



TOTAL ENVIRONMENT

2005 / ISSUE 3

E D I T O R I A L

CROSS CITY TUNNEL t h e r e a l p r o b l e m

The Cross City Tunnel fracas is about a lot of things, but at its core it's about our addiction to the motor car. When the plan was first mooted and then put on exhibition, there was lots of support from motorists, in the clear knowledge there would be a toll. In fact the prospect of the Tunnel led to successful urgings to extend it and to free up William Street for boulevard beautification.

Such things never come without a cost. The Carr Government made the political calculations about how to more quickly meet the insistent demands of motor car drivers and their lobbyists, and now the new Premier, Morris Iemma is having to deal with the consequences.

We have to stop deluding ourselves that motor vehicles are the cheapest form of transport and we can exponentially grow their use. The recent Commonwealth Parliament report on Sustainable Cities found that the average person thinks the cost for car use is six cents for every passenger kilometre, but the real cost of car use is 60 cents per passenger kilometre. This takes into account externalities such as road maintenance, noise and air pollution and road crashes. When the full budget is tallied expenditure outstrips income from fuel excise, registration fees and insurance by \$8 billion. In comparison trains and buses cost 20-30 cents per passenger kilometre.

One of the other key objections raised early on by a few about a tollway public-private partnership, was the inevitable contractual requirements from the private sector. Of course they would demand measures to ensure a profitable traffic flow. The private sector isn't a charity.

When you combine the perils of public private partnerships with the Roads and Traffic Authority and their myopic influence on transport planning, you will inevitably end up with a mess. The RTA is a band aid agency, ever happy to open the filing cabinet and lift out a section of its city wide road scheme.

Penalty arrangements (if the traffic flow was reduced due to improved public transport) were not an encumbrance, to the RTA but an inducement to get the private funds.

The highest tollway traffic projections generated applause. They were not a target for critical and independent assessment. And it is doubtful the new Ministerial arrangements under Premier Iemma, where transport has been split from planning, that things will improve. The new Metro Strategy must lock transport planning into city wide sustainability needs, not transport quick fixes that perpetuate faulty decision making.

We have reached such a point of traffic saturation. New roads simply move the congestion around. Only massive investment in new public transport will solve the problem.

The Carr Government came into office in 1995 as the M2 controversy boiled over with the spotlight on secret contracts, big tolls and public transport constraints, arranged by the Coalition Government. Now Premier Iemma arrives in the same landscape. Sydney is failing basic sustainability tests and the Iemma Government has a chance to chart a new path with the imminent Metro Strategy, which could wean us off our addiction to car use, help clean the air, reduce the massive financial costs from congestion and make Sydney liveable again.

Jeff Angel, EXECUTIVE DIRECTOR

2005 Issue 3

- p1 Cross City Tunnel
- p2 Desal Alternative
- p3 Green Banking?
- p3 Safer Solutions
- p4 Energy Plan for NSW
- p4 A Renewable Energy Guarantee for NSW
- p5 Campaign Results
- p6-7 Annual Report
- p8-9 Snowy River Recovery
- p10 Sad Farewells

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Leigh Martin,
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Desal Alternative

NSW Government plans to build a desalination plant in response to Sydney's ongoing water shortage have been roundly condemned as short sighted and unsustainable due to massive energy requirements and greenhouse gas emissions and the reinforcement of our one-use water system. However a sustainable alternative is already available.

TEC has conducted an investigation of alternative approaches to desalination. We are proposing a combination of indirect potable reuse of highly treated effluent from western Sydney sewerage treatment plants (STPs) and permanent water restrictions to avert the construction of a desalination plant.

The Government has decided on a small plant, but will still build larger inlet and outlet pipes for future expansion.

Reuse

Sydney Water data reveals that almost 49 GL of treated effluent is discharged into waterways in Western Sydney each year. Apart from two small STPs at Richmond and Blackheath all of this effluent is tertiary treated and disinfected. If approximately 72% of this effluent was further treated to drinkable standard and utilised for indirect potable reuse it would provide 35GL of drinkable water per year. This represents about 5% of current sustainable yield.

If directed into Prospect Reservoir as part of an indirect potable reuse strategy this 35GL per annum would represent approximately 0.67GL per week into a reservoir with a capacity of 13GL (i.e. approximately 5.2% of its capacity). Further dilution would occur as it is fed into the delivery system throughout Sydney. Addition of membrane filtration at the Prospect water filtration plant would ensure that this water meets all drinking water standards. It is important to note that residents in parts of north western Sydney are already drinking recycled water with no ill effects. Effluent from Blue Mountains STP's is discharged into the Hawkesbury River. River water is then treated at the North Richmond water filtration plant for North West Sydney's sole drinking water supply.

A second stage could increase water availability by 23GL pa if the Liverpool and Glenfield STPs were upgraded to tertiary treatment and brought into the system.

Restrictions

Permanent restrictions (such as those adopted in Melbourne and Adelaide) have a vital role to play in achieving sustainability. Mandatory restrictions in place since 1 October 2003 have reduced consumption by 10%, saving around 63GL pa. Even restrictions that were less than two thirds as stringent as those currently in place would save 40 GL per annum. The actual type of permanent restrictions adopted should be set at such a level so as to save at least this volume of water.

There is already strong support for this option. Research by the Independent Pricing and Regulatory Tribunal shows that 70% support for permanent water restrictions.

We can do it now

Taken together, the 75GL per annum, provides relatively quick, viable and sustainable alternative to 45.5GL and 72.8GL desalination plants. When the second STP phase is added in, this yields 98GL or 16.3% of present sustainable yield.

Concerns about using treated wastewater should be alleviated by the fact it is treated twice by high standard plants and diluted twice. It seems the real barrier to a sustainable reuse solution is the political perspectives of the NSW Government.

Green Banking?

Tony Mohr, ASSOCIATE DIRECTOR

Finance institutions like banks are not what comes to mind when talking about business and its impact on the environment. They don't use a lot of natural resources or pollute like other sectors do. However, despite the lack of direct impacts, the financial sector has a huge influence over every other sector of the economy through investment, loans and insurance. So how can this influence be used positively to support a sustainable future?

Internationally and in Australia, environment groups have been making use of the influence of the finance sector. Banktrack is an international coalition of NGOs keeping watch on dodgy projects to which the big banks lend money.¹ The Wilderness Society lobbied Australian banks like CBA and ANZ over their investment in Gunns' logging of old growth forests. This new kind of shareholder activism is likely to increase in the future.

The federal government surprised many when it announced a joint parliamentary inquiry into corporate responsibility.² The focal point of the inquiry is whether corporations law should be changed to require company directors to consider environmental and social issues, not just financial ones.

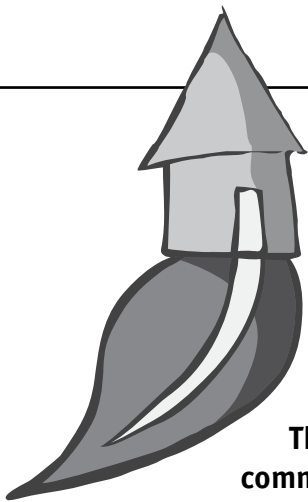
In addition to regulating sustainable finance, individuals can make it happen through Socially Responsible Investment (SRI). The concept is not new – those wanting to invest in accordance with their values can already seek out an investment fund or superannuation fund that chooses investments in accordance with the same values. The amount of money invested in SRI grew a remarkable 70% in the last year, but still only represents a tiny 1.4% of total funds under management. The launch of a new "SRI Symbol" by the Ethical Investment

Association seeks to further increase SRI³. Some superannuation funds say the biggest reason for the finance sector to address sustainability issues is that it actually creates better financial returns on investment. VicSuper is one of a handful of superfunds who subscribe to this view. The idea is that companies which aren't reducing their environmental impacts run the risk of bad press, public protests, litigation and a host of other problems that eventually become financial problems and bad news for investors.

However, after a series of global corporate collapses, many say that for the finance sector to grapple with sustainability, ethics must come first. Adding a code of ethics to corporations law is one suggestion, broad ethics training for directors another.

TEC's Green Capital program has organised debates on these approaches to help mainstream SRI and we are working with Griffith University to develop new tools to facilitate SRI.

- 1 <http://www.banktrack.org/>
- 2 http://www.aph.gov.au/senate/committee/corporations_ctte/corporate_responsibility/
- 3 <http://www.eia.org.au/>



Safer Solutions

Keeping your home **healthy** and **green**

TEC has received funding under the NSW Environmental Trust to run a community education program on hazardous chemicals in the home. The project, under the banner, Safer Solutions, will focus on increasing community knowledge and awareness on toxic chemical exposure and safer alternatives in and around the home, garden and renovations.

The project will build on TEC's considerable track record on toxic chemical campaigning and will be supported through the **Safer Solutions website www.safersolutions.org.au** The site will go live late 2005.

For further information about the project **contact Jenny Kent on 9299 5599; jenny.kent@tec.org.au**.

This project is being conducted under the Our Environment - It's a Living Thing Integrated Environmental Education Program and has been assisted by the New South Wales Government through its Environmental Trust.



ENERGY PLAN for NSW SHOWS SURPLUS OF CLEAN ENERGY

Jane Castle, RESOURCE CONSERVATION CAMPAIGNER

Total Environment Centre's long-running campaign for NSW to adopt clean energy instead of polluting coal-fired power is showing some glimpses of success. The Government has established the Energy Savings Fund, announced new gas-fired and wind generation, and the White Paper laying out NSW energy policy – that was veering towards new coal – appears to have been put on hold.

The delay of the White Paper allows TEC more time to continue its fight for clean energy. Our latest report 'The Real Solutions for NSW's Energy', produced with the support of other environment groups, shows that NSW can increase its energy supplies by over 50% – as much as 6 coal-fired power stations – with renewable energy, gas and energy savings. The report outlines actual projects in development that would create jobs and help NSW avoid the emerging financial risks of expensive greenhouse emissions.

The report shows that over 6000 MW of clean energy is available: 1864 MW from energy savings; 1655 MW from renewable energy; 650 MW from cogeneration; and 2697 MW from gas generation. The report also confirms that the peak demand projections on which previous calls for new power stations were based were overblown – now down from 3.8% per year to 2.8% per year. Cleaner gas can provide peak power and there is no need to consider dirty coal power for baseload generation.

To ensure that NSW continues on a clean energy path, the Government must:

- extend the life of the Energy Savings Fund for 20 years;
- introduce a Renewable Guarantee for 15% of renewable electricity by 2012 and 25% by 2020;
- maintain the 40% greenhouse reduction under BASIX due for June 2006;
- introduce a mandatory 5 star energy efficiency target for commercial buildings; and
- implement a carbon levy and/or emissions trading to meet 20% reduction by 2020.

Coal fired power is the biggest cause of greenhouse emissions in NSW and emissions have grown almost 50% in the last 10 years, increasing the impact of dangerous climate change. For every megawatt hour of electricity produced, coal-fired power creates 1 tonne of greenhouse pollution. This compares with 0.4 tonnes from efficient gas, no pollution from renewables like wind and solar and reduced emissions from energy savings.

To see 'The Real Solutions for NSW's Energy' go to www.tec.org.au/member/tec/projects/Energy/realreport.html



A RENEWABLE ENERGY GUARANTEE FOR NSW

The renewable energy industry in NSW is in trouble. This is because the Federal Government's Mandatory Renewable Energy Target, which requires electricity retailers to buy a small percentage of renewable energy, is full almost five years early. As a result, retailers are not buying power from the multitude of renewable projects in development, risking their feasibility. The percentage of renewable energy in Australia's electricity mix is in fact declining due to increasing overall demand for electricity. In NSW, despite the Government announcing their approval, 3 new wind power projects will not get built unless the Government commits to a mechanism to guarantee renewable power sales.

In response, Total Environment Centre is campaigning for NSW to pick up the pieces from the botched Federal scheme and implement a Renewable Guarantee. Without such a guarantee, over 1500 MW of renewable energy, \$3 billion worth of investment and more than 2000 new jobs may be lost.

A Renewable Guarantee should ensure that NSW increases its proportion of renewable energy from the current 8% to 15% by 2012 and 25% by 2020. This would enable NSW to meet greenhouse emissions targets at least cost. The impact on consumers would be negligible, adding about \$15 per year to the average household bill by 2012. Ultimately, this would be much cheaper than locking NSW electricity consumers into primitive, polluting and expensive greenhouse intensive power stations.

For more details on the amount of renewable energy at risk go to:
http://nccnsw.org.au/member/tec/news/media/20051114_reguarant.html



CAMPAIGN RESULTS

In the last month, decisions have come thick and fast. Some show success, while others mean there is still work to do.

Broadscale clearing

The Native Vegetation Act 2003 that implements the NSW Government's decision to end broadscale clearing has finally been activated. After almost 18 months of negotiations about the trigger Vegetation Regulation, its gazettal allows the Act to begin controlling clearing.

Thirteen Catchment Management Authorities will now use a sophisticated data and computer tool to make decisions on applications ranging from paddock trees to large scale operations. The tool called the PVP Developer, contains a number of red lights that prohibit clearing in highly fragmented vegetation communities; sites with threatened species; riparian zones and more. Other lower condition sites may be cleared or thinned, with offsets that are governed by strict criteria.

The Regulation also establishes a Public Register of clearing consents and potentially improves native grasslands protection. There are also some controversial elements such as exemptions for routine agricultural management activities and clearing of so-called invasive scrub attracts special permissions.

Environment groups will be closely monitoring the roll out of the Act over the next twelve months.

Greenhouse Plan

Another action that has been a long time coming is the government's greenhouse action policy. Released at the end of November, it is largely a summation of previous policies (some quite significant such as the benchmark scheme for the electricity industry); but contains ambitious targets with some new policy.

These include:

- Stabilising at 2000 emission levels by 2020, and cutting emission by 60% by 2050 (as recommended by greenhouse experts);
- Confirmation that the BASIX law will require a 40% reduction in new home energy consumption by mid-2006 (the housing industry had been strongly lobbying to defer this indefinitely);
- Requiring retailers to include 10% GreenPower in any new electricity customer connection. Consumers can opt out, but there are unlikely to be many as polls consistently show a high level of support and there is usually no price premium on 10%.

However, the policies that can make a big difference will be found in the yet to be released Energy White Paper. Environmental groups are calling for no new coal and a renewable energy guarantee.

Environment levy

New Premier, Morris Iemma has announced a substantial increase in the waste levy to fund new environment programs. The levy will rise by \$6 a year for the next five years increasing household costs by 20 cents a week, producing some \$300m for the environment.

Major expenditures will include an \$80m urban sustainability fund and \$105m to buy water for stressed rivers and wetlands. The water buy back is important but has been made necessary by the Carr Government's deplorable virtual privatisation of water licences.

A major impact of the waste levy rise is that landfill will become more expensive and recycling (which does not attract the levy) more competitive. It is hoped that we will reach the 'tipping point' where major investment in new alternative technologies will occur over the new few years.



INTRODUCTION

The last year was a very intense period with a clear focus on some large issues. The Western Brigalow woodlands were finally saved and we made advances on demand management as our key contribution to reducing greenhouse gas emissions from the electricity sector. Coastal development campaigning finally began to see light at the end of the tunnel.

These three examples also illustrate the core work values of TEC – persistence; liaison with local and regional groups; good information and strategic campaign planning. Our staff bring their skills and experience together with other environmentalists, utilising political insights and media contacts. It can be arduous and sometimes tedious but there is always an undercurrent of inspiration and excitement that we are all working towards a cleaner and greener society.

NATURAL ENVIRONMENT

- » Our coastal protection work is beginning to yield fruit with the employment of 3 community planners and the development of regional strategies that have significant conservation and sustainability components. The first regions to be addressed are the Lower Hunter and Far North Coast, with decisions expected this year. Key issues include population growth projections (with developers proposing absurd levels to justify rezoning and speculation about sensitive coastal sites); infill to take advantage of existing town centres and public transport, and new conservation protection areas. TEC also worked on exposing the impact of developer donations on coastal councils and undertook a special investigation of Taree Council.
- » The protection of the western forests has been resolved. The Carr Government announced a new reserve system of 352,000ha and a generous industry restructuring package. TEC was pleased to work with a range of state and local groups in this hard fought campaign.
- » Last year we predicted that the new land clearing laws would be activated by 'late 2004'. Now we can hazard another prediction for late 2005. Much work and prolonged negotiations have taken place. Banning broadscale clearing is a process of weaving together new statutes, regulations and delivery infrastructure like Catchment Management Authorities. As time goes on the constructive engagement of NSW Farmers looks ever more doubtful and it is time for the NSW Government to implement its election mandate.
- » Threatened species received attention with controversial changes to the Threatened Species Conservation Act to allow biodiversity certification of planning schemes. TEC sought several key changes in an attempt to ensure they were not a backwards step. The concept of bio-banking (to improve funding from private sources for conservation) has also been promoted and we sponsored forums to review its implications.
- » While the GE crops trials were abandoned for 2004, it is expected there will be further pressure from the big companies. In the interim some contamination has occurred with canola, again highlighting the severe problems of liability which the industry seeks to avoid.

CLIMATE CHANGE

- » We continued to seek reforms of state and national energy decision making to afford a prime place for energy conservation. At the NSW level, the Government established a \$40m pa Energy Savings Fund as a result of our lobbying.
- » Efforts to fix the almost impenetrable National Electricity Market were upgraded with federal moves to pass the National Electricity Law. Our submissions and lobbying extended to several states, but success was limited due to capture of the process by conservative Treasury officials. The coming year will see further efforts.
- » A joint green groups' position on emissions trading has been achieved. Key principles including controversial carbon sinks have been resolved. During the year the states announced support for the main components of a trading scheme. The Green Power scheme, an accredited program of new investment in renewable generation was also placed under review and green groups, including TEC made several reform proposals.
- » Energy planning remains a difficult problem for the state, with the need to reduce greenhouse gas emissions and seek to satisfy growing demand. We released an economic analysis that definitively showed energy efficiency was much cheaper than new coal fired power and that coal plant proponents were misguided in pressing for an early start. Premier Carr announced a target of 50% cut in emissions by 2050, but how we get there is unknown as the Government's greenhouse policy is yet to see the light of day.

URBAN SUSTAINABILITY

- » The Sydney Metro Strategy was a major focus with the clear message from the public that the environment mattered. TEC worked with other stakeholders and actively campaigned on sustainability settings and accountability requirements for Strategy. Late in the reporting year the Government backed away from its proposed green belts, however, TEC is working for the retention of major conservation gains.
- » Amendments to the planning and environmental assessment laws were made by the Government. In a severely retrograde step established community involvement and environmental assessment were thrown back into the melting pot to facilitate state significant and critical infrastructure projects. It remains to be seen if the legislation will be used to validate unacceptable projects.
- » The 'BASIX' law which requires new housing to consume 40% less water and 25% less energy is slowly being extended to apartments and commercial premises. Developers have been lobbying to prevent its extension and TEC has been campaigning strongly to ensure this effective measure proceeds.
- » Our work on a sustainable urban water cycle continued with participation in reviews of the operating licences, pricing policies and sustainability indicators for Sydney Water, Sydney Catchment Authority and Hunter Water. One important outcome has been the adoption of two step pricing to give a better signal about wasteful consumption. TEC is also undertaking a national study of regulatory and pricing systems to evaluate best practice for sustainability outcomes.



- » Our major waste campaign effort this last year was reform of the National Packaging Covenant as an active member of The Boomerang Alliance. We were successful in obtaining specific targets for recycling and renewed focus on the poorly performing plastics, glass, steel and away from home packaging sectors. Additionally the NPC will be subject to a mid-term review by the country's Environment Ministers and if found a failure, will be replaced by more effective regulatory instruments. During the campaign it became even more obvious that container deposits could make a very significant contribution to recycling.
- » We issued our second major review of Action for Air scoring the NSW Government 4.5 out of 10. Major failings included lack of investment in new public transport infrastructure.
- » TEC is represented on the expert committee reviewing the priority list of products for extended producer responsibility action and assessment of industry plans. We are concerned at the lack of action by the computer and mobile phone industries. TEC also investigated market based instruments to advance resource recovery.
- » With the support of an Environmental Trust grant, TEC has begun a major effort to reduce hazardous chemicals in the home, under the auspices of 'Our Environment It's a Living Thing' campaign.

GREEN CAPITAL

Our Green Capital program continues to develop as a significant engagement and education effort. Undoubtedly the corporate sector is either part of the problem or the solution and TEC is seeking to turn the positives into real environmental gains.

- » Major events were held on – CSR Where to Now? Ethical Investor Awards; Waste Wars; Sustainable Cities; Greenwash. The latter was particularly animated and TEC presented three case studies which have led to discussions with two companies about how to improve the accuracy of their environmental claims. These events have attracted over 2,000 people. Events are now held in both Sydney and Melbourne.
- » A number of smaller forums allowing detailed discussion were convened on – Global Reporting Initiative; Waste Market Based Instruments; Indoor Air Pollution; Sustainable Supply Chain; and Biodiversity Banking.
- » Green Capital continues to develop a program to help companies engage their staff on sustainability issues.
- » Our project with the Key Centre for Justice, Law and Ethics at Griffith University on mainstreaming socially responsible investment is gaining pace and the final Green Capital event is Sustainable Finance.

LEGISLATION

Through the Environmental Liaison Officer supported by TEC and other groups, we were active in drafting amendments and lobbying for improvement to key pieces of legislation including:

- » Native Vegetation Act Regulations
- » Amendments to the Threatened Species Conservation Act
- » Amendments to the Environmental Planning and Assessment Act
- » Energy and Water Savings Acts

GOVERNMENT COMMITTEES – TEC staff were members of: Millenium Parklands Advisory Committee; Pesticides Implementation Committee; Natural Resources Advisory Council; EPR Expert Reference Group; Planning Reform Reference Group; Metro Strategy Environmental Reference Group; Ministerial Reference Group.

STAFF

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COMMITTEES: Canopy Native Forests

RESIDENT GROUPS: Colong Foundation for Wilderness; Sydney Harbour and Foreshores Committee

AUDITOR: Barton Sellars - Financial report available on request from TEC

THANKS TO ALL OUR DONORS AND SUPPORTERS





Snowy River Recovery

Fran Kelly, NATURAL AREAS CAMPAIGNER

Prior to 1967, when the Snowy Hydro scheme cut 99% of the Snowy's flows below Jindabyne, the Snowy River was a torrent for most of the year, especially when fed by the snow melt in spring. It had lower, slower, but rarely drought level, flows in the summer. The River was dependent on the top 14% of the catchment for most of its flows. As a result of losing most of the high country flows, the river experienced drought conditions most of the time. It changed to a river with greatly reduced channel size, pools infilling with sand, a loss of habitat diversity, greater abundance of instream vegetation and weeds, greater abundance of macro-algae, invertebrate fauna typical of silty, slow flowing conditions and a reduced abundance of native fish with more feral species such as trout.

The campaign to save the Snowy began in the 1980s by the Snowy River Improvement Trust who drew attention to its problems. In the mid to late 1990s the campaign to save the Snowy grew into a major NSW and Victorian community campaign spearheaded by the Snowy River Alliance. TEC worked on the Snowy River Campaign at the Sydney level helping to bring attention to city based politicians and the media.

During this time Government and independent scientific reports into the river's health concluded at least 28% flow was needed for the river to survive. The corporatisation of the Snowy Hydro also offered the opportunity to make advances for the river. Then in 1999 – an Independent "Save Snowy River" candidate, Craig Ingram, won the seat of East Gippsland and with two other Independents gained the balance of power in the new Victorian Labor Government. Finally in 2000 a deal was struck between the Victorian and NSW Labor Governments - to return up to 28% flows and restore the Snowy.

On 28 August 2002, the Premiers of NSW and Victoria released the first 3% of additional flows back into the Snowy River with the spilling of Mowamba Weir.

Recovery Begins

The Snowy River Recovery is a whole of river, long term, far-reaching landscape-scale project that is multifaceted, integrated, and involves instream and riparian restoration. It aims to rehabilitate the entire length of the river to a standard that will maximise the effect of environmental flow releases. It is backed, supported and run by State and Federal Governments, Councils, CMAs, Landcare, scientists, community groups, schools, TAFEs, universities, private landholders, state agencies, NGOs, and businesses.

The program involves:

- Restoration of environmental flows
- River rehabilitation project
- Fish study and recovery
- Rainforest restoration
- Trial of instream and rehabilitation techniques
- Flow response monitoring and benchmarking project

Restoration of Environmental Flows

The project aims to restore the scientifically recommended minimum 28% of environmental flows. In 2000 a joint NSW/Vic enterprise established - Water for Rivers - to find water savings for Snowy and Murray flows. 38GL per year has been found for the Snowy to date. Since the first release in 2002 the Snowy has gained an average 22-25 billion litres of water each year from the Mowamba River. By mid 2006 the second stage will increase flows to 18%. Within 10 years the flows should rise to 244 billion litres to reach 21 % of its flow. Further flows to reach the recommended 28% will only occur if private sector funding is forthcoming. Crucially the program is intended to deliver flows in a way that will flush out the channel.

Rehabilitation

The Snowy River is being prepared for environmental flows by - stabilising sand deposits; creating sediment entrapment; aiding bank stability; and enhancing river vegetation structure and biodiversity and habitat. The project aims to make the river willow free and reduce other weed infestations.

So far 174 km in NSW has had a first willow poisoning and 58km of river and 50km of tributaries have had a follow up. There will also be revegetation of strategic areas with local native plants.



Hundreds of thousands of native plants have been planted in channels, along banks and riparian zones so far. The final plank is preparing riparian management agreements with river front landowners the Snowy Banks scheme – to carry out actions such as fencing riparian zones from stock, providing offstream water access, and removing threatening weeds and pests.

Fish Study and Recovery

The two Governments with input from Native Fish Australia, and other community organisations are implementing a fish recovery strategy to breed and reintroduce selected native fish to the Snowy caught from remote tributaries.

Rainforest Restoration - Victoria

This is a highly successful and popular restoration project managed by the East Gippsland Catchment Management Authority, involving local Orbost school children, TAFE and university students, private local nurseries, indigenous community, local community groups and landholders. It aims to re-establish riparian and rainforest plant species on a 40ha degraded grassland beside the Snowy River, turning it into what it would have been like in the 1800s. It is replicating ecological pathways that help disperse native plants that in turn attract native fauna

Since 2002, 200,000 trees have been planted. The project has achieved in three years what they thought would take 5 years. So far sixty bird species, including several threatened species, and nearly as many plant species are naturally regenerating on the site. Thirteen other riverfront landowners have applied to do similar projects.

Trial of instream and rehabilitation techniques

This component aims to improve the diversity of riverbed and aquatic habitat in the lower Snowy River. Studies have included sand movement and volume, use of instream structures such as logs to influence water flows to recreate deep pools and scour pools - dug by water in the sandy riverbed.

Flow Response Monitoring and Benchmarking Study

The Flow Response Monitoring and Benchmarking Study aims to assess differences in the condition of the Snowy before and after environmental flow releases and with other rivers. It involves monitoring changes in water quality and hydrology, macro-algae, vegetation, macro-invertebrates, geomorphology, and fish.

Results are used to report how flows have changed river condition and provide data to the Snowy Scientific Committee to advise on release patterns and adequacy.

Has the Snowy Recovery Project been successful so far?

There are early signs of improvement to river ecology including:

- An increase in base flow and reintroduction of spring snow-melt flows and frequent smaller flow variations
- Healthier river habitat as river channel becomes more defined in sand-bed sections
- Plants are becoming more abundant on river margins
- Instream vegetation, including weeds are becoming water logged in permanent deeper water
- Macro-algae cover has been scoured by higher flow velocities on the stream bed
- Increased woody debris for fish and insect habitat provided by falling dead willows.

Success can also be measured in the project's broad community acceptance, popularity and involvement in projects by local residents, community groups, schools, and businesses, with support from all layers of government.

The main area of concern that remains is where the next round of increased flows will be sourced from. The next stage of up to 18% has been held up by works being done on Jindabyne Dam to enable increased water to be released (however water is being stored for a major flushing release, once completed in mid 2006). There is strong community and environment group preference for retention of the Mowamba River release rather than the less natural release of settled water from the dam. The Snowy River Alliance has been lobbying all government levels for both the releases to occur and for it to be directly from the river.

Overall, the recovery so far has been really encouraging. One of the best aspects of releasing increased environmental flows is that it has the effect of enabling the river to recover itself.



Sad Farewells

Herbert Beauchamp

Herbert was with Total Environment Centre for almost 20 years, providing a critical resource for our chemical and political strategies and as a member of the Management Committee.

He joined us in the early 1980's and immediately made his dynamic presence felt. The Toxic and Hazardous Chemicals Committee was established and it quickly became a force in national and state public campaigning and policy making. In 1983 the Committee organised the first national conference on Hazardous Chemicals in the Australian Environment examining over two days the toxic chemical load on the environment and human health. In his preface to the Conference proceedings, Herbert identified the three key campaign objectives:

- 1. Establish a dialogue between stakeholders.**
- 2. Increase awareness of the serious hazards.**
- 3. Change legislation to redress the potential for overload of hazardous chemicals in the Australian environment.**

These are the principles that governed our work from that date on and even now.

Later conferences on Solvents; and Chemicals in Schools in the 1990s broke new ground and their visions reverberate as we still tackle the chemical load in these areas.

In 1995 the 10-year campaign on toxic termite control resulted in a ban on organochlorines in Australia and over the years TEC also established the largest independent toxic chemical advice service in Australia.

But Herbert did not only work on Chemicals – he also worked on TEC – its organisational and financial health and political strategies. He also gave us immense help with our hard pressed finances, both as a donor and fundraiser.

We thank Herbert - for a cleaner air we breathe; a reduced chemical load; a more aware, informed and active community; and a strong Total Environment Centre.

Judy Ambler

Sadly we recently lost Judy, one of our long term supporters.

She helped a day a week at TEC for many years, assisting with phone reception and public information, always willing to help. As a bush regenerator, elected councilor and North Sydney Council precinct committee member – she made other important contributions to the public good.

Judy showed generosity in many ways including accommodating several students from Germany, who had work placements at TEC; and financial support.

We will miss her quiet diligence and commitment to the environment.

HELP THE ENVIRONMENT TODAY FOR OUR FUTURE

VOLUNTEERS NEEDED

TEC and the environmental battle can be greatly assisted with your volunteer time and skills.

If you can help, please return this coupon to:
Volunteers Coordinator, Total Environment Centre,
Level 2, 362 Kent Street, Sydney 2000.

I would like to volunteer to help TEC with:

- Reception / phones
- Stalls
- Research / submission writing
- Office work (eg mail outs)
- Library
- Other

My previous work has been

My qualifications / skills are

My environmental interests are

I am available (per week) half day one day
 occasionally
other

Name:

Address:

Postcode: Date:

Email:

Phone: (day).....(evening).....

Make a tax deductible donation to

TOTAL ENVIRONMENT CENTRE INC.

Yes, I want to help the environment
campaign work of TEC.

Name:

Address:

Postcode:

I wish to donate:

- \$1000 \$500 \$400 \$300 \$200
- \$100 \$50 other \$.....

or Please deduct \$.....
monthly from my credit card until further notice

I wish to pay by:

- Cheque payable to Total Environment Centre Inc
- Visa Mastercard Bankcard

Card Number: _ _ _ _ / _ _ _ _ / _ _ _ _ / _ _ _ _

Card expires:

Name on card:

Signature:

Phone: (day) (evening)

Return this form and payment to:

The Administrator
Total Environment Centre Inc
Level 2, 362 Kent Street,
Sydney 2000 Australia

Consider a Bequest

Please remember TEC in your will. The Law Society of NSW recommends the following wording:
"I bequeath the sum of \$..... to TOTAL ENVIRONMENT CENTRE Inc. for its general purposes and
declare that the receipt of the Treasurer for the time being of Total Environment Centre Inc. shall be
complete discharge to my executors in respect of any sum paid to Total Environment Centre Inc."

news letter

Return address:
TOTAL ENVIRONMENT CENTRE
Level 2, 362 Kent Street
Sydney NSW 2000
Ph: 02 9299 5599

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