress of undesirable global warming. Similarly, improving the efficiency of irrigation water use would not be sufficient to sustain that industry if environmental water availability declined by too large an amount.

Governance arrangements need to facilitate the pursuit of improved sustainability. The Water Corporation has adopted 18 Business Principles which provide a framework to guide thinking and action in all areas of the business, and are designed so that their rigorous application will drive improving sustainability. A copy of the Business Principles is attached.

Suggestions Regarding a Sustainability Charter for Australia

The Water Corporation commends the House of Representatives Standing Committee on Environment and Heritage for conducting this Inquiry. We offer some suggestions regarding the approach to designing a charter, defining the key areas requiring attention, setting targets and measuring progress to goal. These are:

- A Sustainability Charter must embody an agreed concept of sustainability and statement of what we want to sustain. We commend Porritt's model for this.
- The key themes for targets need to be chosen to align with the agreed concept of sustainability, and have regard to the importance of each in achieving stability and viability of key ecosystem processes, and supporting the legitimate social and physical needs of people that support pursuit of a civil society. The targets also need to be cognisant of the context within which they have been set for example, the Charter should support the need for strong international action on global warming as well as setting targets for Australian action on this issue.
- Strategic visions which clearly articulate the desired future state need to be combined with governance systems for government and business decision-making need to drive the attainment of key sustainability targets. Lack of such governance will condemn our efforts to failure. Using Sustainability Principles and targets is one simple way of supporting the governance needs of a Sustainability Charter.
- The elements of a Vision for a Sustainable Australia need to be broadly agreed, and well accepted by the majority of people, governments and business. Perhaps some form of compact or social contract may be a useful mechanism to support cooperative pursuit of the Charter; a CoAG agreement is another.
- Agreeing on, pursuing, monitoring and publicly reporting on the key target areas is essential. The progress to goal in the key target areas should be regularly reported, perhaps in a similar way to stock market and financial reporting in the media, rather than only through the usual government reporting channels.

Suggestions for Key Target Areas for a Sustainability Charter

Although this is an incomplete list, some of the key areas of relevance to a Sustainability Charter might be:

Ecological Footprint (as an overall measure of reducing or increasing stress on the environment) Greenhouse Gas Emissions Water Balance Biodiversity Landscape Integrity and Connectivity Societal Wellbeing (perhaps the Genuine Progress Indicator or Social Footprint?)

Conclusion

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The Water Corporation strongly supports the development and broad application of a Sustainability Charter.

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