State Sustainability Strategy - Consultation Draft

The current Government of Western Australia is to be commended on its attempt to consider the concept of sustainability - something by its very nature long term, and likely to cross the boundaries of terms of office.

The State Sustainability Strategy, as presented, contains many worthy visions, objectives and proposed actions.

However, an opportunity will be lost if there does not exist the political will to make the 'truly tough' decisions necessary to provide meaningful direction to the community. 'Truly tough' decisions will necessitate ability and desire to:

(a) Challenge traditional philosophies / mindsets

Only by challenging traditional philosophies / mindsets will we bring about the major behavioural change now necessary to halt the very high levels of environmental degradation in our State.

Management of our water resources is a good example of this. As a community we are locked into a very European mindset. We currently waste ~50% of our water supplies on trying to maintain a landscape that is totally inappropriate to our climate. Lawns, grass verges, and exotic plant species soak up these vast amounts of our precious resource, and leave us in a permanent state of 'crisis'. The phrase 'local sense of place' (p152) is a good one and it would be a step in the right direction if we could celebrate being Australia (with its own unique natural landscapes) rather than continually trying to imitate somewhere else.

There is much work to be done here. Corporate culture is still trapped in this European mindset, as evidenced when the Water Corporation promotes new developments such as Ellenbrook as being 'waterwise'. The continued promotion of manicured lawns and reticulated flowerbeds is surely not the way forward.

As a community we should start to view the use of reticulation as something of a 'last resort', certainly not the norm. Organisations such as the Water Corporation should be positioning itself as a leader here, now. It is not sufficient to continue to exploit new water resources to compensate for current and continuing inappropriate water management.

Grass not only consumes vast amounts of our precious water resource, but has also been responsible for the severe degradation of our native bushland via its invasive nature.

(b) Discontinue the practice of allowing overseas interests / multinational companies to exploit and degrade WA's natural environment

An example of this is within the mining industry. Many mining interests are controlled by multinational companies, and although their activity provides employment and economic activity for communities – at what price?

A good example of this is Alcoa and Yarloop, a community now devastated by uncontrolled highly toxic airborne emissions.

There needs to be development, but it must be ecologically sustainable. Creating a regulatory and control body for environmental protection which deals with development proposals thoroughly, would be a step in the right direction.

Much more stringent controls need to be applied to business and industrial activity as we learn more about the natural environment and the integrity of ecosystems, as well as the adverse health effects of inappropriate industrial activity.

(c) Value the expertise of the scientific community, and respect and support their guiding principles

An example of where this has **not** been forthcoming is with the issue of forests, and specifically with the recently published Draft Forest Management Plan (DFMP). On careful analysis certain key strategies proposed are inconsistent with the principles of ecologically sustainable management. One key management strategy proposed, i.e. to "undertake a comprehensive biological survey of the forest regions as soon as resources permit" (p65), is fundamental to this point.

This particular strategy (i.e. to carry out scientific survey work *only* if resources permit, some time in the future) is a clearly **not consistent** with 3 out of the 5 principles of ecologically sustainable management, namely Precautionary Principle, Intergenerational Equity and Conservation of Biodiversity and Ecological Integrity. Further it could also be argued that this strategy could not have seriously been **guided** by such principles either.

As in the case of logging high conservation value forests, governments need to think much more creatively to produce positive outcomes for each of the three key areas - environment, social and economic. Bearing in mind that with extinction of species and ecological communities there's no 'second chances', we must learn to work differently, more smartly and with fewer negative side effects. It's a question of priorities, but good, thinking leadership <u>can</u> provide and support a structure that both protects biodiversity as well as social communities.

(d) Show genuine respect for our remaining ecological communities

Establishing comprehensive (real) controls on clearance of native vegetation, as well as stopping potentially highly damaging developments in ecologically sensitive areas will go some way to arresting the severe decline in our unique biodiversity.

(e) Take a <u>leadership role</u> in significant global movements / issues

With respect to a number of highly significant issues, WA has a golden opportunity to learn from specific experiences overseas, and from these make careful, enlightened judgements and decisions in its own right as to how it acts. 'Blindly' following the lead of other countries (often guided by corporate interest), is not the act of responsible government, and WA is in an excellent position to show leadership in key areas relating to sustainable futures.

An example of this is GMOs. The negative social, economic and environmental impacts of the USA's adoption of GMOs in its agricultural industry are well documented and understood. Corporate (multinational) goals would still like to see Australia take on these products, irrespective of the potentially disastrous consequences for our own society.

Again the well-chosen phrase coined in the Strategy document ('sense of place') rings true. This is Australia, not the USA, and hopefully we will be able to truly reflect this in our considered approach to such a vitally important issue. Never more would we be advised to consider the scientific precautionary principle – the precarious state of many of our threatened species and ecological communities do not need any additional pressure.

By government taking a true leadership role, thinking and acting creatively and responsibly, advocating the need for greater focus on our behaviours in terms of cause and effect across the full range of societal activities, other organisations and educational establishments will be guided and supported in the area of sustainability values, which in turn will promote a 'virtuous circle' effect.

Respectfully,

Howard Flinders Educator Environmental Scientist

3.1.03



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Hon Dr Geoff Gallop MLA Premier of Western Australia C/-Sustainability Policy Unit Dept of Premiers and Cabinet 15th Floor 197 St Georges Terrace Perth WA 6000

Comments on 'Focus on the Future: The Western Australian State Sustainability Strategy' Consultation Draft Sept 2002

Dear Hon Dr Geoff Gallop MLA

The International Council for Local Environmental Initiatives (ICLEI) is a membership organisation of local governments and their associations. The Council is dedicated to building and supporting a worldwide movement of local governments to achieve tangible improvements in global environmental conditions through the cumulative impact of local initiatives.

ICLEI is grateful of this opportunity to comment on the draft State Sustainability Strategy and highlights activities currently undertaken by local government and it's role in reducing greenhouse gas emissions. We note the positive references to Cities for Climate Protection (CCPTM) in the draft strategy.

ICLEI Australia New Zealand (A/NZ) delivers the CCPTM- Australia Program in collaboration with the Australian Greenhouse Office (AGO). There are currently 161 local governments across Australia participating in the Program, covering 65% of the national population. In Western Australia there are currently 32 participating local authorities covering 72% of the population (Dec 02) who actively pursuing greenhouse gas abatement.

CCPTM Australia is the only local government program delivered by a Local Government Association that can demonstrate greenhouse gas abatement by its participant councils.

While CCPTM Australia has been delivered by ICLEI in collaboration with the AGO, we wish to highlight that with increased state government support, WA local government could participant and deliver even more in regards to greenhouse abatement and more generally the strategy's intentions for a more sustainable state.

Why involve Local government in greenhouse abatement?

Today 10 years after the launching of the Framework Convention on Climate Change at the United Nations Conference on Environment and Development, and five years after Governments internationally committed themselves to emissions reduction targets at Kyoto, national governments continue to debate a way forward to reduce greenhouse emissions and mitigate the threat posed by global climate change.

In contrast, many Local governments have succeeded in reducing greenhouse gas emissions, improving local air quality and increasing sustainable transportation and efficient energy use and consequently, strengthened local economies.

Local government leaders have been active advocates for local implementation and have demonstrated what can be achieved through appropriate goal setting, strategic action and overall implementation.

The daily decisions made by Local government, the operations and facilities they manage, the types of services and infrastructures they provide, can determine the energy used and waste generated within their municipalities and communities. Local governments often set local laws that can impact on the energy efficiency of residential and commercial buildings. They control waste management and landfill operations. Local governments can influence the greenhouse emissions as well as the health and urban livability of their communities.

Local government land use and development decisions determine the density and physical layout of neighborhoods that in turn profoundly influences the level of auto dependency in the community. Local government can also influence the extent to how a community transit their municipality through bike plans, pedestrian access and transport nodes around commercial centers.

Summary of benefits of Cities for Climate ProtectionTM Australia

CCPTM has delivered for the Australian government over the past 4.5 years as part of a collaborative framework agreement. There are further opportunities for this agreement to be extended in each state. The Victorian Government as part of their Greenhouse Strategy has entered into tripartite arrangement with ICLEI and the AGO to extend CCPTM already underway in Victoria and achieve even greater greenhouse benefits.

Both the Federal and State governments engaged with CCPTM recognise that this program has delivered on many fronts including:

Greenhouse Abatement by Local government

- Strong, consistent and increasing greenhouse gas emission reductions
- Leveraging investment from Local government in greenhouse abatement
- Facilitating networking with other sectors to promote further abatement such as Property Councils of Australia, SEDA (NSW), SEA (VIC) and SEDO in WA.

Leadership at the Local government level

- With a constituency of committed and informed councils willing to engage in a global issue and support national efforts to contribute to greenhouse abatement. This engagement is seen from CEOs to councillors to officers.
- By providing local government with the capacity to make the challenging political decisions required to achieve the long term change required to combat climate change.

Capacity Building

- At the local level, by building the capacity of Local government to make institutional changes, at the corporate and municipal level, that lead to greenhouse abatement.
- At the Local government level with access to tools, networking opportunities and expertise to ensure ongoing commitment and action of greenhouse action.

Quantifiable Results through a Credible Methodology

- ICLEI has created a performance base Milestone methodology demonstrating successful triple bottom line (TBL) results. Its quantification methodology developed by ICLEI's Australian Technical team is thorough, transparent and has provided results for direct use by the AGO.
- The CCPTM methodology provides a simple, standardised way of acting to reduce greenhouse gas emissions and of monitoring, measuring, and reporting performance. ICLEI has developed software that considerably eases the analytical work involved and permits standardised, quantitative comparisons among different cities within individual countries and across the globe.

With further support the WA State government could also benefit further:

- Through the numerous opportunities (conferences, media releases, recognition ceremonies, newsletters and website) provided to promote the achievements of related government state programs.
- Through direct association with a program that demonstrates how policy leadership at the state government level can be facilitated and implemented to achieve results at the community level.

Promotion

- Through the consistent 'good news story' for government with many positive outcomes and outputs from demonstrated abatement and associated multiple benefits.
- With a Campaign that is recognised worldwide as a model for developed country action to engage Local government in voluntary approaches to greenhouse abatement.

State Greenhouse Strategy Program Implementation

- CCPTM is a program which clearly demonstrates the multiple benefits that accrue from greenhouse abatement including improvement in air quality, sustainable transport and reduce traffic congestion, efficient energy use, regeneration of biodiversity through sequestration, local economic development and job creation.

- With a Campaign model that provides a tangible example of how partnerships and collaborative approaches can achieve the targets set to reach state greenhouse abatement commitments.

In conclusion, the CCPTM program is ideally placed as the mechanism to deliver greenhouse abatement and other positive multiple benefits to the state agenda with:

- ICLEI's CCPTM infrastructure in place
- its sound and tested methodology accepted as an appropriate protocol and standard for NGGI
- a performance based program framework delivering results and
- a growing momentum of enthusiasm and change within local government.

ICLEI would welcome the opportunity to discuss further with the WA Sustainability Policy Unit what further opportunities are available which can:

- Work off the strengths of the CCPTM milestone framework and program delivery
- Capitalise on the work already underway by the current pool of WA local government CCPTM participants to deepen and increase their abatement
- Work with relevant state agencies to provide greater technical assistance to ensure all projects undertaken have a sound and proven approach to deliver the abatement predicted
- Create a distance education program to enable more efficient resource use throughout WA
- Support Milestone 5 councils to re-engage in CCPTM by offering further opportunities to build their capacity to influence abatement.

Please contact me at your earliest convenience and congratulations on the momentum being created through this State lead Sustainability Strategy.

Yours sincerely

Maria Simonelli CCP™ Director ICLEI A/NZ

9 December 2002

THE WESTERN AUSTRALIAN STATE SUSTAINABILITY STRATEGY – By David Karr Interspacial Systems

I recently attended the Sustainability and Business seminar/workshop sessions of the WESTERN AUSTRALIAN STATE SUSTAINABILITY STRATEGY.

These seminars are very useful.

It was evident that WA has a long way to go with respect to implementing a sustainable strategy.

I believe that for a sustainable development strategy to be developed, there needs to be some fundamental changes to the methodology of undertaking development in WA.

As an example- the development of new housing estates such as Ellenbrook. The original plan called for an estate off Gnangara Road to be built for a projected population of 20,000 people(I now see its planned for 30,000 people). The market sector catered for would be middle income young families. Thus kindergarten, schools, shopping centres would be needed in the immediate vicinity.

"Just 30 minutes from Perth and adjacent to the picturesque Swan Valley"-Refer www.ellenbrook.net

"From the beginning, five years ago, there's been a grand plan in place for Ellenbrook. Each step along the way has been designed to form part of a much bigger picture: a whole new town beside the Swan Valley.

While the planners wanted the vibrancy and facilities that come with a large-scale settlement, it was vital that Ellenbrook maintained its strong sense of community. The solution was an innovative village structure, which allows a large town to grow, one community at a time.

The first community was Woodlake Village, with its architectural heritage reminiscent of Australia's heritage. Then came the Mediterranean flavour of The Bridges. These were joined by the third village, Coolamon, and now by the recently released Morgan Fields.

In all, seven distinct villages will make up Ellenbrook, each with its own style and character, and all with a sense of belonging that's increasingly hard to find. When all seven villages are complete, Ellenbrook will be a community of some 30,000 people."

There were no plans for providing meaningful employment in the plan-just lifestyle.

I have recently purchased a block of land in nearby The Vines. That was a lifestyle choice, not a location choice.

Now with these planned 30,000 people at Ellenbrook, some of them-about 10-12,000 need employment, where –Perth, Midland, Swan Valley(picking grapes, making wine???) or ?????

Thus the majority have to travel 30 or 40 kilometres to a MEANINGFUL place of work. In order to travel they need transport and roads. Gnangara and Alexander drive especially are loading up to capacity now.

Thus buses(not used as a prime mode of transport) or cars are used to transport the people to their place of employment.

The impact on the environment, economic costs etc need to be considered.

As an aside, I used to work for a large industrial company that relocated from Subiaco to Canning Vale. Some employees were considering relocating but there was no incentive. Here was a golden opportunity to relocate some people to near where they reside.

Should the plan for environmental, economic and sustainability have been "a 30,000 people satellite development of Perth, with a rural setting, surrounded by native bush, together with nearby economic and employment opportunities with public transport provided to residents", been the plan.(Employment opportunities provided in nearby light industrial and commercial parks).

It is very irresponsible having residential development willy nilly surrounding the core city, with no additional infrastructure.

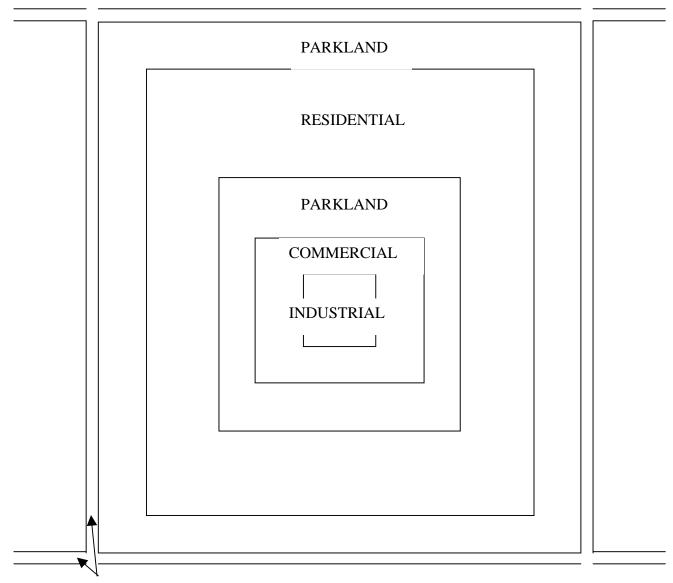
By having a residential development tied into commercial and light industrial parks at the outset, public sentiment would accept this proposal from the outset. Thus another Canning Vale would be prevented where you have residential, industrial and agricultural endeavours conflicting.

Remember no investment will occur in an area where there is uncertainty about the zoning of the area. (As a guide it could be stated that land zonings would be reviewed at a certain date such as 20 years from project initiation).

Another factor that needs to be considered for residential developments, (as well as commercial and industrial) is the need for a town planning scheme to include a GRID system of main roads. Perth is littered with dead ends, and a very low usuage of public transport, due to the extremely bad layout of the city. (Checkout Ballajura with NO straight main roads).

By also designing housing as well as other building to be more energy efficient, a huge positive impact on the environment would occur by reducing emissions of carbon dioxide and other harmful products.

As a suggestion I have provided a possible design for an integrated development encompassing residential, leisure, educational, health, employment and economic zones.



MAIN ROADS ACCESS TO ESTATE

SUGGESTED INTEGRATED RESIDENTIAL/ COMMERCIAL/ INDUSTRIAL DEVELOPMENT

Submission to the Western Australian State Sustainability Strategy

Comments and recommendations

State Sustainability

Overview of selected Strategic Actions

Comments;

- **n** Demonstrate leadership;
- I realise major policy and legislative changes are required but I urge you to fulfill your commitments to the fullest possible extent.
- **n** The leadership shown in the past has been a disgrace as many Acts of Parliament are ancient and contradictory, I applaud your actions in having the courage to start this process to bring about change that is many years overdue.

Value and Protect our Environment and Ensure the Sustainable Management of Natural resources;

- I have personal experience where a Government agency that is an environment body and also in charge of development of a natural resource, has gone against all their literature and environmental values, to the detriment of the environment.
- In my experience it is very difficult to "get a leopard to change his spots" In such cases it may be necessary to employ different persons that are willing to uphold the legislation.

Plan and Provide Settlements that Reduce Ecological Footprint and Enhance our Quality of Life.

Household water Management;

• Until recently it was possible to buy devices like suds save washing machines (I have been told they are no longer available)

I have one and it saves 50% or more of the water used in washing, people should be made use these water saving machines!

Overcome car dependence;

• This goal is only practical for large city populations, country people may always be dependent on cars, perhaps changing the fuel or to electric for country cars would be a more achievable goal!

List of actions;

Sustainability assessment

1.1 One environmental agency I know of has the capacity to carry out environmental protection measures now, according to the Act, but is willing to trade off the environment because they mistakenly think litigation will result if they act to protect the environment! (or at least that is the story they are spinning)

They are making decisions based on ignorance and fear and sacrifice the environment!

Institutional changes

1.4 It would appear that some agencies are unaware of State, Commonwealth and International agreements that currently bind them to environmental agreements.

Embracing sustainability

1.7 Government should commit its fleet vehicles to be totally, gas or electric powered.

(Gas powered vehicles have been made for about 100 years)

Partnership for action

- 1.8 The present system where a local government can be completely ignored, kept in the dark and left out of environmental decisions in their area is a disgrace!
- 1.25 at present the C.S.I.R.O. advise against deep water bores for the Gnangarra mound and the Water Authority is going ahead regardless!

Population Development and Environmental Technology

2.1 We should explore and embrace **global** environmental technologies. (environmental conservation is not new, England and Europe are many years ahead) If development of our coastal wetlands is put into perspective, as to how much of the original wetland areas have been developed, I am sure that there would only be a small percentage left.

I think that all the canal developments that have taken place in the last 10-15 years is a disgrace and environmental vandalism!!

It would seem that authorities are willing participants in this vandalism and when money is involved do not hesitate to sacrifice the environment.

Maintaining our Biodiversity

2.6 As we can't fulfill our present commitments to global treaties now, how do you suggest new initiates are enforced?

Is a body going to be set up to assess developments that are too small to be considered by the E.P.A. but could have a significant, culmative effect ?

- 2.8 How can one branch of government (the E.P.A.) say that development should proceed at the Cape Range Ningaloo area, and another branch say that the area deserves World Heritage Listing? They seem to be opposing views!
- 2.14 Research **ways to stop**, not limit marine pests, perhaps the use of filtered and tested ballast water would be a start.
- 2.18 Commit to changing the Government fleet to Gas powered vehicles
- 2.19 Political factors should not influence power supply decisions.

Sustainable Agriculture

3.3 Local Government needs to be involved agricultural management.

Farm waste is a big problem, silage plastic disposal is one major area of this, in America they compact it in something like a old square bailer, then it is recycled into various

plastic products, such a scheme here would probably need some form of Government assistance because of viability problems, but it would save a large environmental problem!

Some farms need a program of tree planting to replace trees that have been killed from soil compaction, superphosphate or ringbarking by stock.

Farmers need to be paid to look after remnant bush etc. as an incentive to do so, or the pressure to ever increase their cleared land or stock grazing areas through decades of declining farm income and declining rainfall will put pressure on farmers to use these areas.

Salinity is a huge problem that will destroy everything living thing we know today if it is not stopped.

City people need to be educated that this is the areas that our food production comes from!!!! And is a large part of our economy.

Weeds in terms of area are many times a bigger problem than salinity and have removed very large areas from economic agricultural production.

Sustainable Fisheries and Aquaculture

3.14 I would have thought the Leschenault Inlet was a protected area, as there are migrating birds of which W.A. is a international signatory in agreements to protect, and there are rare fish species like Lampreys. But it would seem that this is not enough to stop suggestions that Collie river water should be siphoned off to Perth.

Protecting Aquatic Systems

- 3.36 Triple bottom line decisions can be implemented now but agencies refuse to do so!
- 3.37 Where is the required involvement of local government in this process?

Sustainable Settlements

Maintaining Urban and Regional Growth;

- 4.1 how can country towns irrigation remain sustainable if their dam water is siphoned off to Perth?
- 4.6 Protection needed from the Water Authority grabbing water from where ever the like, for instance the Gnangarra mound and the Wellington Dam!

At Gnangarra C.S.I.R.O. advise of very serious implications, what happened to the precautionary principle?

Integrating Land Use And Balanced Transport

4.24 Work to remove inequity of taxation.

One thing that appears to be unbalanced is the situation that, it seems trucks are favored over rail for, all goods transport. This is partly because rail transport is said to be too costly,

Of course it is not competitive when you consider the following;

Most Rail transport costs are transparent and easily understood whereas;

Road transport costs are blurred into public road costs, as the trucks are not paying for the cost of damage and wear and tear that they cause to the roads!!

Therefore road transport is at an advantage and does not have to pass this cost on to the consumer.

These costs are left to the rate payers of those areas, these Shires in many cases struggle to maintain these roads, and this will be made more costly now by the current duty of care legislation that Councils must comply with!

Another cost is in human life, trucks seem to always be in the news in traffic accidents. **Less trucks means less accidents.**

In many areas the speed that trucks can travel seems appropriate but in many more these speeds seem too fast.

Trucks fully loaded are allowed to travel faster than a car towing a small empty trailer.!!

Preserving Air Quality

As the owner of a gas powered car I cannot recommend too highly the benefits of gas, but I am hearing constantly that there is not enough price difference to be worthwhile, there is not enough outlets or it is not suitable for their car.

I drive a 1975 Holden V8 on gas only, and I manage! In the last 4 years I have traveled to a Station 400kms NE of Carnarvon and to the Eastern States three times, including Brisbane, Sydney, Melbourne and Adelaide.

Provide better incentives for private vehicle owners to convert to gas by the following;

1. Put Pressure on car manufacturers to make gas powered cars at competitive prices.

Perhaps tax relief on gas cars or **increased tax on petrol cars** can make these cars more appealing.

Support these measures for the environmental benefits and not for political economic reasons. (use the triple bottom line principle)

- 2. Through taxes, even out the difference or increase the cost of petrol cars.
- 3. Advertise this cheaper gas on T.V. along with the current petrol prices.
- 4. Detach linkages with petrol price rises. (it isn't a petrol product) Find out why gas price varies wildly, 41c to 95c per litre (cheaper in Melbourne and Queensland than Perth)
- 5. have slow fill devices removed from fuel stations.
- 6. More gas outlets to be installed
- 7. Educate people about the benefits of gas only as a better fuel (petrol and gas cars are a compromise, straight gas can be more efficient)

Our Water future

4.58 It is, or has been illegal, for some Perth hills residents to have rainwater tanks.

There should be limitations placed on Swimming Pools, new swimming pools near the Ocean unless supplied water from a licenced bore should be banned.

A financial incentive should be paid to remove swimming pools.

Spas should be discouraged.

Our water is too cheap, the true environmental and social cost needs to be taken into account.

People do not appreciate or realize how little water is available and that it is not an endless resource.

Manufacturers to introduce throughout their product range devices such as suds save washing machines and water efficient dishwashers that do much to save water.

Sustainable Energy

4.65 **Change to gas NOW!** Trial other fuels latter! See above.

Housing sustainability

Implement practices where **native gardens are phased in** and water dependent gardens are discouraged!

Draftsmen, planners and domestic appliance manufacturers to be forced to adopt safe working products and install them in safe places.

It is dangerous to have any oven above waist height. (I am sure it would not be tolerated in a industrial situation, hot foods are easily spilt over the operator)

Fixed bottom hinging oven doors are dangerous, retractable doors are much safer!

Education and Community Awareness for Sustainability

5.25 When new schools are built, retain close bushland/ wetlands for students to study.

Eco- Efficientcy and Industrial Ecology

6.14 Despite what is claimed in the media, I have experienced first hand that recycling is not working as it should, one of the problems for country areas, is distance to further processing.

Resource recovery and processing centres could overcome some of these transport problems.

Michael Bell R.M.B. 209 Ferguson Road Ferguson W.A. 6236 Ph/ Fax 97283123

Submission to Sustainability Unit Long Distance Land Transport Concept

Introduction

The submission outlines a concept for a standard gauge rail connection from Perth to Darwin via Katherine serving coastal communities and industries en route. West, northwest and north coastal regions of Western Australia, need to be connected together and to Australian transport networks with appropriate surface transport infrastructure. The northern climate makes coastal regions more liveable than inland areas. Major towns are on or near the coast. The trend seems unlikely to change.

Need for permanent transport infrastructure

Developing isolated areas need physical transport connections so that they can readily interact symbiotically with each other and with distant markets. State shipping is limited to ports served. It cannot supply services to a standard that land transport can deliver.

Road transport is well organised with powerful lobby groups aiming to ensuring that substantial sums of public money are allocated to road construction and maintenance. Permissible vehicle sizes, lengths and axle loadings, have increased to an extent worrying to other road users, to reduce running costs. However, they increase road construction and maintenance costs. Drivers spend long hours at the wheel to cover great distances. Driver fatigue is a constant danger. Roads are inappropriate for moving large tonnages over long distances. Rail infrastructure would assist in establishing appropriate new industries based upon not insubstantial resources of the regions.

Present rail construction from Darwin to Alice Springs is a refreshing indication of changes in national attitudes towards rail transport as are plans under consideration to construct a railway from the eastern states to connect with the Darwin to Alice Springs rail route at Tennant Creek.

Development should not be exploitative, with industries largely aiming to exhaust resources involved within a limited time and then to move out. The state needs to demonstrate that development, employment and facilities are here to stay. It seems to be a chicken and egg situation. What should come first: developments or supporting infrastructure? There seems to be little doubt that, in this case, infrastructure should not wait for developments. Developments are more likely to occur if infrastructure needed is already in place. Individual new developments seem unlikely to justify the capital outlay.

Connection to a national port at Darwin with direct links established to countries to the north would increase opportunities for diversified overseas trading. New export industries such aquaculture in the Kimberley region using termites as feedstock for fish exports to world markets may be worth investigating.

A northern connection to Australia's rail network would increase trading opportunities with other Australian states. An example of mutual advantage is an idea by the late Lang Hancock for a northern railway to Queensland to establish iron smelting in each state using Queensland coal and Pilbara iron ore.

Potential major bulk traffic could be phosphate rock from the Mt Isa area of Queensland to a superphosphate industry located near the Burrup Peninsular. It could reduce the need to import overseas phosphate rock to Western Australia. Empty ore wagons returning from the Pilbara Region to Queensland may well encourage a Queensland industry to smelt iron using Pilbara iron ore.

National defence capability should improve with a capacity to move large tonnages rapidly around the northern half of the country at short notice. The Commonwealth Government should have an interest in supporting a Darwin to Perth rail concept.

Proposed route

Perth - Geraldton

The route envisaged would follow the existing railway to Gingin and then head directly towards Geraldton roughly following the Brand Highway with deviations where needed to minimise rise and fall.

The present road distance is approximately 424 km.

Geraldton – Carnarvon

The route would roughly follow the North West Coastal Highway. The old railway route through Northampton to Ajana seems unlikely to be appropriate. It may be better to leave Geraldton initially following the Chapman River valley and then to climb to the east of Northampton before continuing northward.

The present road distance is approximately 474km.

Carnarvon - Port Hedland

The route envisaged would generally following the North West Coastal Highway to South Hedland. It may be worth initially heading for Cape Cuvier for protection from cyclone floods by Lake MacLeod before rejoining the highway north of Minilya Roadhouse.

The present road distance is approximately 670km.

Port Hedland – Derby

The route would generally follow the Great Northern Highway.

The present road distance is approximately 756km.

Derby – Kununurra

To minimise distance and rise and fall, the topography of the intervening countryside needs to be closely studied. A possible route could be to head for the Fitzroy River gap through the King Leapold Ranges via the watershed separating the Lennard and Fitzroy rivers, then, topography permitting, to follow the Fitzroy and Chamberlain rivers heading towards the mouth of the Pentecost River before generally following the Victoria Highway route to Kununurra.

The present road distance is approximately 861km.

Kununurra – Katherine

The route envisaged would continue to generally follow the Victoria Highway with deviations where needed to reduce rise and fall.

The present road distance is approximately 511km.

Motive power

5 to 10MW methanol or ammonia fuel cells for motive power, augmented with battery capacity for regenerative braking and, possibly, a standby generator, should be considered. With an ammonia plant at the Burrup Peninsular now more likely, ammonia could be a fuel option, producing zero carbon dioxide emissions. Further down the road, instead of using natural gas, ammonia could be made from renewable energy without requiring any hydrocarbons for its production.

Operation

Container trains with accommodation on-board for train crews rostered in watches, like ships at sea, with substantial time off between long trips are envisaged for general traffic. Crews would include operators to transfer containers to and from trains at wayside stations. Crew accommodation could possibly be extended to allow for a number of passengers on a self-service basis with accompanying vehicle carrier wagons. While journey times would be longer than for passenger trains, they may appeal to sight seeing tourists and be more relaxing than driving for motorists.

Door to door service

Containers developed over the last half-century allow door-to-door services combined with long distance rail haul. The concept envisages that continued development of container handling equipment will take place so that containers can be transferred, with minimum delay, between trains and railside trestles at wayside stations without using external equipment. Corresponding continued development of container carrying road vehicles may be needed so that they can readily transfer containers between railside trestles at wayside stations and premises served.

Design standards

Design speeds and ruling gradients should be considered when trial locations are made on paper, using existing topographic contour mapping. Safety would be of paramount importance. Heavy rail construction standards could reduce track maintenance. Cyclone flooding would need special attention.

Track maintenance

Track recording equipment, mounted upon at least one traffic train each day, to log rail track horizontal, vertical and transverse alignments is envisaged so that track faults can be identified immediately they start to develop. Mobile mechanised track maintenance units would use the information to maintain track to design speed standards and to apply temporary speed restrictions where needed.

Conclusion

The distance from Perth to Katherine is approximately 3,700 km. The overall cost of a railway is unlikely to be recoverable from services in the foreseeable future. However, State and Commonwealth Governments should see it as a necessary investment needed to provide basic services for communities and industries to develop. Established industries and financiers may wish to be involved in the investment.

Peter Ravine

22 December 2002

--sustainability through culture and the arts
--ethics and developing a "sense of place"
--spirituality as part of building community values

Hearts of Blue: Sustainability and a Coastal Sense of Place ⁱ

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Going to the beach was the excitement of the year. We would be driven to Midland Junction by horse and buggy, then by train to Perth and by tram to the end of the line at the old Osborne Park hotel. There we would be met by one of the older boys for the trip to the beach. The "plank road" was fairly smooth, but the "block" was very bumpy. To spare the horse, we walked up all the inclines, and there was great excitement when we came to the "hill with the bend", for then we knew we would see the sea.

--Rose Farringtonⁱⁱ

The sea is a field of miracles, a profusion of depths and mysteries...We are not sea people by way of being great mariners, but more a coastal people, content on the edge of things.

--Tim Wintoniii

For us living here at Waterman, our own little stretch of coastline is a delight. A walk on the beach, to watch the changing colours of the setting sun, at the end of the day, gives on peace, tranquillity and a sense of the infinite, that the ocean must have afforded people from the beginning of time.

--Patricia Hancockiv

What is it about Australians and the sea?

--Robert Drewe^v

Introduction: Littoral Love

In his address to the *1994 Coast to Coast Conference* in Hobart,
Robert Drewe questions the way the Australian "myths" of Landscape and
Character contribute to the consciousness that "all goodness and
wholesomeness resided in the country." Drewe then wonders what this
"city-rejecting country bias of our culture" means for those who "reside
in its geographical opposite, the coast?" Does this mean that the coast is
a place of shallow urbanity and vulgar corruption, without beauty, depth,
possibility and meaning?

Drewe thinks otherwise, and offers an alternative myth of the Beach for contemporary constructions of Australian identity. He claims that on 2 October 1902, when William Gocher—a "crusading" suburban newspaper editor from Manly—defied the law against daylight surfbathing, a sea-change in Australian identity emerged. The "myth of the outback began to give way to the worship of the coast." Since that time, Drewe concludes, "Like it or not, the coast has successfully captured the spiritual consciousness of contemporary Australians."

When I first came to Perth, I wanted to learn all I could about what Australian theologians and spiritual leaders were writing in regard to the connection of people, place, spirituality and theological meaning. In all the material I read, the bush and desert figured predominantly as the

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spiritual icons of these authors. For example, David Tacey maps the spiritual journey for non-Indigenous Australians as moving from the geographical and psycho-social "edge" to the red heart of the continent, the "sacred centre". But as I began listening to people talk about their own connections to place, I heard many people tell stories about the coast. In fact, people talk as if they are smitten by an acute form of passion—a love of the littoral! Leading the way is Robert Drewe, who confesses that he feels...

most Australian when I see a patch of ocean framed in the branches of a gum-tree...or catch my fist glimpse of Little Parakeet Bay on Rottnest I sland off the Western Australian coast, on an early morning bike ride. To me, the *real Australia* will always be that mysterious, sensuous zone where the bush meets the sea. The *real Australia* has no other season but summer. The *real Australia*, of course, is myth as much as it is reality.

Why is the Sea so Popular?

These informal conversations correspond with research conducted in 1998 by Peter Bentley and Philip Hughes, who surveyed Australians about the places they frequently experience a sense of peace and well-being. They discovered that 71% of the respondents replied, "by the sea". Other answers included "in the bush" (66%), "with family" (64%), "with friends" (59%), "in a garden" (56%), "praying" (29%) and "at church services" (28%). Upon closer examination, for some persons the bush, sea

and gardens took the place of churches. But for many others, the spiritual resources of the natural environment existed *alongside* traditional religious resources. In fact, the people who attend church regularly were just as strong in affirming the sea or bush as those who did not attend church. Bentley and Hughes wonder why the sea is so popular:

Is there something in the nature of the sea itself which attracts Australians, with the extent of its horizons, or the regularity of the tides, or the sound of the waves? Is it the 'beach culture' which has developed Australia, which commentators have sometimes described as the place where social barriers are not apparent? Does it reflect the happiness that most children experience when they play in the sand on the beach, the one place they play for hours without expensive toys? Or is there something more, the almost mystical experiences that some surfers report, as they ride the ultimate wave?^x

Bentley and Hughes leave the questions unanswered. But these questions have sparked my imagination to re-draw Tacey's map in a different way—what if we think of the coast more as a "sacred edge" than a profane and shallow place?xi What would it mean to honour the sea and coast as well as the land in the movement for reconciliation of non-Indigenous people with Indigenous people? What stories need to be told and listened to so that the diversity and richness of spiritual and cultural identities can be illuminated? The themes encourage Western

Australians to honour the possibilities of envisioning, articulating, and

celebrating spiritual values that call all of us to new ways of just and sustainable living on our coast. For as George Seddon writes, "The earth is home. If we are at war with it, it is a war we cannot win; better to think of it as our partner, for richer or poorer, in sickness and in health, 'til death us do part." Xii

The Touch of the Sea

Bentley's and Hughes' statistical data encouraged me to take up a formal project of interviewing non-Indigenous people about their coastal sense of place. While the project is in the early stages, let me share some of the ways the participants regard the cultural and spiritual significance of the sea and coast in their lives:

If I'm in a kind of emotional turmoil, I just go to the beach and I'll walk or sit and look at the waves. The sea is always different; it has different colours, different movements, different moods. It's so alive, not static or fixed; it's always changing.

I love the smell of the beach—the salty smell—and I like touching the sand. Even just sitting on the beach I get into a meditation and feel the energy coming up through the sand. I always feel a lot clearer about things after I've been to the beach.

I suppose it's a real solace place, a place of real peace.

I can't remember a time when there wasn't the beach. The beach was integral to my childhood days.

I feel I'm nearer to God in this place. The ocean is a mystery, like the finger pointing to the moon. What leads me to God is the ocean. At Rottnest, we would lie down at night and we would still hear the sound from the sea, and there would be sand in the sheets and it gave us great joy—it was freedom.

You've got to respect the ocean.

The choice of where my life would end would be in the sea.

It's about care of the earth, care of the beach, care of the world.

There is a symbolism there of rebirth and cleansing. In winter, the ocean takes all the sand away, makes it nice and clean and around spring brings it all back. There's this huge cleansing thing.

The ocean is my key healing place, it's renewing and refreshing. I do a lot of meditating there. There are less distractions and the rhythm of the waves have a calming effect and the eternal nature of the horizons—I feel very calm looking at the horizon.

The ocean speaks to my spirit; it is a special place of freedom. It has to do with the endless, restless movement, like the dance of creation that's ever forming and re-forming, making connections beyond oneself.

You can't help thinking that all this is just incredible, that God created it all and it is so beautiful, the washing of the cliffs, the sculpture that the waves make of the rock.

I used to delight as a child playing with the sand. It's the walking along, the smells, the whole sensual experience by the sea.

The sea touches me at a deep, unconscious level. God speaks to me there through this awareness, deeply embedded in myself, like we are creatures of the sea.

I have never lived far from the sea. It seems as important to me as mountains are to others. I sleep most soundly when I can hear the sea shushing in time with my own breath. Sometimes, on sleepless nights not by the sea, I imagine I am in a bubble, exploring the breadth and depth of the ocean. The ocean floor

fascinates me even more than outer space. Yet I need it to remain an unexplored mystery, a place where my imagination takes me when I need the comfort of solitude, a place which provides a landscape the explorations of which parallel those of my own inner landscape. These imaginings perhaps hark back to life in the womb and my first encounter with the creator spirit—very primal sort of stuff.

Listening to the stories of others makes me think about my own story.

A Heart of Blue

Barbara Kingsolver confides in her recent novel, *Prodigal Summer*, that by growing up between farms and forests, her particular way of looking at the world has been "colored heavily in greens". Since moving to Perth five years ago, I can say that my own particular way of looking at the world has become heavily coloured in blues—beautiful blues—deep, dark blues, cerulean blues, aquamarine blues, blues that make my heart cry aloud with womanist poet Alice Walker:

We have a beautiful mother
Her green lap immense
Her brown embrace eternal
Her blue body everything we know.xiv

Perhaps this is just the effusive passion of a newcomer who has not yet been exposed to the heartland or initiated into the red mysteries of the desert. Perhaps this feeling reflects the clever calculations of

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marketing designers and land developers who advertise the new

Australian dream drenched in these blue colours of desire. But I am not
inclined to be cynical. I have come to love living near the sea. I've
become a coastal person now, with an emerging sense of place that is
moored more to seascape than landscape. My sense of belonging flows
from the bare feeling of sand beneath my feet and an open horizon where
the breeze shifts around mid-day and the sun swims in the evening.

Maritime Mystery

As I listen to Western Australians talk about their own senses of place, I've come to wonder about the connections between Australians, spirituality and the sea. What is it about Australians and the coast? As Meaghan Morris claims, the beach is "one of the deepest-laid 'realities' of life" in Australia. **Yet the coast, with all our cultural-crossing, and double-crossing, is not without its ambiguity. In response to the dispossession of Gai-mariagal people, Peter Read laments his childhood memories of Forty Baskets Beach, "How can we belong in places of our own intense pleasure but others' intense pain?" **Vi

Yet, what is this sense of hope and possibility that comes upon one in just catching a glimpse of that blue horizon, let alone in immersing oneself beneath the waves? What does this salty sense of salvation

mean? Many writers on Australian spirituality speak from the hearthabits of the bush and desert; these are the landscapes for the heart's "re-enchantment", as David Tacey claims. **Vii But Western Australian Tim Winton casts his lot with the coast when he suggests:

Australians are surrounded by ocean and ambushed from behind by desert—a war of mystery on two fronts...Of the two mysteries, the sea is more forth coming; its miracles and wonders are occasionally more palpable, however inexplicable they be. There is more bounty, more possibility for us in a vista that moves, rolls, surges, twists, rears up and changes from minute to minute...The sea is the supreme metaphor for change. *viii*

In recent years, I have found myself drawn to the contemplation of blue, the faithful persistence of limpets, and the long swells of waves from deeply fathomed currents. I have found my heart enchanted with maritime mystery.

Sand in our Souls

Immediately, I am taken back to my own childhood, growing up in the northeast of the US. My earliest memories are of sitting with my mother and sisters at the shore, making pools of water and drip castles with our hands. In the mornings, just before sunrise, my father would wake me for our walk along the beach to discover driftwood, starfish and broken whelks. During these times of summer holiday, my family was relaxed—we knew the times were special, even though walking the beach

and bathing were ordinary, daily rhythms. I learned my deepest spiritual intuitions of awe, wonder and humility along the coast, where today I continue giving thanks that I dwell in a world of sacred Presence, where "deep calls to deep", to draw on the words of the Psalmist (42:7).

Now my own two boys are growing up with what Leone Huntsman calls "sand in our souls". Xix Their imaginations are coloured blue and full of drifting along open seascapes—Nanarup, Yallingup, Turquoise Bay, Little Beach, Coogee and Cottesloe. Huntsman observes that while public spaces in Australia usually ignore children, at the beach children are privileged: here, coastal love begins early, with a child's initial 'baptism' in the sea and later through hours of carefree and sensual play. Yes For many people, the coast provides the transition from social order to fluid openness. Winton shares his own childhood memory when the sea was the only remaining place of freedom:

When the bushland around my street began to disappear, a big part of my world began to be closed off. Roads, fences, drainage ditches literally sectioned the landscape up... In the end there was only the sea left unfenced, unowned. In the world of childhood it was a saving refuge and because of the shrinkage of my natural world I looked to it fiercely.*

Perhaps we love the coast because of our need to return to that place of creativity and freedom, a birthing place, a place where we are not bound by clocks, bitumen or backyard fences. We are restored to our senses by

placing ourselves within reach of "the elemental". Thus, seascape becomes fraught with memories of not only joy and passion, but loss, tragedy and sorrow. Still we keep returning in a ritual of remembrance, binding ourselves again and again to a spacious, encompassing other, in which we flow and have our being. Perhaps it is as simple and complex as this: "The ocean is my friend", Reg Cribb wrote for the Western Australian Youth Theatre Company's recent performance, "This Endless Shore".*

In reflecting today about a "sense of place", I believe we can find much inspiration in our community value of coastal living, which honours together both land and sea, landscape and seascape, land rights and sea rights, care of the land and care of the sea. In committing our state to a sustainability strategy, we need to do more than "think like a mountain", to invoke Aldo Leopold's famous vision. We also need to "think like the sea". We need a sea-ethic for sustainable living, and as I would like to explore much further with any of you, a sea-spirituality. Thank you.

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i This submission is based on a plenary presentation concerning "Sense of Place" delivered at the 11th National Students and Sustainability Conference, Murdoch University (8 July 2002).

Rose Farrington, "Childhood Memories", in *Recollections from a Shoreline: Researched and Compiled by Members of the North Beach Historical Society*, co-ordinated by Linda Newell and edited by Helen Weller (Perth, Western Australia: Artlook, 1980), p. 117.

iii Tim Winton, Land's Edge (Sydney: Picador, 1993), pp. 35, 37.

iv Patricia Hancock, "Rock, Sand and the Sea 1.8 Million Years Ago to the Present Time", in *Recollections of a Shoreline*, p. 93.

- ^v Robert Drewe, "Forward: The Lure of the Beach," *Australian Beaches*, by Anne Matthew (Sydney: Landsdown Publishing, 1998), p. 5.
- Robert Drewe, "The Beach or the Bush? (or the Shark vs the Dingo)", presentation at the 1994 Coast 2 Coast Conference, Hobart, Tasmania (29 June—2 July 1994). I am grateful to Dr. Robert Kay of Onecoast: Coastal Knowledge Ecosystem for sharing this paper with me.
 - vii David Tacey, *The Edge of the Sacred* (Melbourne: HarperCollins, 1995).
 - viii Drewe, "Forward", pp. 4-5.
- ix Peter Bentley and Philip J. Hughes, *Australian Life and the Christian Faith: Facts and Figures* (Victoria: Christian Research Association, 1998), p. 108. I am grateful to the Revd Dr Nigel Leaves, who first brought this data to my attention.
 - ^x Ibid., p. 109.
- xi I have explored the image of the sacred edge in the following resources: "Sea-ing Faith, Fathoming Faith: Reflections on a Coastal Sense of Place," *Eremos: Exploring Spirituality in Australia*, No. 79 (May, 2002), 17-21; "The Sacred Edge: Seascape as Spiritual Resource toward an Australian Eco-eschatology," *Ecotheology*, Vol. 6 (July 2001 & January 2002), 167-185; "The Sea is Our Life! Cross-Cultural Reflections on a Coastal Sense of Place," *In God's Image: Journal of Asian Women's Resource Centre for Culture and Theology* 20/4 (December, 2001), 34-8; "The Sacred Edge: Women, Sea and Spirit," *Seachanges: Journal of Women Scholars of Religion and Theology*, Vol. 1 (2001), www.wsrt.com.au, 1-28.
- xii George Seddon, *Landprints: Reflections on Place and Landscape* (Cambridge: Cambridge University Press, 1997), p. 248.

 Xiii This project, supported by Murdoch University is entitled "Learning the Language of the
- This project, supported by Murdoch University is entitled "Learning the Language of the Sea", to borrow an image from Tim Winton's fable, *Blueback* (Sydney: Macmillan, 1997), p. 130. Quotes are used with participants' permission.
- xiv Alice Walker, *Her Blue Body Everything We Know: Earthling Poems 1965-1990 Complete* (London: The Women's Press, 1992), p. 459.
- xv Meaghan Morris, *Too Soon, Too Late: History in Popular Culture* (Bloomington, Indiana: Indiana University Press, 1998), pp. 105.
- xvi Peter Read, *Belonging: Australians, Place and Aboriginal Ownership* (Cambridge : Cambridge University Press, 2000), p. 217.
- David J. Tacey, *Re-Enchantment: The New Australian Spirituality* (Sydney: HarperCollinsPublishers, 2000).
 - xviii Winton, Land's Edge, pp. 36-7.
- xix Leone Huntsman, *Sand in Our Souls: The Beach in Australian History* (Melbourne: Melbourne University Press, 2001).
 - xx Ibid., p. 185.
- xxi Tim Winton, "Strange Passion: A Landscape Memoir", in Richard Woldendorp and Tim Winton, *Down to Earth: Australian Landscapes* (Fremantle: Fremantle Arts Centre Press, 2000), p. xviii.
- xxii John Sallis, *Force of Imagination: The Sense of the Elemental* (Bloomington, Indiana: Indiana University Press, 2000).
 - xxiii Reg Cribb, "Director's Notes: The Endless Shore", Victoria Hall (September 2002).

The Draft Western Australian State Sustainability Strategy – How Focused on the Future?

Introduction: Ethical Foundations

It was argued in our organisation's previous submission in the ongoing process to establish a Western Australian State Sustainability Strategy that:

"The fundamental ethical values society should embody and thus promote through the actions of its defining institutions are the building of community between people and the protection of the natural environment. In this way is the full spectrum of God's creation at least protected and ideally strengthened."

Recommendations for Government Policy

Working through the implications of this argument, the following recommendations were made:

"Government must act preventively to ensure that renewable natural resources are not exploited to such an extent that they can no longer regenerate themselves. Likewise, wherever possible, reliance on non-renewable resources should be replaced by sustainable exploitation of renewable resources. This will protect not only the physical environment but also employment and human community.

"However, such change to the way we currently exploit our environment for the provision of human needs cannot be rapid and painless. Sustainability must ultimately be a human project or else it is doomed to failure. Sustainability must be an inclusive project that actively finds a place for those in the new order who formerly made their living through unsustainable environmental practices.

"Therefore generous assistance must be provided to those who bear the short-term cost of shifting society to a more sustainable environmental footing. Generous financial assistance must also be made for those on low incomes who will undoubtedly face higher prices for many goods and services under a true sustainability policy. Many goods and services prices have been artificially

low due to the unsustainable environmental exploitation that has underlain their production. Inevitably these prices, including especially for many utilities, will rise under a true sustainability policy."

Inadequacies of the Draft Western Australian State Sustainability Strategy

In summary, it was – and is – the view of our organisation that the two keys to achieving true sustainability in Western Australia are:

- absolutely limiting exploitation of our environment to levels that allow the environment to regenerate itself without assistance; and
- compensating temporary losers from the subsequent changes in the way our State would operate.

Thus it is a matter of concern that neither step appears to have been given sufficient priority in the Draft Western Australian State Sustainability Strategy.

Concern No. 1: Treating the Natural Environment as a Rights-Bearing 'Legal Person'

First, proposals to absolutely limit exploitation of the Western Australian environment need to be extended beyond those specific measures in the Draft Strategy. There is a need for a much broader *paradigm shift* in which Western Australia's natural environment is treated not as an abstract entity but rather as a defined 'legal person' with defined legal rights over natural resources. In our litigious, legal rights-based society treating the natural environment as a legal rights-bearing 'individual' would be a hugely powerful step in signalling a commitment to sustainability. An independent Natural Environment Rights Protection Trust, or something similar, could be established with initial and ongoing grants from government and the community to pay the legal costs of defending the natural environment's rights when infringed.

An example of assigning 'rights' over natural resources to the natural environment is granting the 'right' of river systems to a minimum environmental flow. Humans could then only remove water from river systems in excess of that flow. Another example would be to grant all farmland the 'right' to minimum levels of contiguous native vegetation coverage consistent with the maintenance of native ecosystems in farming districts. The right to farm would be subject to not

clashing with the environment's rights in such lands. The urban environment could be granted the 'right' to enjoy sufficient green corridors and wetlands to maintain its native ecosystems. Urban development and the system of property rights it relies upon would then only be exercised when

not in conflict with those 'rights' of the urban environment.

Concern No. 2: Estimating Compensation Costs of the Transition to Sustainability

Second, there is insufficient recognition in the Draft Strategy of the likely costs of change to certain sections of the community in adopting a truly sustainable path. These costs will be associated particularly with changed employment patterns and, at least temporarily, upward

movements in the prices of many goods and services.

Fundamentally, achieving sustainability in Western Australia requires change in the behaviour of the state's human population. The recommendations in the Draft Strategy all boil down to human behavioural modification in some form or another. Thus achieving true sustainability requires widespread community recognition and acceptance of such behavioural changes. Given the democratic nature of our society, achieving sustainability in Western Australian thus will rely upon the state's people voluntary actions as much as it will rely upon the actions of the state

apparatus.

Such popular behavioural change will not occur widely enough to allow the transition to sustainability to occur as quickly as possible if the transition to a sustainable future promises to produce a wide gap between relative 'winners' and 'losers'. Until the likely costs of change – and more particularly their *distribution* throughout the community – are worked out the state government is likely to find itself unprepared to swiftly buy off opposition to the necessary changes in production practices and goods and services prices needed to achieve sustainability in Western Australia. In the state government being thus unprepared the chances of achieving sustainability in Western Australia as quickly as is possible will be lowered greatly.

Angus Algie

Deputy Chair,

Social Responsibilities Commission of the Anglican Province of Western Australia

Dear Sir / Madam,

Two things struck me from the briefings and discussions on this area I attended.

- 1. Could Perth revitalise its ferries networks in the same way Sydney has? The jetties all seem to still exist, car-parking would not be difficult to create for cars which were not within walking distance, and a couple of loop circuits up and down the swan would surely not be hard? It's possible people in Perth do not work in the CBD to the same extent they do in Sydney. If it was possible though, obviously it would ease traffic and its associated costs, promote public transport, and perhaps also be a charming, soothing way to travel.
- 2. It seems like the easiest approach to take for everything would be to take whatever the UN has come up with, and then make in a flowdown order all national>state>local>community policies in line with that. That way we would have a coherent approach, adapted to be suitable to the individual environment wherever required, yet coherent with a world approach, which will allow us to network and benchmark against the work of others around the globe, more easily. I mean this not just in a government sense - but also in an industry one. If we take an approach to classification or reporting which is "made in WA" - any goods or services which are innovative or valuable to the Australian or world community, would have to undergo a translation process before being able to be taken up by others - and in the same way, any work they do, would have to be translated into WA standards. I can't help but feel that this would be wasteful in the extreme, but some of the discussion did seem to be tending that way, through a focus on "what's going on here" - rather than "what's happening everywhere, and how does it apply to the issues we face here"...

All the best,

Tara Shah
7/ 54 Coode St
South Perth

Docld: 66426 ENS0065 : IB:MR

23 December 2002

The Director
Sustainability and Policy Unit
Department of Premier and Cabinet
15th Floor Governor Stirling Tower
197 St Georges Terrace
PERTH WA 6000

Dear Sir

THE WESTERN AUSTRALIAN STATE SUSTAINABILITY STRATEGY SUBMISSION FROM THE TOWN OF CAMBRIDGE

The Draft Western Australian State Sustainability Strategy (Focus on the Future) was considered by the Council at its meeting held on 17 December 2002. In considering the Draft Strategy, the following comments are put forward for your consideration.

The draft State Sustainability Strategy is intended to provide an overarching framework for sustainability in Western Australia. The 42 priority areas identified throughout the strategy cover all echelons of society. The work of local government is relative to many of these priority areas.

Earlier this year, the Western Australian Planning Commission advertised three draft statements of planning policy (SPP's) concerning natural resource management, upon which the Town provided comment. These policies were:-

- Environment and Natural Resources Policy (ENR Policy).
- State Coastal Planning Policy (Coastal Policy).
- Public Drinking Water Source Policy (PDWS Policy).

The policies are particularly relevant, of course, to the State Sustainability Strategy and indeed the strategy makes repeated reference to the role of SPP's in implementing sustainability policy.

Much of what was said in the SPP's is now repeated in the sustainability strategy. In the circumstances, it is relevant to repeat Council's comments when considering these SPP's:

ENR Policy

Information/Data – in gaining best available information before making planning decisions, as outlined in the general policy measures, Local Government will be greatly assisted if the Department of Planning and Infrastructure (DPI) is able to identify and collate such data and where necessary, direct Local Government to the appropriate sources.

Densities – reference to residential densities is made under air quality and greenhouse gas emission policy measures. In established urban areas, the issue of residential densities is often a very contentious issue within the community. Whilst appreciating the intentions of better integration of landuse and transport planning, it will need to be recognised that this will have to be balanced with the impact that any change in density might have on existing built form and sense of community.

Biodiversity – the protection of regionally significant vegetation for Perth and the protection of habitat corridors is acknowledged, however, such policy must also recognise individual land tenure, existing zonings and the potential for 'urban consolidation, within existing urban areas. The proposed establishment of a comprehensive reserve system must take account of the above factors and in regard to land tenure, local government land holdings should not be seen as public land, for inclusion in such a reserve system, without any thought of compensation or for that matter, who will continue to maintain the land.

Energy efficient building design – there is a considerable body of work that is being done in this area, but, this has come through various sources. The Australian Building Codes Board is preparing amendments to the Building Code of Australia regarding Energy Efficient Design, the Australian Greenhouse Office has printed material, the Housing Industry Association has run a recent series of seminars, and the draft Residential Planning Codes include some general provisions for the design for climate. As can be seen, the approach to energy efficient building design is somewhat fragmented.

This is an emerging area of development control in Australia and a more coordinated approach in WA is warranted.

Coastal Policy

The Town of Cambridge coastline is already protected by a wide Parks And Recreation Reserve under the Metropolitan Region Scheme. As such, the provisions of this draft Coastal Policy, insofar as it relates to new urban development, would not apply to the Town. With regard to the general management of the coastline and to the provision of public infrastructure, however, the provisions of the policy would be taken into account.

In this regard, again, the broad intent of the policy is supported. The objectives of the policy: protecting public access, sustainable use of the coast and accounting for natural coastal processes, are consistent with the Town's Coastal Plan.

Coastal setbacks - whilst recognising that there is a considerable amount of science which has gone into the formulae developed, they can only, at best, be an approximation. It is recognised that the policy identifies that there will be variations to the general case and possible exemptions are also listed. The application of this policy will require a sensible, evaluative approach, rather than relying purely on mathematics. Matters such as established public use, established infrastructure and a general cost/risk analysis for individual proposals must be taken into account.

Community Participation – in ensuring the opportunity for community to participate in coastal planning and management, it is very important that such participation is broadly based. Our coastline is widely used by a range of people for different purposes. It is important, that planning is able to respond (in a democratic way) to all of these interests and not be swayed by one particular interest group.

Urban Development on the Coast – the broad presumption in the policy that urban development should only occur in and around existing settlements seems somewhat subjective. Whilst not denying the demands for sustainable development practices, the coast is intrinsic to our way of life. People want to live near it and recreate there. This is not to say that the entire coastline must be developed, however, on the other hand, to 'quarantine' it from any further settlement is extreme.

Implementation

As overarching State Policy, the ENR, Coastal and PWDS Policies tend to express broad principles. Further, they form part of a suite of 'sector issues' that must be considered in planning, from a regional point of view. As mentioned earlier in this report, much will depend on how the state implements these policies, in balancing economic and social concerns with sustainable environmental management.

Of particular concern to local government is that decision making at the state level is accountable and expeditious. As one of the measures in the ENR Policy, 'best available data', is vitally important to informed and expedient decision making. Decisions based on general philosophy, or subservient to particular interests, will inevitably lead to adversarial situations and will 'bog down' the approvals process and continued involvement and commitment at the State Government level to assist Local Government in the management of the Coast.

In relation to the Town of Cambridge coastline, the Town would seek an open and communicative assessment process with the state, to enable it to effectively plan for the beach in a socially responsive, as well as an environmentally responsible manner.

In the application of these policies, as indeed with all State Planning Policies, there must be a genuine commitment by the State to engage with Local Government and the general community, and not merely enforce particular planning theory, from a distance.

Comment was sought on these draft policies by 29 March 2002. Since that time, we have had no response from DPI, either concerning our submission or on the progress of the adoption of the policies.

Further to the above, the following additional comment can be offered.

The strategy pins a great deal of importance on Future Perth as paving the way for a sustainable future for Perth. Certainly, the adoption of a strategic regional approach is vital in providing for good town planning. The progress of Future Perth, however, seems to have stalled over the past couple of years. If the principles espoused in the State's Sustainability Strategy are to be advanced, then an updated strategic regional plan must be progressed. To do so, requires firstly, political commitment to allocate adequate resources to properly undertake such an exercise.

At a local level, the strategy promotes regional organisations of Councils as perhaps the best way of delivering sustainable planning outcomes. Further, Town Planning Schemes are identified as a primary instrument for the implementation of sustainability goals. Whilst acknowledging that regional organisations of Councils have had some considerable success with matters such as waste disposal and environmental management, the idea of extending such an operation to Town Planning Schemes has practical difficulties, from a legal point of view as well as social and political. Further, it is considered that the ability of the Town Planning Scheme to deliver some of the broader sustainability proposals (environmental, economic and social) is overestimated.

Essentially, a Town Planning Scheme is statutory instrument for the reserving and zoning of land and the control of subsequent development. It is but one component in the delivery of local government service. For example, the issue of social housing is much more than just an issue of zoning. There are significant social and economic influences which must be understood and accepted by the community, as expressed through their local Council.

If the intention is to amend the Town Planning and Development Act to require a Town Planning Scheme to incorporate much more, then its preparation will become infinitely more complex. Local governments are already struggling to maintain their existing schemes. Of the 153 Town Planning Schemes in WA, only 30% are current ie less than 5 years old. Nearly half are more than 10 years old. In the circumstances, the broadening of the function of the Town Planning Schemes could prove to be counter-productive. This is not to say, however, that schemes must not be complementary towards advancing the sustainability cause.

As mentioned earlier in this report, under the section 'sustainability and community', a glaring omission in the strategy would appear to be that of the role of sport in the community. In a social sense, sport, probably more than anything else, influences our sense of identity as a community. This is in addition to its contribution towards fostering an active, healthy (both mental and physical) community. This would be no more important than in rural Western Australia and would surely play an important part in arresting population decline in these communities, something that is strongly advocated in the strategy.

CONCLUSION:

Sustainability practice is certainly not new to local government. The exercise of establishing an overarching approach to sustainability for the whole state, however, is quite enormous. It is probably unlikely that this draft has captured absolutely all issues, although, it does provide the basis for what will no doubt remain an ongoing government commitment.

From a local government perspective, as proposed by the strategy, the role of WALGA is pivotal. The ability of WALGA to properly represent local government in this forum will depend on the success of communications between individual local governments and WALGA. Of critical significance will be the ability of local governments to adequately resource sustainability initiatives. This is in a climate of increasing responsibility being devolved to local government and a consequent growing financial burden being placed on it. If local government is to fully participate in the state strategy, then appropriate state assistance is essential.

Thank you for the opportunity to comment on the Draft Strategy. Should you have any queries on the Town's submission please contact Mr Ian Birch, Executive Manager Development and Environmental Services, on telephone 9347 6050.

Yours faithfully,

GRAHAM D PARTRIDGE CHIEF EXECUTIVE OFFICER

DES02.199: Council Meeting 17 December 2002

cc Chief Executive Officer,
Western Australian Local Government Associatiom
PO Box 1544,
WEST PERTH WA 6872

Comments on Draft Western Australia Sustainability Strategy

Centre for Social Responsibility in Mining, University of Queensland January 2003

In general terms, we are impressed by the comprehensiveness of the draft strategy and the amount of thought that has gone into preparing it. The work that has been done has positioned Western Australia as a pacesetter in this area.

Our only specific comments are as follows:

Action 3.27:

With key stakeholders, develop a set of agreed Sustainability Operating Principles for the Mining Sector, including consideration of the MMSD Principles recently outlined through the GMI, through a working group managed through the Dept of Minerals and Petroleum Resources.

Comment

There is a possibility that the proposed working group could duplicate work already underway within the minerals industry. The International Council of Mines and Metals (ICMM) is working towards producing a set of operating principles for the global mineral industry. In parallel, the Minerals Council of Australia (MCA), which represents all of the major players in the industry, has its own member committee working towards the same goal. Our understanding is that the MCA is about to commence work in earnest on broadening the current Australian Mineral Industry Code for Environmental Management to reflect more fully sustainability issues. The minerals industry is likely to be reluctant to be involved in 'yet another process' to define operating principles that cuts across the MCA exercise. It is also important to avoid the emergence of competing frameworks in different jurisdictions which might only further confuse stakeholders.

Subject to confirmation from the MCA on its timetable, a more appropriate course of action might be to let the MCA process run its course and for the WA Government to seek to have input into the development of the proposed new Code. Once this Code has been finalised, consideration could then be given to whether it needs to be supplemented or modified to fit WA circumstances. (One issue here is that the junior exploration and mining sector is unlikely to have much involvement in the MCA process and so may not consider itself to have ownership of the outcomes.)

Action 3.30

Work with industry on the development of voluntary accreditation for sustainability

Comment

Again, it would make sense to liaise with the MCA on this, as the proposed Code should provide a framework for accreditation in some form.

The more challenging issue, which is not really addressed in the strategy, is what to do with those companies – such as the junior miners – who are reluctant to participate in voluntary schemes. This may require some form of regulatory 'floor' to ensure that all companies meet at least minimum standards. The regulatory framework should also recognise, and reward in some way, those companies that are prepared to undertake voluntary accreditation.

Comments prepared by Professor David Brereton, Director, Centre for Social Responsibility in Mining, University of Queensland, Brisbane 4072.





refining

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27 November 2002

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

Dear Professor Newman

Re: The WA State Sustainability Strategy

A West Australian newspaper editorial¹ stated that WA will have problems complying with the level of reductions needed to comply with greenhouse gas emissions because it has a strongly growing economy that relies heavily on energy. Generation of used oil will increase correspondingly, but where will it go if the oil recycling industry can't sustainably dispose of it?

Even as we accept reuse for the original purpose as the highest and best use of recycled lubricants, or recycling in its best form, we must recognise it is difficult to achieve due to the content and nature of residual contaminants and additives in lubricants and market barriers of distribution and competition from large oil companies. The recent closure of the Kwinana BP Refinery lube oil production facility also ended the brief interest they expressed in re-refining².

The seriousness of the problem in Western Australia is reflected in rapidly declining energy markets and the ongoing accumulating surpluses of used oil because of increased burning of natural gas in its place. The external affects of such changes ignore the use of recycled oil while collecting it safely is always supported. Other than frequent Regulatory issues concerning collection, transport, treatment and storage, the last contact that Wren Oil has had from a WA government agency about used oil was in February 2001³ to promote used oil collection. I support such efforts, as it means more used oil will be taken out of the environment, but at the same time the WA Government should use their best efforts and influence to ensure it gets reused in those areas where it is competitive with and can replace new burner fuel oils.

Western Power is the largest WA user of re-refined oil, using about 6-7ML per annum of recycled oil for electricity generation at the Esperance, Broome & Derby Power Stations and according to recent decisions, the remote stations will soon change to gas or other fuels. Where will all the recycled oil go then?

² BP Refinery - Wren Oil discussions July-August 2000

¹ West Australian 7 August 1999

³ Jannelle Booth, a Department of Environmental Protection Waste Minimisation Education and Promotion Officer, Community Support Branch, in their quest for an Environment Australia Waste Oil Levy Grant

Firstly, a way forward is for the WA Government to persuade Western Power to use re-refined oil, not untreated or lesser treated used oil, as a replacement for the new fuel oils used to light up the coal at the Collie and Muja Power Stations on economical and environmental grounds. And, as more encouragement for its reuse, to include and promote re-refined oil as a renewable energy source in the "WA State Sustainability Strategy" in line with a recent submission to the Federal Office of the Renewable Energy Regulator concerning re-refined oil and the Mandatory Renewable Energy Target (MRET) in Australia. The MRET issue and re-refined oil will be raised when the Renewable Energy Regulations are reviewed in Canberra January 2003. Such changes will provide an incentive for the power stations to use recycled oil and create a use for a recycled product.

Following is a synopsis of the MRET submission which argues the case for such a change. If wanted, I will supply the complete submission provided to Australian Greenhouse Office, the Federal Minister for the Environment & Heritage, his Shadow counterpart and other members of Federal Parliament that were visited.

SYNOPSIS - SUBMISSION TO THE OFFICE OF THE RENEWABLE ENERGY REGULATOR MANDATORY RENEWABLE ENERGY TARGET

- § Re-refined oil (used motor oil that undergoes an extensive re-refining process removing contaminants) should be classified as a renewable energy source and be listed in the *Renewable Energy (Electricity) Act 2000*. This oil can be:
 - o re-refined indefinitely (it does not wear out)
 - o blended to produce diesel fuel extenders and lubricants such as motor oil, transmission fluid, and grease.
- Re-refined used oil should be classified as a renewable resource under the *Renewable Energy* (*Electricity*) *Act* 2000 which would further facilitate the meeting of the Government's MRET and attract credits for power stations using this product as start up.
- During the process of development of the Act and associated regulations the used oil industry was not consulted at all or invited to comment.
- **§** The statistic regarding energy efficiency and re-refined oil is derived from the fact that re-refined oil does not need to be:
 - o "explored" for
 - o drilled for
 - o pumped out of the ground
 - o shipped/transported hundreds and/or thousands of miles
 - o does not require as many steps in the refining process as crude oil.
- **§** Re-refining is an energy-efficient and environmentally beneficial method of managing used oil because:
 - o less energy is required to produce a litre of re-refined base stock than base stock from crude oil;
 - o for every litre of re-refined oil used for energy a litre of crude oil is saved, which in turn impacts upon balance of payments issues;
 - o re-refined oil prices are competitive to equivalent virgin oil products;
 - o car manufacturers are increasingly installing re-refined oil in new cars;

⁴ Produced in August 2002 by Global Environmental Consultants for Wren Oil and Australian Waste Oil Refineries of NSW.

- o lubricating oil does not wear out, it simply becomes contaminated;
- o there is no compromise in the quality of re-refined oil.
- o oil and its fossil fuel derivatives is a non-renewable resource thus recycling is very important;
- o the actual recycling process is economical, efficient and environmentally friendly.
- o the recycling loop is closed;
- o market dynamics of the 800 million litres lubricating oil produced by Australian refineries, approximately 500 million litres is sold into the domestic market. With 300 million litres excess available, the Government is encouraging the increased collections of used oil which adds to the the potential recycled oil supply of approximately 250 million litres. Therefore there is a compounding problem of approx 550 million litres, less current markets, that needs to find a home. With no viable markets, who will use the expanding glut of used oil?
- Environment Australia reports that 110 million litres were unaccounted for in Australia in 1999. Just one litre of used oil has the potential to contaminate up to one million litres of drinking water.
- This oil can potentially be re-refined into lubricants, processed into fuel oils, and used as raw materials for the refining and petrochemical industries.
- § Coal fired power stations rely on heavy fuel oil and light fuel and diesel for start-up fuel. As long as coal and oil continue to be used, replacing new oil with re-refined oil is a sustainable alternative energy source; since it conserves a valuable, non-renewable resource (crude oil).
- § MRETs need to encourage the energy generators to use re-refined used oil in power stations in order to gain renewable energy credits. Due to the recent influx of gas, wind power, bagasse and other renewables into the power generation industry the use of recycled oil is further being compromised.
- The Bills Digest no.18 to the *Renewable Energy (Electricity) Bill 2000*, define renewable energy as: "...any source of energy that can be used without depleting its reserves", consequently re-refined used oil clearly meets this guideline
- This list in the Act does not include the traditional "fossil" fuels: coal, gases associated with coal seams, oil and natural gas. This is because fossil fuels are not renewable on a time scale relevant to electricity generation. However this should not apply to re-refined base oils that can be used as a start up fuel for generating electricity and has a relatively short re-refining time.
- Bagasse co-generation, black liquor, wood waste, crop waste, municipal solid waste combustion create the *same greenhouse emissions as re-refined oils*.
- Re-refined oil is akin to landfill gas methane (listed as a renewable energy source) both are created from a used product. Methane is made from the decomposition of organic waste while re-refined oil is sourced from lubricating oil.
 - o the benefit of using recycled oil as burner oil is relatively immediate whereas methane takes longer to generate from solid waste landfills.
 - o Re-refined oil as an alternative fuel will replace diesel and heavy fuel oils derived from a non-renewable resource for which there is no ready substitute.

- In conclusion, re-refined used oil is clearly a sustainable and renewable resource. As such it should be classified as a renewable resource under the *Renewable Energy (Electricity) Act 2000* and encourage its use by Power Stations in order for generators to be able to gain MRETs and increase the market potential for 100 million litres of used oil.
- Encouraging the power stations to get carbon credits from using re-refined oil as start up would potentially utilize over 50 million litres of re-refined used oil. (End synopsis)

I look forward to your comments and support.

Yours faithfully

Fred Wren Managing director **WREN OIL**