

The Bendigo & District Environment Council Inc

Bendigo and District Environment Council Inc (BDEC) is a non-profit organisation whose main interest is the conservation of the natural environment and Australia's progress towards the achievement of ecological sustainability.

Department of Sustainability and Environment,
Attention: Sustainable Water Strategies branch,
Office of Water,
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Date: 6/3/08

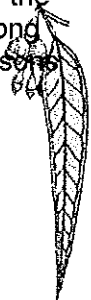
The Murray/Darling System of which the "The Northern Region" is an important part

"Is Australia's Aral Sea"

- The Aral Sea crisis is the brightest example of the ecological problem with serious social and economic consequences, directly or indirectly connected with all the states of Central Asia. The critical situation caused by the Aral Sea drying off was the result of the agrarian economies tendency for volume growth of irrevocable water consumption for irrigation on the basis of irrigated agriculture development.

Conference of the Central Asian region ministers. States of Central Asia: Environment Assessment. Aarhus, Denmark, 1998

- The time has come for adequate water to be delivered to the forest, wetlands and rivers on a consistent basis. The water must be delivered consistently as over the bank floods not as small amounts down the runners that feed the forests with most of the trees missing out, leading to their death. Continuing to take water from the forests, wetlands and rivers will destroy them utterly. Such a practice is not a sustainable water strategy.
- If this discussion paper is just about sustainable water for human use and not sustainable water for the natural environment then it is a complete waste of time and is every way a deceptive and dishonest document.
- There appears to be a disconnection within this discussion paper between the Murray Darling and the rivers within Victoria that are a vital part of the whole system. It is not possible to separate out a discussion of the Victorian rivers, wetlands, forests and the availability of water within the state from the whole of the Murray Darling. There is only one system and whatever is decided upon within Victoria will have an effect on the whole. Discussing small sections of the Murray Darling without considering the whole has been a consistent fault throughout the long and poorly planned history of this degraded river system. It has been one of the major reasons for its decline and it would appear this mistake is being made again.



Bendigo - Heart of the Box - Ironbark Forest.

It was said at the information session in Bendigo that the market shall be used to fix the water problems. It will not as it is the reason that the system has collapsed.

The problem with the over use and over allocation of the Murray Darling and its collapse can be explained by the work by Garrett Hardin 'The Tragedy of the Commons'. The lesson of "The Tragedy of the Commons")

The benefits of population growth and of growth in the rates of consumption of resources accrue to a few individuals; the costs of population growth and growth in the rates of consumption of resources are borne by all of society.

Individuals who benefit from growth will continue to exert strong pressures supporting and encouraging both population growth and growth in rates of consumption of resources.

Garrett Hardin, Published in Science, December 13, 1968

The author is professor of biology, University of California, Santa Barbara. This article is based on a presidential address presented before the meeting of the Pacific Division of the American Association for the Advancement of Science at Utah State University, Logan, and 25 June 1968.

Unless the majority of people decide to restrict the use of water to what can be utilized without the destruction of the natural environment then the use will rise until the system is destroyed. It is the logical rational conclusion of the market. The market hasn't any memory and cannot imagine a future it is purely reactive to the moment and the maximisation of profit.

Imagination and memory belong to us, if we refuse to use it and impose our will upon the market it inevitably leads to destruction as history has shown all too often.

Tragedy of Freedom in a Commons

We may well call it "the tragedy of the commons"; using the word "tragedy" as the philosopher Whitehead used it: "The essence of dramatic tragedy is not unhappiness. It resides in the solemnity of the remorseless working of things." He then goes on to say, "This inevitableness of destiny can only be illustrated in terms of human life by incidents which in fact involve unhappiness. For it is only by them that the futility of escape can be made evident in the drama."

The tragedy of the commons develops in this way. Picture a pasture open to all. It is to be expected that each herdsman will try to keep as many cattle as possible on the commons. Such an arrangement may work reasonably satisfactorily for centuries because tribal wars, poaching, and disease keep the numbers of both man and beast well below the carrying capacity of the land. Finally, however, comes the day of reckoning, that is, the day when the long-desired goal of social stability becomes a reality. At this point, the inherent logic of the commons remorselessly generates tragedy.

As a rational being, each herdsman seeks to maximize his gain. Explicitly or implicitly, more or less consciously, he asks, "What is the utility to me of adding one more animal to my herd?" This utility has one negative and one positive component.

1) The positive component is a function of the increment of one animal. Since the herdsman receives all the proceeds from the sale of the additional animal, the positive utility is nearly +1.

2) The negative component is a function of the additional overgrazing created by one more animal. Since, however, the effects of overgrazing are shared by all the herdsman, the negative utility for any particular decision-making herdsman is only a fraction of -1.

Adding together the component partial utilities, the rational herdsman concludes that the only sensible course for him to pursue is to add another animal to his herd. And another; and another.... But this is the conclusion reached by each and every rational herdsman sharing a commons. Therein is the tragedy. Each man is locked into a system that compels him to increase his herd without limit--in a world that is limited. Ruin is the destination toward which all men rush, each pursuing his own best interest in a society that believes in the freedom of the commons. Freedom in a commons brings ruin to all.

Some would say that this is a platitude. Would that it were! In a sense, it was learned thousands of years ago, but natural selection favours the forces of psychological denial. The individual benefits as an individual from his ability to deny the truth even though society as a whole, of which he is a part, suffers.

Education can counteract the natural tendency to do the wrong thing, but the inexorable succession of generations requires that the basis for this knowledge be constantly refreshed.

A simple incident that occurred a few years ago in Leominster, Massachusetts, shows how perishable the knowledge is. During the Christmas shopping season the parking meters downtown were covered with red plastic bags that bore tags reading: "Do not open until after Christmas. Free parking courtesy of the mayor and city council." In other words, facing the prospect of an increased demand for already scarce space, the city fathers reinstated the system of the commons. (Cynically, we suspect that they gained more votes than they lost by this retrogressive act.)

In an approximate way, the logic of commons has been understood for a long time, perhaps since the discovery of agriculture or the invention of private property in real estate. But it is understood mostly only in special cases which are not sufficiently generalized. Even at this late date, cattlemen leasing national land on the western ranges demonstrate no more than an ambivalent understanding, in constantly pressuring federal authorities to increase the head count to the point where overgrazing produces erosion and weed-dominance. Likewise, the oceans of the world continue to suffer from the survival of the philosophy of the commons. Maritime nations still respond automatically to the shibboleth of the "freedom of the seas." Professing to believe in "the inexhaustible resources of the oceans," they bring species after species of fish and whales closer to extinction.

And so it

This is what happened in the past when so much water was given away for both political and monetary pressure that the system collapsed when it has come under stress from a dry period.

Sustainable Water Strategy Northern Region Discussion Paper:

Having waded through this cumbersome document it appears that it is dedicated to a further reduction in the available water to the natural environment. Prof Peter Cullen said recently on the ABC's 7.30 report that the water available to irrigators in the Murray Darling will have to be cut by fifty percent and that the this fifty percent gained will have to go to the rivers themselves.

This document advocates just the opposite; it wishes to take whatever is left to the environment and give it to human use.

Those who have been running the Murray Darling Basin, rivers, wetlands, forests and irrigation system have made a complete mess of it. This includes governments of all persuasions, government agencies and the agricultural industry itself. The dreadful mess that has been made by their incompetence does not engender any confidence at all in the future health of the system as it seems that those who have made a mess in Victoria's case are at it again by being in charge of this discussion paper.

The only reasonable thing to do would be to sack those who have written the discussion paper on the grounds of incompetence. After all it is they who destroyed the system. In any other enterprise they would have been gone long ago.

We have a Murray River that is very close to death, an irrigation system where the debt levels are such that most will not recover. It is after all not the lack of water to irrigators that will destroy them but the accumulated debt levels, it is like buying the farms again so even if water is restored for a little while into the future the financial problems will cripple many.

So we have another discussion paper where everyone gets a chance to have their say and then excluded from the final form the strategy takes, which of course is made behind closed doors by the same people who have shown such incompetence. Still no one will be able to say they were not consulted.

The forces within our society that have led to the collapse of the Murray Darling are greed, selfishness and hatred. Greed! We always want more water and it does not matter to us if we destroy the world to get it. Selfishness! We do not give a dam if our present needs damage future generations. Hatred! We must hate this land because how else could our destructive actions towards it be explained; we certainly do not love it.

Our actions are those of dispossessed Europeans who believe that this land can be used until it is spent and then move on to new places, unfortunately this is where our descendants will continue to live; there is no where else to go and what a mess we are leaving them.

We take the strange title 'Sustainable Water Strategy' to mean that the users of water will stay within the carrying capacity of the ecosystem. If this is not the case then the discussion paper is nothing more than a scramble for a scarce resource where the powerful gain what they want and more of the natural world is destroyed, such a strategy is unsustainable.

We are seeing the return of scarcity.

We put forward four of the seventeen laws of sustainability as sustainability is a word that is all too often distorted. Certainly those who have written the discussion paper have no idea what is meant by the word sustainability as both their past actions and this backward looking paper shows.

Ecological Sustainability:

First Law

Population growth and/or growth in the rates of consumption of resources cannot be sustained.

B) Unsustainability will be the certain result of any program of "development," whether or not it is said to be "sustainable," that ignores the problem of population growth and that does not plan the achievement of zero or a period of negative growth of populations and of rates of consumption of resources.

C) The research and regulation programs of governmental agencies that are charged with protecting the environment and promoting sustainability" are, in the long run, irrelevant unless these programs address vigorously and quantitatively the determination of optimal population sizes that can be carried indefinitely and unless the programs study in depth the demographic causes and consequences of environmental problems.

E) Persons who advocate population growth and/or growth in the rates of consumption of resources are advocating unsustainability.

G) The term "sustainable growth" is an oxymoron.

Fifth Law

A) Sustainability requires equilibrium between human society and stable ecosystems.

B) Destruction of ecosystems tends to reduce the carrying capacity and/or the sustainable standard of living.

C) The rate of destruction of ecosystems increases as the rate of growth of the population increases.

Sixteenth Law

The addition of the word "sustainable" to our vocabulary, to our reports, programs, and papers, and to the names of our academic institutes and research programs, is not sufficient to ensure that our society becomes sustainable.

Dr. Albert A. Bartlett, Professor Emeritus, Department of Physics, University of Colorado, Boulder, presented a talk on "Arithmetic, Population, and Energy," to a rapt audience at the 1996 AIA Colorado Design Conference in Aspen. The above law is a sampling of his thoughts on sustainability and human behavior. You can reach Dr. Bartlett at Department of Physics, University of Colorado, Box 390, Boulder, CO 80309-0390.

The dominating factor within this discussion paper is the economic with the natural environment delegated to a very poor last. ? We note that when the list of the areas needing water arises the natural environment is difficult to find. Like so many discussion papers before it the aim of this one is to make sure that the economy is maximised without saying explicitly what damage the natural environment is going to sustain as a consequence.

Therefore we ask the question that has not been put forward for discussion:

- **How much more of the natural environment contained within the river systems (rivers, wetlands and forests) is to be destroyed in the scramble for a declining water resource brought on not only by a reduction in the amount available due to the heating of the planet, but the need to supply human needs, both economic and social.**

The only reason we have not fixed the near death of the rivers, forests and wetlands is that we do not want to give any of the wealth that we have stripped from them back. The problem is a social/political problem not an engineering one, no one is game enough to take the powerful water interests on, so we spend our time and effort doing anything but fixing it.

Wetlands and forest need regular over the bank floods, but of course if they are flooded then we lose control of the river system and water is wasted because it goes down river and actually waters other wetlands, can't have that can we, what a waste. The belief that we can allocate water to wetlands and

irrigate them cannot come just from ignorance. Pure managerialism runs most of our actions when it comes to the natural environment.

The excuse that the problem of dead and dying rivers, wetlands and forests is caused by a major drought does not hold as these areas have in the past survived many such droughts without damage. No, for these river systems this is a man made drought!

We wonder at the ability of those who can hold in their mind or belief systems competing ideas of ecological sustainability and economic pillage. There does not seem to be any concern for the impact that over allocation of water to human use has had on the Red Gum forests and wetlands, only concern for the economic outcomes. It is just another example of the economy taking every last bit it can from the natural environment, so much for ecological sustainability.

If the decision is made to take more water from the rivers, wetlands and forests then the time has come for those in authority to show courage and state publicly that they are going to do so. The time has come to stop being cowards by masking the destruction of the Murray/Darling behind weasel words.

Balance or Triple Bottom line:

What a disappointment this discussion paper is! It contains the same old rhetoric concerning balance, triple bottom line etc. Surely by now it is realised that such ideas have past their use by date as they just lead to more destruction within the natural environment. The use of the word balance, or the paper could have said triple bottom line, means simply that a part of the natural world is to be destroyed never to be seen again.

"Australia, the State of the Environment Report points out that progress towards sustainability requires the recognition of the fundamental truth that "the economy is a subset of human society which, in turn, is a part of the environment" (See p15 of the Executive Summary of "Australia, the State of the Environment" Report).

This is a fundamental truth together with the importance of conservation of biodiversity to sustainability. Economic systems are part of human cultural arrangements and hence can be changed if the need arises (See Stephen Boyden, "The Biology of Civilization, understanding human culture as a force in nature", UNSW Press, 2004. p29).

Both the social and the economic are abstract ideas coming out of the human mind; in fact we are able to change our social arrangements, to evolve them to suit changing circumstances. This is what we do as it is the main part of our species survival strategy.

But the natural environment is a concrete entity, when we demand that it compromises to reach our imagined balance a part of the natural world dies. This is the great problem in the world today so much has died.

So when ever we hear or read the words balance or triple bottom line we know that another part of the natural world is to be killed. The words are being used to mask and protect governments, government departments at all levels and it would appear powerful economic interests from being blamed for carelessly destroying our descendants' inheritance for the sake of avarice.

Water Deprived Rivers, Wetlands and Rivers:

The wetlands that have been deprived of water have suffered and in many cases ceased to be. They may have the capacity to regenerate if adequate water is provided; of course giving them adequate water in the present political climate may be impossible.

In order for the dead and dying forest to regenerate they will need at least one hundred years of over the bank floods, perhaps one hundred and fifty years. The reason that these forest cannot come back into existence without constant flooding is that when they receive a flood that allows young trees to regenerate they need time to grow to a point where they can with stand dry periods and that takes at least one hundred year and many many floods. This is something that is simply not going to happen within the present regime and we know that this paper will in the end toe the government line, money first, money second, money third.

The present practice of starving the forests of water is defacto clearing. Most certainly that is going to be the end result.

What a gift to future generations!

How do those in authority live with the knowledge that they have helped produce this gift?

The Water Grid.

The water grid and the desalination plant not only produce useable water they also pump carbon into the atmosphere and unless these projects are carbon neutral they are not sustainable. Of coarse these projects will never be carbon neutral within a time frame that matters with regard to the heating of the planet. They are therefore not sustainable. No amount of propaganda will make them so.

Stuart Fraser:



Convenor.