

10 January 2003

Professor P Newman  
Director, Sustainability Policy Unit  
Department of Premier and Cabinet  
197 St George's Tce  
PERTH WA 6000

Dear Professor Newman

I am pleased to provide the attached response to the documents titled 'Focus on the future - The Western Australian State Sustainability Strategy, Consultation Draft' (the Sustainability Strategy).

The Water Corporation fully supports the Sustainability Strategy. The Corporation is committed to delivering quality water and wastewater services throughout Western Australia that are economically viable, environmentally sound and socially responsible. The Corporation's partners in achieving this aim are the Western Australian Government (shareholder) the community, customers, industry, water industry regulators and resource managers.

In August 2002, the Corporation responded in detail to the 'Draft State Sustainability Discussion Paper' (response annexed). In its paper, the Corporation outlined its view of "sustainability" and then detailed 25 key sustainability issues in water resource use and management, goals for the State and the Corporation's commitments for sustainability.

The Corporation's major contribution to the Sustainability Strategy will be through the development of the State Water Strategy as a member agency of the Premier's Water Taskforce. Therefore, the attached response has been limited to comments, suggestions or clarifications to particular textual references of the Sustainability Strategy.

Yours sincerely

J. I. Gill  
MANAGING DIRECTOR

Att



Focus on the future  
The Western Australian State Sustainability Strategy  
Consultation Draft

A response from the Water Corporation

January 2003

# **Water Corporation response to the Focus on the future - Western Australian State Sustainability Strategy- Consultation Draft**

## **Introduction**

The Water Corporation sees its ability to positively contribute to the sustainability agenda in Western Australia, within the water industry as well as in other sectors, as both an opportunity and a public duty. However, many of the potential sustainability gains in the water industry will only be possible if there is significant general institutional change, a change in community attitudes and “Sustainability” as a philosophy, ideal or goal, is being developed within both the corporate and individual consciousness of the Corporation.

The Water Corporation is Western Australia’s major provider of water and water-related environmental management services over a large, diverse area. It is a significant manager of the water cycle – taking water from the environment and returning treated wastewater and its by-products safely to the environment. Its goal is long-term sustainability of the business, including public health, environmental protection and economic development outcomes.

The Water Corporation’s commitment to “sustainability” is consistent with the relevant proposed Government sustainability framework, the principles, the visions, and the goals. The Corporation will be a major contributor to many of the 42 priority areas for actions.

## Discussion of key points in the Focus on the future – Western Australian State Sustainability Strategy- Consultation Draft

**The Water Corporation endorses the Strategy, but provides the following comments, suggestions or clarifications to particular textual references:**

### **General observation**

The actions under way and priority actions set out in the State Sustainability Strategy would appear to understate the challenges involved in addressing the State's key issues, especially in the areas of dryland salinity, supply of water and energy use.

Throughout the State Sustainability Strategy there are statistics and comments, which suggests that significant change and resource commitments will be needed to implement programs in these areas to provide net environmental, economic and social benefits for future generations.

### **Summary**

In the Summary, and again later in the text, the report suggests that “sustainability of our water supply is an issue of concern of many Western Australians, especially those who live in the South West”. The Water Corporation is of the opinion that this is an issue of concern to many Western Australians, but is not necessarily peculiar to those that live in the South West. Sustainability of our water supply is also of particular concern to those Western Australians who living in the northern and eastern parts of the State.

Action: suggest delete “especially those who live in the South West”.

### **Section 2 - The conceptual basis: developing a framework for sustainability**

#### A sustainability framework

##### *Water Corporation Strategic and Sustainability Framework*

The strategic framework of the Corporation focuses its business direction and details the main areas for action to continuously improve performance.

##### *Our Purpose*

Sustainable management of water services to make WA a great place to live and invest

### *Business Direction*

As a successful business we will:

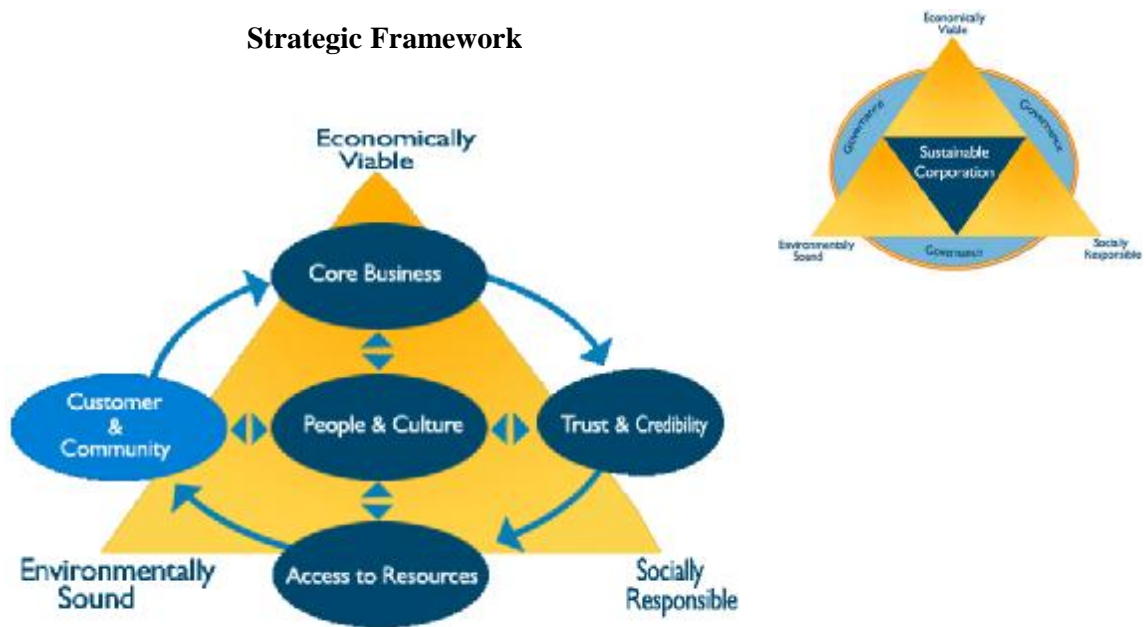
- Fulfil customer, community and government needs
- Innovate to deliver quality, trusted water services
- Invest in empowered people, well-managed assets and growth.

### *Areas for Action*

The key areas for action to support our purpose are Customer & Community; Core Business; People & Culture; Trust & Credibility; and Access to Resources. For each of the areas for action the Corporation has established objectives, priorities and set of measures with one and five-year targets, designed to drive continuous improvement.

In meeting the Corporation's commitments, Sustainability, Financial outcomes and Compliance with Regulation are overarching considerations to guide the implementation of priorities and strategies in each of the areas for action.

### **Strategic Framework**



### *Water Corporation business specifics of sustainability*

The sustainability challenge for the Water Corporation is to make decisions which take into account the changing needs of the community and its employees, the protection of the environment, the effective utilisation of current infrastructure and investment in new solutions the incorporation of technological advancements and the impact on the return to Government.

The key elements with respect to sustainability for the Water Corporation are consistent with the Sustainability framework defined for the State Sustainability Strategy and are summarised below:

*Principles of Sustainability – business specifics*

Economically viable	<ul style="list-style-type: none"><li>• Commercial return on assets</li><li>• Efficient processes and delivery</li><li>• Equitable and efficient pricing signals</li><li>• Adequate dividend return to shareholder</li></ul>
Environmentally sound	<ul style="list-style-type: none"><li>• Minimise impacts</li><li>• Efficient resource use</li><li>• Integrate into business</li><li>• Restore habitats and biodiversity</li></ul>
Socially responsible	<ul style="list-style-type: none"><li>• Delivery of essential service</li><li>• Employee and public safety</li><li>• Work conditions and diversity</li><li>• Regional development</li></ul>

A set of sustainability indicators is being developed to measure the Corporation's progress in these areas.

*Principles of Sustainability – process principles*

The process principles set out as part of the State's Sustainability framework – Integration, Accountability, Transparency, Engagement, Precaution and Hope, Vision, Symbolic and Iterative Change are central to embedding sustainability into the operations of the Corporation's business.

*The Water Corporation's Environment Policy*

The Water Corporation's Environment Policy embodies many of the broader principles of sustainability. However, as one of the Corporation's objectives is to significantly progress the embedding of sustainability within the business in the next 12 - 18 months, a Sustainability policy will be written, which will be reviewed against the Corporation's Principles of Sustainability set out on page 2.

The Water Corporation's Environment Policy sets out the Corporation's commitment to the following principles:

- Meeting the obligations of society and the natural environment and aiming to exceed environmental targets where appropriate.
- Engaging stakeholders in major decision-making.

- Minimising the adverse effects of activities while maximising economic, environmental and social benefits.
- Avoiding where practicable, serious or irreversible harm to the environment by managing the risks associated with activities.
- Assessing the environmental, social and financial implications in planning for the provision of water services.
- Maximising efficient use of resources.
- Communicating promptly and openly, and reporting publicly on activities.
- Ensuring employees have the environmental awareness, skills, motivation, resources and expert professional support to sustainably manage the business.

The Water Corporation's commitment to these principles is demonstrated by annually setting objectives and targets to drive continual improvement in environmental performance.

### **Section 3 – Sustainability and governance**

#### Sustainability assessment

To change the framework within which decisions are made is one of the keys to developing different and more sustainable solutions. Coupled with this, is the need to change the mindset or paradigm out of which the current system arises. The new framework should not be viewed as a checklist, but as a process that will challenge current paradigms, encourage greater understanding of issues and evolve new ways of thinking through stakeholder dialogue.

Sustainability assessments will provide the following challenges for the Water Corporation;

- Review the way we define an “acceptable” solution and assess options, from minimising risks and debating trade-offs to looking for solutions with net economic, environmental and social benefits;
- New questions such as where do we draw the “sustainability box” in determining whether a solution is “sustainable”, around the Corporation? around a region? around the State? For example, the Water Corporation is pursuing a number of water recycling and reuse projects using treated wastewater. These projects are moving the Corporation towards achieving the 20% wastewater reuse State-wide target and also brings significant benefits for the integrated water supply, the environment and some of the Corporation's biggest water use customers. However, from a State perspective, the process to re-treat wastewater is very capital and energy intensive, and raises some environmental issues.
- Reassessing our ability to respond with information and comment on options being considered. We are currently required to comment on options when responding to development proposals through the planning process and when liaising with developers directly. However, as the sustainability decision making process will involve more stakeholder engagement and likely to produce more options, this may consume additional resources from agencies like the Water Corporation.

As noted in the introduction, many of the potential sustainability gains will only be possible if there is significant general institutional change (such as “new” sustainability assessment decision making tools) and a change in community attitudes. “Sustainability” as a philosophy,

ideal or goal, is being developed within both the corporate and individual consciousness of the Corporation.

On page 38 there is discussion of the establishment of the sustainability assessment units within three key government departments. The nature and objectives of the liaison process between the three key government departments should be well defined, including how they maintain relevancy. Perhaps in the transitional phase a formal mechanism could be set up. This could take the form of a joint working group to ensure these departments not only build understanding of the issues in their own “patch”, but to also ensure a cross pollination of views and to gain an understanding of the links between environmental, economic and social factors. The Water Corporation has significant dealings with most of the key government agencies, including the Economic Regulator in the future, a consistent approach to Sustainability is therefore imperative to progressing towards becoming more sustainable.

On page 41, indicators and targets, in addition to measuring “Capacity within government ... to participate in sustainability assessment” a complementary lag indicator could be introduced over time to show traction. An example is “percentage and number of key projects, policies, programs and agreements reviewed against sustainability principles and modified where necessary”.

Building on the proposed actions set out on page 43 (Section – Institutional Change) to “support regular communication and information exchange for capacity building in sustainability across the public sector”, a key area for capacity building is understanding the philosophy of, and being able to carry out sustainability assessments. The Corporation suggests that the rate of implementation of sustainability assessments as a decision making tool would be increased, and cross pollination of views could be nurtured, if the Sustainability policy unit was given the central coordination role in providing an across government education program.

#### Institutional change

A suggested improvement for the indicator and targets set out on page 44 is “Number of agencies with a process to ensure all areas within the organisation making policy include sustainability criteria.” The making of policy to reflect sustainability criteria should not be limited to a single function or group but should be the responsibility of all groups across an organisation that make policy.

#### Embracing sustainability in government agencies

In the Summary, and again later in the text, the report suggests that “sustainability of our water supply is an issue of concern of many Western Australians, especially those who live in the South West”. The Water Corporation is of the opinion that this is an issue of concern to many Western Australians, but is not necessarily peculiar to those that live in the South West. On the contrary, sustainability of our water supply is also of particular concern to those Western Australians who live in the northern and eastern parts of the State.

Action: suggest delete “especially those who live in the South West”.



In Box 10, P48, 'Energy Use', it is suggested that as part of the Energy Smart Government Program, the Government will require agencies to achieve 5, 6, 7, 8 & 12% energy savings for the years 2002-3 to 2006-7.

Although a laudable goal, this presumes that energy is being wasted and that such energy savings can be achieved through various efficiencies. However, in the Corporation's case these energy saving goals do not take into account the business expansion in provision of essential services and the pressure for increased levels of service and more energy intensive solutions. The strategy does not acknowledge that the Water Corporation and its predecessor, the Water Authority, have had a long history of attention to energy efficiency, and that the Corporation's current operations result in its greenhouse gas emissions being 25% lower than the 'business as usual' case.

The Water Corporation is not a Government Department and would therefore not be included. However, it is Western Power's second highest energy consuming customer in Western Australia, but with the electricity generated at Woodman's Point Wastewater Treatment Plant, is also the fourth biggest generator of renewable energy in the State. The Corporation expends nearly 90% of its energy use (in the form of electricity) in pumping in Water Corporation water and wastewater operations. In recent years, with extra water pumping needed to maintain the water supply under drought conditions, there has been an increase in required energy. In addition, there has been a 2% per annum increase in clients or customers. Energy use by the Corporation will also increase as desalination is used more frequently as a water source. The Water Corporation has established an Energy Management Unit and is developing an Energy Management Plan that actively seeks to reduce energy use by various means. These include assessment and improvement of energy efficiency in all parts of the business, in energy use minimisation and in fuel switching activities such as the collection and re-use of digester biogas for heating. Water conservation, if achieved, is a worthwhile sustainability goal in its own right, but such a reduction would also significantly reduce the Corporation's energy use and consequently its greenhouse gas emissions.

Action: acknowledge that some sectors cannot be expected to meet these goals.

Although opportunities to reduce energy use for the Water Corporation are limited very significant environmental gains can be achieved through a major shift using energy generated from renewable energy sources and carbon sequestration. The adoption of "sustainability assessments" for decision making will ensure energy use is factored into our future investment decisions. The Corporation also supports membership of the Greenhouse challenge and the setting of greenhouse gas emission reduction targets.

#### Partnerships for action

This section places the importance upon the establishment of regional councils to manage natural resources similar to the regional council model, which was structured for waste "rubbish" management. There is a fundamental difference between waste management and natural resource management as waste can be measured in terms of volume and type. Not so for natural resources as evidenced with the management of unwanted water "drainage". Perhaps a model, which could be considered, is regional cooperation between councils within a particular catchment and partnerships with relevant state organisations (similar to the WESTROC model). In the case of natural resource management, the success of this model or

any other, will be determined by the clarity of accountabilities and responsibilities, in other words the governance framework in place.

Regional councils are accountable to their membership (member councils) rather than the communities, which means that the community has little or no contact with the regional council. Another issue facing regional councils is determining the service cost and distributing them to member councils, for example are costs distributed on population, commercial activity, and number of properties or area.

#### **Section 4 - Contributing to global sustainability**

On page 86, the Kyoto Protocol is discussed with some optimism. However, the Kyoto Protocol has yet to be ratified. Australia has signed the Protocol, but has yet to ratify it. It is understood that the Australian Federal Government has said that it will not ratify the Protocol unless or until the US does and the US has since publicly announced that it will not do so. As 'ratification' of the Kyoto Protocol requires the ratification of 55% of countries involving 55% of global emissions, such ratification depends on countries such as Canada, Russia and Japan, some of which have not yet committed to ratification.

Similar optimism is shown by the announcement that the Western Australian Greenhouse Taskforce is preparing a WA Greenhouse Strategy. A draft WA Greenhouse Strategy was prepared by the Executive Officer to the (then) WA Greenhouse Council in 1999, but was not adopted. A contract was then let to a consultant to prepare such a strategy and finally a group of relevant WA Government CEO's also tried to prepare a Strategy – without success. As a WA Greenhouse Strategy relies on key commitments for action from Government (with a significant cost implication), such a Strategy will not be forthcoming until such commitments are made.

Greenhouse mitigation projects will have no status until the above issues are dealt with. This is an example where institutional aspects will limit the full values of GHG mitigation projects developed by the Water Corporation.

The Water Corporation was the first water and wastewater utility to join the Greenhouse Challenge, a voluntary greenhouse emission reduction initiative run by the Commonwealth Government's Australian Greenhouse Office. The Corporation has initiated an Energy Management Unit, which is significant, as electricity usage is the Water Corporation's largest source of greenhouse emissions. Greenhouse gas emissions in 2001/2002 increased by 3% over 2000/2001 (a function of increased energy use – see above), but greenhouse gas offsets increased by 15.5%.

Proposed Action 2.15 (page 87) suggests the establishment of a voluntary program of Greenhouse Offsets to assist large development projects to reduce GHG emissions by investing in energy efficiency, renewable energy, carbon sequestration etc. It is the experience of the Corporation that membership of the Greenhouse Challenge could be supported in the Strategy, as it promotes these initiatives and also provides for members to set greenhouse gas emission reduction targets and to publicly report on them on an annual basis, using a common and scientifically robust mechanism.

## Section 6 - Sustainability and settlements

### Managing urban and regional growth

One of the drivers for urban and rural decline or lack of development is when the cost of infrastructure provision is higher by a factor of one or more than the value of the improved land. There is a very real need to link development with natural resources so that the imports of resources and their costs such as power and water are minimised.

### Our water future

The detailed plan for the sustainability of Western Australia's water supply will be set out in the State Water Strategy, which will be finalised in early 2003.

In this section "Our Water Future" (page 151) there is the same quote as in the "Summary" ie "Sustainability of our water supply is an issue of concern of many West Australians, especially those who live in the South West" – see earlier comments. Also, "... there is a need to provide a vision for the future, new sources of supply and new ways to save water." The Water Corporation supports this suggestion and is already actively involved in progressing these issues. The 50% decline in runoff to dams in the South West is also flagged. The Corporation is currently working with stakeholders to consider options to actively manage catchments to enhance water quality and quantity and provide net economic, environmental and social benefits.

Page 152 talks about water sensitive urban design that can contribute to the aesthetics of an area. Water sensitive design undertaken on a whole of community basis can result in a reduction of potable water use through better use and reuse of stormwater. It is possible to determine the water balance for a community and to determine a water budget utilising potable water, stormwater and shallow ground water. The Water Corporation is undertaking a desktop study of utilising water in this way so that developers have the option of designing water sensitive communities.

The Corporation supports the water consumption per capita and wastewater reuse indicators and targets set out on Page 153, but suggests the following minor word changes. Annual water consumption per capita reduced from 170kl to 155kl by 2012 should be modified to include "for the Perth Integrated Water Supply Scheme". 20% recycling of wastewater by 2012 should be modified to include "State-wide". A possible alternative or addition to the preparation of ground water management plans could be the introduction of catchment water management plans, which could address the management of the total water cycle rather than just ground water. Permitted land uses would need to be a major consideration of these plans. These plans would address drainage as part of the water cycle. Regional planning would enable drainage to be considered on a catchment basis.

The Corporation is actively involved in managing water demand and pursuing wastewater reuse options and views them as viable options to developing new sources of water. The Water Corporation has a good record in the area of water efficient practices and the

Corporation is pursuing a Kwinana wastewater reuse facility with industry partners and is moving towards achieving 20% wastewater reuse State-wide.

Some of the Corporation's demand management initiatives include;

- introduction of community education projects such as the "Waterwise Schools Program";
- introduction of water conservation and efficiency measures such as daytime sprinkler bans, 2 day a week watering, developed a water calculator and supported installation of waterwise appliances; and
- completion of a comprehensive Domestic Water Use Study between two study periods –1981/82 and 1999/2000 to better understand where customers use water. It showed there was a 50% increase in external water use, highlighting the necessity to focus on water consumption outside the home in all water efficiency education and information.

Other comments to "In Short...." on pages 152 and 153 are as follows;

- *Objectives:* We question the objective to extend responsibility for ground water supplies to local government (Regional councils) from the Water and Rivers Commission on the basis that the necessary resources and skills reside with the Water and Rivers Commission.
- *Proposed actions:*
  - Guidelines for households' use of grey water have been drafted and are not a proposed action.
  - The Water Corporation's focus is setting out a 10 year plan to achieve the 20% State-wide reuse target, but is not currently considering how all wastewater could be reused in the longer term. Any proposal to do this would raise significant environmental, technical and cost issues.

## **Section 7 – Sustainability and community**

### Community Services & Development

On page 167, there is a list of government agencies involved in the delivery of community services. It is suggested that this list could be amended to include the Water Corporation.

### Housing & Sustainability

On page 171, the text discusses what "good housing" should provide. It is relevant to flag here that in addition to requirements for an individual house, "good housing" should also be examined in the regional and subdivision planning stages. All too often, a local council will approve land subdivisions anticipating that the Water Corporation will secure buffers, provide wastewater treatment plants, secure land for infrastructure and service corridors and provide major extensions to the Corporation's reticulation system, with no thought as to either the infrastructure or source required for water supply, infrastructure and disposal mechanisms required for wastewater treatment or costs.

As also stated in the section “Managing urban and regional growth”, one of the factors for urban and rural decline is when the cost of infrastructure provision is higher by a factor of one or more than the value of the improved land. There is a very real need to link development with the availability of natural resources and to ensure that approved land uses reflect the sustainability of the natural resources on a catchment basis.

## **Section 8 - Sustainability and business**

### Financial reform and economic instruments for sustainability

On page 202, the text suggests that “material, energy and water flows in the global economy are currently not sustainable and have exceeded the carrying capacity of the planet”. The Water Corporation will work with the water resource manager towards ensuring that water supply policy in WA is consistent with the principles of sustainability.

### Eco efficiency and industrial ecology

On page 205, the Strategy notes that government departments have signed the WA Sustainable Industry Group’s Cleaner Production Statement. Although not a Government department, the Water Corporation has signed both the WA Sustainable Industry Group’s Cleaner Production Statement and the Greenhouse Challenge.

### Industry sustainability covenants

On page 207, the Strategy suggests that Government needs to go beyond traditional command and control regulation that minimises harm, and find new ways to encourage business to create economic, environmental and social benefits. The Water Corporation is doing this in a number of areas. A good example is the Corporation’s Busselton Environmental Improvement Initiative. The Corporation has entered into binding agreements with local dairy farmers to significantly reduce their discharges of phosphorus and nitrogen. This will provide a very significant nutrient reduction as a cost-effective environmental offset to avoid excessive investment (for little environmental return) in the Busselton sewage treatment and disposal system.

## **Section 9 - Implementation**

### Implementation of the strategy

On page 209, the Strategy states that Government agencies will develop a Sustainability Code of Practice (and associated Sustainability Action Plans) and Sustainable Procurement Policy. The Water Corporation has already committed to a sustainable operations policy, which is reflected in its Strategic Framework and Environmental Policy.

## List of Proposed Actions

### List of Proposed Actions

In response to the “List of Proposed Actions”, on page 223, the Water Corporation’s key contributions will be:

- Progressively implement sustainability reporting based on the Global Reporting Initiative’s Sustainability Reporting Guidelines;
- Incorporate sustainability principles and practices into Water Corporation administered legislation as it comes up for review or drafting;
- Expand the sustainability provisions contained in its Environment Policy and develop a Sustainability Code of Practice and associated Sustainability Action Plans which will require:
  - Sustainability assessment
  - A sustainable procurement policy
  - Improved fuel efficiency and fuel switching eg gas
  - Reducing greenhouse gas emissions by investing energy efficiency, renewable energy and carbon sequestration
  - Increased offsets such as matching fleet emissions by equivalent carbon credits from Water Corporation sequestration projects
  - Demonstrated sustainability in design and construction
  - Development of the State Water Strategy as a member agency of the Premier’s Water Taskforce;
  - Establish initiatives to achieve annual water consumption per capita of 155kl by 2012;
  - Develop partnerships with Local Government to ensure water sensitive drainage design is built into all urban development;
  - Develop partnerships to develop water-efficient and energy-efficient housing; and
  - Construct the Kwinana wastewater reuse facility with industry partners and move towards achieving 20% wastewater reuse Statewide in 10 years.

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