Accounting for Nature

SKM Ozwater Dinner

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Thank you for inviting me.

Before I start, I have to tell you I am very comfortable speaking on serious public policy issues, and appearing before inquiries, but this is my only second ever after dinner speech.

I avoid them for a good reason. I've heard dreadful stories over the years from other Wentworth Group colleagues.

One was asked to give a serious speech, but wasn't warned he'd have to follow a magician.

Another had to follow an excellent belly dancer.

This time I've been told I'm following the foofing flames.

The worst I have ever witnessed was when some people in the audience started throwing bread rolls at each other.

So I can cope with the flames, but please, no bread rolls.

My topic tonight is a serious one, because I want to use this opportunity to talk to you and get your thinking later in questions. It's not specifically about water, but water is central to it.

The subject for my talk is *Accounting for Nature*, and follows the blueprint the Wentworth Group and other scientists released last year proposing the building of the national environmental accounts of Australia.

The lack of an environmental accounting framework is one of the great failures of public policy of our generation and is at the core of our environmental problems.

It has resulted in policy and land use decisions that have caused significant and unnecessary damage to our natural environment, it has resulted in the massive waste of billions of dollars of public funds aimed at repairing this damage, and now as climate change imposes its footprint on the Australian landscape, it means we do not have the tools in place to adapt to these changes.

Let me put this in an economic context.

How is it that the world was able to coordinate a response with such speed and precision to confront the global credit crisis. How do we know whether the response is working?

How did we even know we were having a financial crisis?

The trains are still running, the shops are full of food, the factories are still open.

The reason is that sophisticated and detailed economic accounting, developed over the last 50 years, allows us to monitor the health of and changes in our economy with incredible precision.

Yes, as the crisis deepens and spreads into the real economy, people are starting to lose their jobs, but we should not lose sight of the fact that governments around the world were able to put in place a suite of economic measures to give us a fighting chance of correcting the damage.

So why then didn't the world move with similar speed and precision when the most comprehensive assessment of the health of the world's ecosystems ever undertaken concluded that *"Over the past 50 years, humans have changed ecosystems more rapidly and extensively than in any comparable period of time in human history (and) this has resulted in a substantial and largely irreversible loss in the diversity of life on Earth"*?

The Millennium Assessment of 2005 was ignored because whilst it provided an expert assessment of the state of our environment, it did not provide any institutional means by which the world could react to these challenges.

The world is confronting a global economic crisis – the worst of our generation, and possibly the worst since the Great Depression – because we borrowed more from the future than we were able to repay, and the system broke.

We are also facing the greatest environmental crisis ever to confront western civilisation for exactly the same reason – we have been increasingly living off and degrading our natural capital beyond the ability of nature to replenish.

The difference of course is that we have a far greater ability to correct our economic mistakes than we have in correcting our environmental mistakes, because after the crisis of Great Depression the world put in place a system of economic accounts.

But when it comes to environmental accounting we are still in the dark ages.

If we are to have any hope of managing the great environmental challenges of the 21st century, we are going to have to apply the same discipline to environmental management that we apply to managing our economy.

We need to build a system of national environmental accounts.

If you can't measure it, you can't manage it.

Our current political systems were built to manage the industrial revolution where the great contest of the age was between capital and labour.

Our Westminster system reflects this contest – two major parties fighting for political ascendancy – one from the right defending capital – the other from the left fighting a social revolution.

Both won.

We have become as a civilisation highly skilled in economic management, highly skilled in the social sciences – education, health, law and order.

These were, and still are, defining issues of our age.

And therein lies our problem.

The world laughed at the Club of Rome[2] when they warned that the industrial revolution would send many of our natural systems to the point of collapse and never in our wildest dreams did we imagine that the very machines that created all this wealth could change the world's climate system, within our own lifetimes.

The Millennium Assessment was ignored because the link between future prosperity and functioning natural systems remains an abstract concept, unreconciled with everyday living.

In Australia we face the same challenges with our State of the Environment reporting: sound advice is provided by experts on the condition of our environment, but where are the measurable ways of assessing the health of our environmental assets, and hence, providing a practical basis for investing in actions to manage them?

The Australian Bureau of Statistics has undertaken a certain degree of natural resources accounting.

Water, energy, salinity, mineral and fish reports have been produced at varying intervals with an environmental-economic accounting approach, a satellite framework of the System of National Accounts[3,4], but they too have encountered the same problems that have plagued the Millennium Assessment and our State of the Environment Reports[5]:

1. "*There is no definitive set of indicators that encapsulate progress in the environmental domain*" and
2. "*Data gaps and data inconsistency present problems in many areas of environment analysis*".[6]

Let me taken, as just one example, water reform.

When you talk to the authors of the Sustainable Rivers Audit of the Murray-Darling Basin, you come to appreciate just what an institutional catastrophe we have in standard setting and quality assurance in environmental accounting in Australia.

I'm sure this audience, more than most, knows precisely what I am talking about.

The tragedy of water reform in Australia is that it has been framed under the old rules of a choice between environmental and economic outcomes - and the consequence of this has been a catastrophe – a tragedy for both the environment and the economy and consequently a human tragedy.

And because we think that taking water from people is bad, we have made the profound mistake of accepting incremental change when rapid, fundamental, large scale reform is required.

Nature has now caught us out.

If we continue with this creeping incrementalism we will surely destroy Australia's greatest river system and we will destroy the well-being of the thousands of people who depend on a healthy river for their livelihoods.

Community is pulled against community, with everyone blaming everyone upstream for taking their water.

The lack of progress on national water reform is a national disgrace.

Take the ecological disaster in train right now in the internationally listed Coorong and Lower Lakes.

After decades of so-called water reform, of dozens and dozens of press conferences announcing yet another so-called historic deal, I cannot find a single person who can answer the most basic hydrological question: how much water do we need to keep a positive head at the Murray Mouth to keep it functioning as a healthy estuarine system.

We are now aware that our future prosperity is linked to effective stewardship of nature: our land and water, a stable climate, clean air, healthy coasts, and marine resources.

We now know that without stable functioning natural systems, our economic prosperity is transient and intergenerational financial security is a mirage.

The great challenge of our age is not wealth creation – certainly not in the western economies – the great challenge of our age is climate change, global food security, the growing scarcity of fresh water resources, and the catastrophic loss of the world's biodiversity.

Our problem is that our political institutions are designed to manage economic growth and distribute wealth. They are simply not designed to manage the economics of nature.

I say again - it is very simple - if you can't measure it, you can't manage it.

If you can't use environmental accounts to guide decision-making and investments, and assess the relative effectiveness of management scenarios, then environmental accounting becomes purely academic, just another record keeping procedure.

With your help, Australia can once again be at the forefront of environmental reform.

Last year, the Wentworth Group, with the help of a number of scientists, put forward an institutional model for building the National Environmental Accounts of Australia.

This blueprint, *Accounting for Nature,* proposes a regionally based, standardised model, to monitor and track the health and change in condition of Australia's major environmental assets.

Why regional? Because active management requires accurate data at a scale that is fit for purpose.

Regional reporting is necessary in order to manage the landscape at an appropriate scale, not just one defined by political boundaries.

Each region is unique and needs to be managed in a holistic manner to cater for its specific landscapes, land use profile and environmental assets.

At a regional level, the accounts can communicate changes in condition of environmental assets using the report card approach.

This has been successfully used for 10 years in south-east Queensland by the Healthy Waterways Partnership[7].

The proposed National Environmental Accounts of Australia in our *Accounting for Nature* model are essentially biophysical accounts that sit alongside the economic and social accounts to help us manage the economics of nature in the 21st century.

These accounts would build on and correct the data gaps that have plagued the State of the Environment reporting process.

Environmental accounting is complex and expensive, which is why it is essential they are in a form that can both inform policy and guide future public and private investments at a local, catchment, state-wide and national scale, across the Australian landscape.

This is a big ask: but the solution is as simple as it is elegant.

The model we have developed allows the same accounts and the data system that lies beneath them to serve at least three, if not more, functions.

1. Firstly, they provide annual national, state/territory-wide and regional (catchment) scale reports which measure the health and change in condition of our major environmental assets;
2. Secondly, because they are data based and geographically specific, they can underpin the long-term catchment management and land use planning decisions by, again, Commonwealth, state/territory and local governments, and regional authorities; and
3. Thirdly, scaling is achieved by using metrics and as such, these environmental accounts can readily be used to improve the cost effectiveness of public and private investments in environmental management and repair.

What we are proposing is large scale reform.

Reform of this scale requires a radical rethink of environmental monitoring and reporting in Australia.

This *Accounting for Nature*[8] framework will change the way we manage Australia: the design of our cities, how and where we produce our food and fibre, how we direct public and private investments as we strive to improve and maintain the health of our environmental assets, and they will guide us as we adapt to the impacts of climate change.

Environmental accounts are fundamental to successfully dealing with the 21st challenges of climate change and managing nature.

2009 offers the opportunity for science to stand up and support what could be one of the great environmental breakthroughs of our generation.

But without your support and energy it could just as easily end up in the dustbin of history and with it our legacy.

The choice is ours.

Accounting for Nature is available as a download at: www.wentworthgroup.org

Notes and References

[1] Millennium Ecosystem Assessment, 2005. *Ecosystems and Human Well-being: Synthesis*. Island Press, Washington, DC.

[2] Club of Rome, 1972. *Limits to Growth.* A Report to The Club of Rome

[3] Australian Bureau of Statistics, 2008. *Information Paper: What are Environmental Accounts?* Canberra.

[4] Australian Bureau of Statistics, 2006. *Australian System of National Accounts, 2005-6. Reissue*. Canberra.

[5] Department of the Environment, Sport and Territories, 1994. *State of the Environment Reporting: Framework for Australia*. Canberra.

[6] Australian Bureau of Statistics, 2008. *Australia's Environment: Issues and Trends, 2007* .

[7] South East Queensland Healthy Waterways Partnership, 2006. *Annual Report 2006-7*. Brisbane, Australia.

[8] Wentworth Group of Concerned Scientists, 2008. *Accounting for Nature: A Model for building the National Environmental Accounts of Australia.* April 2008.