

“Snippets Plus”

November 2007 – Edition 20C

From 15th November

15th

FarmOnline

Water outlook for border rivers released

The CSIRO report, *Water Availability in the Border Rivers*, was released today by the Department of the Environment and Water Resources. The report is one of a series covering the entire Murray-Darling Basin. It was commissioned by the Prime Minister and Murray-Darling Basin state Premiers at the November 2006 Water Summit. The Border Rivers region covers southern Queensland and northeastern NSW. It is based on the Macintyre Brook and Dumaresq River which join the Macintyre River and continue to become the Barwon River. The region covers 4pc of the total area of the Murray-Darling Basin (MDB). It includes the major towns, Stanthorpe, Inglewood, Mungindi, Goondiwindi, Glen Innes, Inverell and Tenterfield. Around 50,000 people live in the region. Broadacre livestock grazing is the main land use but before the drought, around 75,300 ha were under irrigated cropping, more than three-quarters of which was cotton. The CSIRO's 'best' estimate (median) of the likely range of future climate outcomes by 2030 is for a 9pc reduction in average annual runoff, leading to a 10pc fall in water availability. However, there is considerable uncertainty in the climate predictions for 2030, arising from different climate models and different global warming scenarios. Extreme estimates range from a 28pc fall, to a 20pc rise in average annual runoff. Currently, the level of surface water use has reduced the reliability of supply in the region and its end-of-system flows. And the level of groundwater development near the Dumaresq River is expected to reduce groundwater levels and streamflow. Without management changes, the report says, projected increases in groundwater use would be unsustainable in the long term, further affecting stream flow. The 'best' estimate 2030 climate would also increase the average time between beneficial floods into anabranches and billabongs on the Macintyre River. Information in the report will be used to develop the new sustainable diversion limit for the river systems in the Basin, a key responsibility of the new Murray-Darling Basin Authority under the Water Act 2007. The integrated surface water and groundwater sustainable diversion limit will be part of the Basinwide water plan the authority will develop. Along with the CSIRO work, other scientific and economic inputs and consultation with stakeholders will be used to determine the limit. Reports on other Murray-Darling Basin catchments will be provided progressively through to early 2008. * More information: www.environment.gov.au/water/mdb/yields.html SOURCE: Breaking national news from Rural Press weekly agricultural papers, updated daily on *FarmOnline*.

Young dairy farmers defy drought

The younger generation of dairy farmers on the Darling Downs, Qld, have spent most of their careers in drought conditions. Despite this, they've supported the Darling Downs Young Farmers Network (DDYFN). They've eagerly invested time, cash and resources such as land, water and vegetation in the worst possible circumstances. Yet they are making a really good go of it, says Penny Hamilton of the Condamine Alliance, which helped to establish the network. She says the young people recognise the need to change their practices to be both resource-efficient and able to maintain or improve productivity while conserving or enhancing the environment. The Natural Heritage Trust, through Condamine Alliance, provided the financial incentive of \$120,000 and the farmers contributed \$477,000 in cash and kind. This proved to be the catalyst for 29 on-farm natural resource management (NRM) projects worth \$597,000. Bronwyn Ford, NRM coordinator for Queensland Dairyfarmers' Organisation (QDO), says Condamine Alliance has fostered the basis of a successful model that the dairy industry now wishes to roll-out across Queensland. With extra funding of \$260,000 from the Department of Families, Community Services and Indigenous Affairs, QDO is expanding the Darling Downs network, and starting new networks in the Gympie and West Moreton regions. SOURCE: Extract from story in *Queensland Country Life*, November 8.

Adelaide.now.com

Global warming quickens

Climate is changing faster than predicted by the United Nations Intergovernmental Panel on Climate Change, a report shows. The panel only used material published up to mid-2006. Many crucial new observations have been published since. Accelerating greenhouse gas emissions and global warming, faster melting of polar ice and slower absorption of carbon dioxide by land and sea have scientists calling for urgent action. The former head of the CSIRO division of atmospheric research, Dr Graeme Pearman, said it was "not all doom and gloom". The latest science simply highlighted the need for swift action. "Policy needs to match the degree of urgency that has been considered by the science," he said. "What we do know suggests that actually we really are exposed and we need to manage the risks." The chance of more rapid changes, brought on by the collapse of ice sheets or breakdown of natural systems, is greater.

The report shows:

EMISSIONS growth is accelerating - the carbon dioxide concentration is now more than 382 parts per million, with other greenhouse gases combining to create a CO₂ equivalent level of about 455 ppm.

GLOBAL warming has been getting faster.

ARCTIC sea ice is retreating faster than any of the IPCC climate models suggest. A new summer minimum was set this year, 30 years ahead of forecasts.

ANTARCTIC warming is most rapid and glaciers on the peninsula are retreating.

RISES in sea levels may have been underestimated. Observations show the level is rising higher than the IPCC best estimate. The IPCC also assumed negligible contribution from Greenland and West Antarctica. This probably is incorrect.

Dr Pearman prepared the new report for the Climate Institute at the University of Melbourne.

The report will be released today at a climate change conference in Sydney.

Subsidy for climate efficiency

A Labor Government would give businesses up to \$200,000 in subsidies to retrofit their office buildings with more energy-efficient airconditioning and lighting. Labor Leader Kevin Rudd yesterday announced the Green Building Fund at the party's campaign launch, as part of a \$720 million clean energy initiative. The fund complements the \$500 million renewable energy fund, as foreshadowed by The Advertiser yesterday. The renewable energy fund would help with the development, commercialization and deployment of renewable energy in Australia. The private sector would be encouraged to contribute \$2 for every \$1 provided by the Government under the fund. "We need to harness our enormous potential in solar, wind, geothermal and wave power," Mr Rudd said. He also announced a \$150 million energy innovation fund to keep leading scientists and researchers in Australia and \$105 million for three new funding projects - in Queensland, NSW and Western Australia - under his National Clean Coal Fund. Mr Rudd has been campaigning hard on climate change since his appointment last year. He was critical of Prime Minister John Howard for not announcing any new climate change initiatives at his campaign launch on Monday. However, Industry Minister Ian Macfarlane said Labor's fund was "a belated me-too version of the Government's policy, funded by closing down or diverting funds from existing programs". Climate Institute chief executive John Connor welcomed the renewable energy fund, saying it would provide "much needed funding for Australian researchers to come up with more solutions that will underpin our clean energy economy". "This announcement takes the ALP to 60 per cent on the Climate Institute's report card, compared with the Coalition's 26.6 per cent," Mr Connor said. Clean Energy Council chief executive Dominique La Fontaine said the fund was needed, with Australia ranked 14 out of 25 countries in terms of investment attraction in renewable technologies. Labor says the net impact of its clean energy plan will be \$415.3 million.

The Australian

A clean \$3bn to cut carbon emissions

Labor's new clean energy plan brings its commitments to climate change programs to more than \$3 billion on top of billions more to subsidise mandatory renewable energy supplies and household hot-water systems. Despite Kevin Rudd claiming to spend less than the Howard Government as part of his claim of economic responsibility, yesterday's announcements wrapped up a nine-month, multi-billion-dollar spending spree for Labor on climate change. The Coalition is yet to announce details of its main clean-energy support funding, which is expected to include an extension of its \$500 million low-emissions technology development fund (LETDF) and about \$200 million for new clean-coal research. To date, its main commitment in this area has been \$75 million towards new and emerging renewable technologies. Yesterday's big addition to Labor's climate change shopping list is a \$500 million renewable energy fund to help develop, commercialise and deploy renewable energy technologies, to complement its mandatory renewable energy target of 20 per cent by 2020. This will effectively replace the Howard Government's LETDF and will offer \$1 for every \$2 offered by industry to bring new technology beyond the demonstration stage. A further \$240 million was promised yesterday by Mr Rudd to help business and industry deliver energy and water efficiency projects and a further \$150million for an energy innovation fund to help retain scientists and researchers. The business fund will spend \$90 million to retrofit commercial buildings to make them more energy efficient, \$75 million in grants to make business more efficient and \$75 million to help commercialise clean technologies. The innovation fund includes the already announced \$50 million solar institute at Newcastle, \$50 million for photovoltaic research and \$50 million for general clean energy and efficiency research. "This fund will support projects that take renewable energy technology from the lab to the grid," Mr Rudd said yesterday. The announcements were welcomed last night by researchers and the renewable energy industry who said they would fill a critical gap in driving new clean energy projects in Australia.

Australian National University solar researcher Andrew Blakers said: "It's really important that we fill the gap that exists between Australian Research Foundation funding and commercial support - there is currently this yawning gap in between." The gas industry has again criticised Labor's climate policies for focusing only on renewable energy while ignoring gas, which has half the emissions of coal and is the cheapest transition fuel to a low-emissions economy. Labor has also committed to a ban on electric hot water systems from 2012.

Adelaide.now.com

March on Parliament

A determined group of about 50 Riverland producers took their protest against drastic cutbacks in irrigation allocations to Parliament House today. Many said it was the end of their livelihoods – and of their communities. After heckling their local member, River Murray Minister Karlene Maywald, they shouted for Premier Mike Rann to address their concerns, particularly on short-term funding. When Mr Rann did not appear, they took their protest into the House for Question Time. They stayed about 30 minutes, quietly watched proceedings, and then left. State Opposition Leader Martin Hamilton-Smith said he would ask Mr Rann to answer the concerns by SA growers. Bill Lakakis, a spokesman for the Murray Community Survival Group, said unless more water and drought relief funding became available "we will end up living in a dust bowl". "It will destroy the livelihood of Riverland communities, as it will everyone living along the Murray." The State Government this week announced a modest rise in irrigation allocations for this season – to about 22 per cent from December 1. Loxton resident Ros McLintock, from the protest group, said the it was "too much of a coincidence" water allocations had slightly increased, given the rising protests around election time. "This release of water was in direct response to the dire situation we are in," she said. "We are marching on Parliament House and have asked Premier Mike Rann to be honest and tell us what the grand plan for water is. "We need water to get through this summer and then we need to address the long-term issues." Greens Senate candidate Sarah Hanson-Young said 30 years or more of over-allocations in the Murray-Darling Basin had led to the crisis. Another Senate candidate, SA politician Nick Xenophon, said the drought-affected water allocations to the Riverland was a "catastrophe" which could lead to the loss of 11,000 jobs by 2010 and \$1 billion loss of gross state product. "That is a bigger crisis than the State Bank and closure of Mitsubishi Motors," he told the rally.

Readers divided on snubbing water curbs

A third of AdelaideNow readers who voted in a poll said they would break water restrictions to save their gardens as continue to temperatures soar. From about 800 votes registered by 3pm, 34 per cent said they would break the water restrictions, while the same percentage said they would stick to the guidelines. The remaining 30 per cent said they would use grey water and rainwater on their gardens. One AdelaideNow reader, Sharon of Adelaide, questioned why residents would break restrictions for their gardens. "I can't believe currently that 34% of respondents would break water restrictions to water their gardens. Your garden won't save you when there is no water to drink, my friends," she said. The responses are in the wake of forecasts by the Bureau of Meteorology showing Adelaide could have a record-breaking string of 30C-plus days. Senior forecaster Graham Cowan said the number of hot days with a maximum temperature above 30C was likely to continue into next week. Today's expected top temperature will be 34C. Tomorrow is expected to reach 35C, ahead of 33C on Saturday and 36C on Sunday. Monday will reach 37, while 39C has been forecast for Tuesday. Adelaide could experience 11 hot days in a row, which would be a new record. While it is not a true heat wave - defined as five days or more in a row of 35C or higher, or three consecutive days of 40C or higher - people will find it a particularly hot period for spring, Mr Cowan said. Last November 11 days in total were above 30 degrees.

Cooler weather on the way

Bureau of Meteorology meteorologist Simon Timke said the first sign of cooler weather is due on Tuesday. "A cooler change is coming through late on Tuesday. Wednesday will be cooler with a temperature in the 20s," he said. This could be an early warning sign of a long, hot summer as the three-month outlook for December, January and February forecasts temperatures will be higher than normal across the state. The bureau believes there is a 60-70 per cent chance regions across south eastern Australia, including the southern half of South Australia, will have above average median temperatures this summer. "There is no denying we are seeing a rise in maximum temperature," Mr Cowan said.

Take care in the sun

The Cancer Council of SA said people should be vigilant about sun protection when out in the sun over the next few days. SunSmart co-ordinator Joanne Rayner said people should check the UV index daily. "Take extra care with your skin when the UV index is three or above," Ms Rayner said. "The SunSmart UV Alert shows the times of the day that UV radiation is 3 and above and skin protection is needed. "Heat also triggers people to start looking at freckles and moles. They should be checked as soon as possible."

FarmOnLine

Water summit in Canberra today

Australia's leading scientists in climate change and water research will meet in Canberra today and Friday to discuss the consequences of climate change on Australia's water resources. Organised by CSIRO, the two day *Cutting Edge Science Symposium - Hydrological Consequences of Climate Change* will focus on:

- The link between climate and water.
 - Our scientific understanding of how future climate projections are likely to affect water availability in Australia.
- "Research is revealing that Australia's water resources are highly vulnerable to climate change," says symposium organiser Dr Ian Prosser, science director of the Water for a Healthy Country Flagship.
- "Climate change is likely to increase pressure on water resources, not only on supply but also on associated natural hazards such as floods and droughts," he says. "Our capacity to predict and manage these events requires an improved understanding of how climate influences hydrology and how Australia's hydrological systems, such as evaporation, vegetation and water movement to our oceans, influence our climate." The symposium will be opened by Australia's chief scientist Dr Jim Peacock. SOURCE: Breaking national news from Rural Press National Agricultural News Bureau, Canberra.

Coalition promises more flows for Snowy

The Minister for the Environment and Water Resources, Malcolm Turnbull, and Federal Member for Eden-Monaro, Gary Nairn, today announced that a re-elected Coalition Government will deliver additional investments to recover more environmental flows for the Snowy River. Mr. Turnbull said a re-elected Coalition Government will commit \$50 million from the National Plan for Water Security for the additional flows. "This funding will allow Water for Rivers to deliver water efficiency projects, ensuring that the commitment to return 21 per cent of natural flows to the Snowy River is met once and for all," Mr. Turnbull said. He said, a re-elected Coalition Government will ask the New South Wales and Victorian Governments to contribute additional funding and deliver on their previous obligations, such as establishing the Snowy Scientific Committee. And part of this commitment will mean seeking to establish a permanent environment flow also for the Mowamba River. The Federal Member for Eden-Monaro, Gary Nairn, said that the current drought highlighted the importance of this additional funding to help secure these critical environmental flows for the river. He said, "The Snowy River is an icon, not just nationally but locally. Besides improving the health of the river, this investment will also secure the future of the Snowy River as an important natural asset for the local community."

Drought worsens in NSW

The drought declared area in NSW has risen to 81.9pc of the State for November, despite some locally heavy rain in recent weeks. Parliamentary Secretary to the Minister for Primary Industries, Steve Whan, said the figure was up from 78.6pc for October. The area considered satisfactory, dropped from 9.3pc to 7.6pc and the marginal area from 12.1pc to 10.5pc. He said the below average rain which continued through October had a "devastating" impact on crops and pasture conditions. Mr. Whan said, "And unless November is wetter than average, 2006-07 will be one of the few instances in history where the Murray-Darling Basin has suffered a winter-spring drought in successive years. "Winter crop production is forecast at 2.82 million tonnes, down almost 40pc from mid-September estimates of 4.67m tonnes." Rural Affairs Minister, Tony Kelly, said the Government had boosted support for regional communities affected by drought through continuation of the business drought assistance payroll tax relief program. The Government would renew the scheme with applications for this financial year to be accepted until June 30, 2009.

Rain lifts SA River Murray allocations

SA Minister for the River Murray Karlene Maywald says irrigation allocations for 2007-08 will increase to at least 22pc from December 1, based on the latest assessment from the Murray-Darling Basin Commission (MDBC).

The commission reported an increase in available water across the basin, because of:

- Inflows to the River Murray system in October 2007 were higher than previously forecast.
- Slightly more water will be released into the system from the Snowy Mountains Scheme.
- The commission's forecast for minimum inflows in November 2007 has improved, based on recent rain across the basin from 10-100 millimetres.

Minister Maywald says the total volume of water available for diversion across the basin has passed 1500 gigalitres. This is a key threshold in determining South Australia's share of water for irrigation and dilution flows under the revised water sharing arrangements agreed to by Murray-Darling Basin states earlier this year. She says the commission advised her that there is sufficient improvement to increase allocations from the current 16pc.

“Total available water will again be reviewed at the beginning of December once we have the commission’s final assessment of November inflows. “If further rainfall and inflows are received in the basin before the end of November, allocations will again be updated. “While this increase will be welcomed by irrigators it is still not enough to keep all permanent plantings alive and is well below the 60 percent, irrigators received in 2006-07.” Minister Maywald says conditions are expected to be hot and dry over summer with the Bureau of Meteorology forecasting only a 45-55 percent chance of receiving above-average rain before January 2008, while there is a 65-70pc chance of temperatures being hotter than normal. “Murray-Darling Basin storages peaked at 23pc of capacity during October, and are now currently at 22pc,” she said. “Flow to South Australia has now been increased to 3400 megalitres per day to help reduce salinity impacts and the likelihood of algal blooms occurring. “The increase to River Murray water allocations will not impact domestic water restrictions and Adelaide consumers are still tracking well against the target consumption line for 2007-08.” SOURCE: *Stock Journal*, SA.

News.com

Emissions 'rising faster'

World greenhouse gas emissions are rising faster and impacts on oceans and the atmosphere are worse than scientists thought. A review of scientific papers by Graeme Pearman and the Climate Adaptation Science and Policy Initiative at the University of Melbourne has found worst-case scenarios produced by the Intergovernmental Panel on Climate Change may have been too conservative.

Emissions accelerating

Dr Pearman, former head of the CSIRO Division of Atmospheric Research, released a report yesterday showing carbon dioxide emissions are accelerating as is the melting of Arctic and Antarctic ice. He told a Sydney conference organised by the Centre for Economic Development Australia that carbon dioxide emissions growth exceeded IPCC's most intensive scenarios.

Gases already at dangerous levels

Dr Pearman and the university were asked by the Climate Institute to review papers not included in the latest IPCC reports. Their report says greenhouse gases are already at a dangerous level and increasing at such an extent they would impact on the Earth's biogeophysical systems, animals and plants. Dr Pearman said yesterday he did not want to scaremonger but governments were not reacting quickly enough to the situation. "They talk about climate change being on the radar. But it's not, it's right outside the window," Dr Pearman said. "It's already happening. It's a story we didn't really want to hear and we don't have decades to respond." It comes as governments are due to discuss climate change at next month's United Nations climate conference in Bali.

Warming up by 0.8C per century

The report found average global warming was 0.8C over the past century, with recent warming growing at 0.2C per decade. If continued, such a trend would lead to a temperature rise of about 3C by the end of this century relative to pre-industrial temperatures. Latest observations show decreases in Arctic sea ice are occurring faster than any climate model projections.

Ice-free Arctic Ocean by 2050

Models had suggested that in a business-as-usual scenario, an ice-free Arctic Ocean might occur from 2050 to 2100 or beyond. "But observation, if extrapolated on the basis of current trends, suggests a much earlier ice-free Arctic," the report says. Warming in the Antarctic - one of the most rapidly warming regions of the planet - is about 0.5C per decade, compared to the global rate of 0.2C.

Sea level rises revised

IPCC projections may also have underestimated sea level rises. One prediction is for a rise of 0.5m to 1.4m by 2100, much higher than the IPCC expects. Projected warming of 2C to 3C "could yield sea level rise of several metres per century with eventual rise of tens of metres, enough to transform global coastlines". Dr Pearman said, although people might see it as alarmist, warming and cooling had occurred regularly in the Earth's history. An example of how radical change could be was that sea levels had changed 80m since the last ice age 25,000 years ago when ice covered nearly half the planet.

Ozone hole getting smaller, say scientists

The ozone layer is on track to a full recovery, with the latest sets of satellite images showing the hole is shrinking, scientists say. "Apart from the (unusual) 2002 hole, this is the smallest hole for at least a decade," CSIRO marine and atmospheric scientist Paul Fraser said. The hole in the ozone layer has been progressively shrinking since the phase-out of chlorofluorocarbons (CFCs) and halon gases in the 1990s. "I think our long term prediction is still basically out to 2060 before we'll get long-term recovery," Dr Fraser said. The delay is due to the long life of CFCs and halons, which can remain in the atmosphere for several decades.

"We've got this large reservoir of CFCs and halons sitting in the atmosphere, slowly leaking into the stratosphere where it does the ozone destruction," Dr Fraser said. "The slow leakage means it will around for a long time. We're paying for the sins of the past." Increased levels of greenhouse gases were likely to delay an ozone recovery by a few decades, he said. "One of the less obvious impacts (of increased greenhouse gases) is the cooling in the stratosphere, which leads to much more efficient ozone destruction processes," Dr Fraser said. "We think that the good work we've done might be delayed by 10 to 20 years," Dr Fraser said.

NRM Quickie! Natural Heritage Trust - LGA

Disaster control needs swift action

In the November edition of leading journal Science, an international team of experts argues that governments and policymakers worldwide need to take swift action now to minimise mounting losses due to future natural disasters - regardless of the effect of climate change on our global weather patterns. Australian Ryan Crompton of Risk Frontiers, a natural hazards research centre at Macquarie University, worked with colleagues from the Netherlands, Germany and the US on the paper, which offers three recommendations to decision makers: improve disaster data collection; expand the role of disaster risk reduction in adaptation; and develop and apply innovative finance mechanisms to protect against losses. "According to data collected by Munich Re, global inflation adjusted economic costs of weather-related disasters have increased from an annual average of US\$8.9 billion between 1977 and 1986, to US\$45.1 billion between 1997 and 2006," Crompton says. "Even if extreme weather doesn't increase - and the IPCC says it likely will - in coming decades we will see losses skyrocketing due to societal change and economic development. The research team argues that although greenhouse gas emission reductions are of central importance, they cannot decrease hazard risk for decades, and so must be complemented by other policy changes if staggering losses are to be avoided. "One of the pressing needs is for better data collection," Crompton says. "An open-source, peer-reviewed database would enable the scientific community to study worldwide disasters - and potentially even offer the prospect of an early-warning system for changes in the earth-climate system. "Finally, some innovative insurance products have been developed and expanded recently, such as catastrophe bonds which cover flood risk in the UK, and there is a real need for more of this as risk becomes increasingly more concentrated." (Extracts from Science Alert article, 7 November 2007)

Millions of jobs at risk from climate change

Millions of jobs worldwide could be casualties of climate change, though efforts to mitigate its effects will also create huge new waves of employment, United Nations officials said on Monday. The heads of the UN climate and weather agencies told diplomats that global warming could decimate the world fisheries sector, threaten the tourism industry and cause widespread job losses among those displaced by its impacts. At the same time, UN Environment Programme (UNEP) Executive Director Achim Steiner said scores of new jobs would be created in the environment technology sector as countries work to avoid and lessen the effects of climate change. In the United States, there are already more environmental workers than those in the pharmaceutical industry, and in Germany environmental employment will eclipse the auto sector by 2020, Steiner said. "Global warming and the need to respond to climate change is becoming a major impulse for innovation and efficiency gains," he told diplomats, trade unionists and business representatives at the International Labour Organisation (ILO). Such trends are already well under way, World Meteorological Organisation (WMO) Secretary-General Michel Jarraud told the session at the ILO's Geneva headquarters. "Warming is taking place even faster than the models predicted," he said, signalling major adjustments ahead for both businesses and workers whose livelihoods may be at risk. Matthew Farrow of the Confederation of British Industry [said] "We are talking about a major change, as substantial as what resulted in the industrial revolution," he told the forum. (Extracts from Planet Ark topical, 13 November 2007)

Top UN official warns against inaction on climate

Addressing the UN's climate panel, joint winners of the 2007 Nobel Peace Prize along with former US Vice President Al Gore, Yvo de Boer, head of the UN Framework Convention on Climate Change, said the message to world leaders was clear. "Failure to recognise the urgency of this message and to act on it would be nothing less than criminally irresponsible," said de Boer. Ministers will try to approve a two-year timetable to work out a successor to the UN's Kyoto Protocol, the main UN plan to curb warming until 2012. The treaty obliges 36 industrial nations to cut emissions by at least 5 percent below 1990 levels by 2008-12. A new deal would aim to involve outsiders led by the United States and China, the world's top two emitters which have no Kyoto goals. There is still time to slow warming, the IPCC draft says, and it need not cost too much. Even the toughest targets for curbing emissions would cost less than 0.12 percent per year of world economic output. (Extracts from Planet Ark topical, 13 November 2007)

Humans threaten sandy beaches

Residents of southeast Queensland could be loving their sandy beaches to death, according to researchers at the University of the Sunshine Coast.

A team of USC scientists, led by Dr Thomas Schlacher, have found that human activities like 4WD vehicle use, dune destruction and overcrowding are placing escalating pressure on coastal ecosystems. Dr Schlacher said this posed a substantial threat to the region's prime recreational asset – its sandy beaches – and also to the regional economy. "Beaches are increasingly becoming trapped in a 'coastal squeeze' between burgeoning human populations from the land and the effects of global climate change from the sea," he said. "Society's interventions to combat changes in beach environments, such as erosion and shoreline retreat, can result in severe ecological impacts and loss of biodiversity. "The weight of evidence of information obtained to date points towards substantial detrimental impacts on key ecological resources, which presents a formidable challenge to sustainable uses of our coasts in the future. "The regional economy relies, to a great extent, on beaches as the prime recreational assets, yet human impacts and accelerated beach erosion due to global climate change could destroy the very foundation on which this region relies." Dr Schlacher said the research by USC, in collaboration with Noosa and Redlands shires and regional natural resource management organisations, could assist in the continued existence of beaches as functional ecosystems. (Extracts from Science Alert article, 14 November 2007)

Drought

The Bureau of Meteorology now admits that its rain forecasts earlier this year were optimistic. This is because they were based on the weather of the last 100 years and did not take account of the fact that we are moving into a new climate regime. Dr Coughlan, of the Bureau, says "we can't predict when this drought will end". And Ross Young, of the Water Services Association of Australia says we are now moving towards "permanent drought". With half of Australia's land in drought and farmers under financial and water stress, food prices are bound to rise. And - given that we have 20 years of climate change effects built into the system - the situation is going to take an almighty effort to turn around. (Extract from Get Farming Drought Update article, 13 November 2007)

Carbon Trading: finding the right number of trees to capture success

Climate change and carbon capture may dominate political debates, but according to an internationally regarded biologist at the University of Western Sydney, decision-makers must turn to science to find the solutions. Professor David Ellsworth is studying the impact rising atmospheric carbon dioxide levels are having on Australian native trees and their ability to act as a carbon sink. "Native forests are emerging as a vital defence against accelerating greenhouse gases by offsetting carbon emissions. Carbon credits for planting or preserving native forests are also potentially very lucrative. It is essential we accurately establish the amount of carbon native trees can capture in a changing climate, and the impact planting more trees will have on the surrounding environment," Professor Ellsworth says. "There is a risk that without closer scrutiny, a benefit for the global environment may cause new local environmental challenges. Plants much larger than the grasses now covering the grazing land could increase the demand for water - adversely impacting groundwater and yield from nearby rivers and dams." However, Professor Ellsworth, who has studied the impact of rising atmospheric carbon dioxide on plants in some of the world's largest and most complex scientific projects, believes nature may provide ways for the extra plants to capture carbon with minimal impact on water supplies. (Extracts from UWS latest news article, 25 October 2007)

Healthy planet, places and people

Research Australia brought a panel of ten scientists together to profile Australian health and medical research into environmental health issues that are likely to emerge or worsen due to climate change. This report covers emerging research in areas such as:

- The impact of climate change on the spread of infectious disease
- Climate change, water supplies and health
- Asthma and climate change
- The effects of climate change on mental health
- The relationship between energy use, climate change and obesity
- Heat extremes and mortality

(Extract from APO article, 31 October 2007)

Adelaide Advertiser

Irrigators need to 'get real'

Riverland irrigators need to "get real" about the water crisis and start looking at growing different crops, Wentworth Group scientist Peter Cullen says. As Murray fruit growers yesterday staged a city protest over water allocations cut because of the drought, the former thinker-in-residence said annual crops that could be planned to suit conditions should replace permanent plantings such as vines and citrus. Professor Cullen said irrigators would have to adjust, even using some annual crops demonised as water wasting. "If the water is less reliable, you will probably have less area of permanent plantings," he said.

"And you'll get more annual crops, so there will be more rice and cotton and more annual pasture because farmers will make decisions when they can see what water is available." He thinks the Riverland will survive on irrigation from the Murray, "but it might be less and it might be a different sort of irrigation". "These farmers have had reliable water for 70 or 80 years. I don't blame people for not foreseeing this," Professor Cullen said. He said Wednesday's decision by the State Government to increase irrigators' allocations to 22 per cent from 16 was a "tough call". He said irrigators were ignoring the lack of rainfall. "Get real. Everyone is short of water," he said. "The inflows into the Murray are about half what they were 10 years ago. What do they expect governments to do, get out there and do rain dances?" Professor Cullen said if irrigators wanted more water, they should "get out there and buy it". "That's why we have a water market; so those that have got the most valuable crops will be able to buy the water and take it away from others," he said. Professor Cullen is in Adelaide for tonight's Schultz Oration on Confronting Water Scarcity in SA.

Aussies worst CO2 polluters

Australians are the world's worst greenhouse gas polluters per capita, producing five times as much carbon dioxide (CO₂) from power generation as China, a global study says. The U.S. was second with eight tonnes of CO₂ per head - 16 times more than that of India. The U.S. also produced the most emissions in total, followed by China. The Carbon Monitoring for Action (CARMA) website is the first global inventory of emissions and looks at 50,000 power stations. Its data was compiled by the Centre for Global Development, a U.S. think-tank. Carma says that while U.S. power plants emit the most CO₂, releasing 2.5 billion tonnes into the atmosphere each year, Australian power stations are the least efficient on a per capita basis, with emissions of 10 tonnes, compared with 8.2 tonnes in the U.S. China's power sector emits the second-highest total amount of CO₂, pumping 2.4 billion tonnes into the atmosphere annually. However, its emissions are only one fifth of Australia's when measured on a per capita basis. The United Kingdom's 192 million tonnes make it the ninth highest emitter, with per capita CO₂ emissions of 3.2 tonnes. The nation's largest power station, the coal-fired Drax plant, is deemed to be the 23rd most polluting plant in the world. Kevin Ummel, a research assistant at the Centre for Global Development, hoped the online inventory would help the push towards a low carbon future. "The experience of people in the environmental field has been that supplying the public and markets with information that they did not have has often led to improvements in environmental quality," he told BBC News. "There is no reason why this could not happen for carbon emissions." He said the data for power stations in the U.S., Canada, Europe and India came from official, verified reports. For the power plants that did not have robust reports, Mr Ummel said a model was used to calculate the volume of emissions. "In this website, we do not push a particular agenda or outcome," explained Mr Ummel.

The Australian

Captains want clarity on carbon

The head of Xstrata Coal says the federal Government must provide clarity on a proposed carbon trading scheme. This is so that businesses can take early action on lowering carbon emissions. Xstrata Coal chief executive Peter Coates said by the middle of next year Australian businesses would need a solid picture of the proposed "cap and trade" carbon scheme put forward by the Prime Minister's Emissions Trading Task Group. "By mid-next year we need to be able to define an emissions tax, we need to know what the early cap (on emissions) will be, so we can start working on early action properly," Mr Coates told a climate change conference organised by the Committee for Economic Development of Australia. "At the moment there is clearly no incentive for early action," Mr Coates said. Visy recycling division manager Steven Boland said it was hard for business to make investment decisions when the proposed cap and trade scheme was not clearly defined. "We are preparing, but blindly," Mr Boland said. The research and development of new clean technologies is a key issue for business, with some of those technologies expected not to be on the market until at least 2020. Mr Coates and Mr Boland were part of a panel of business heavyweights, including those from the mining sectors, who said business needed to play a continuing role in fighting climate change, regardless of the outcome of the federal election. Alcoa Australian managing director Wayne Osborn said future governments needed to engage in an open dialogue with the business community, since business had made "a very substantial and a good-faith contribution to dealing with climate change". The panel agreed that climate change was not just an environmental issue, but an economic one, and that businesses needed a clear financial incentive to act early on the issue. Xstrata said it had already committed \$250 million to the research and development of carbon capture and storage. Environment Business Australia chief executive Fiona Wain said clean coal and carbon storage must be developed along with other clean-energy technologies, since coal as a power source would be around for the next 20 to 30 years. A report by the International Energy Agency published yesterday said coal usage for energy production would increase by 73 per cent by 2030. Ms Wain said that without solving the "coal problem the carbon dioxide problem would not be solved either". *AAP*

Adelaide.now**Mannum ferry left high and dry**

Falling water levels in the River Murray will force the closure of the upstream Mannum ferry within the next week, the Transport Department announced yesterday. Other ferry services, at Tailem Bend, Walker Flat, Purnong and Swan Reach, will also be affected by vehicle weight restrictions which will be enforced from next month. The department's director of road and traffic management, Flett Steele, yesterday said the upstream Mannum car ferry service had to be suspended for the safety of river users as water levels dropped below the level of access ramps. "Mannum upstream ferry will have to close," Mr Steele said. "It really depends on the rate of evaporation, but it will close sometime within the next week. "Fortunately, the downstream service remains viable (because) the ramp that the ferry goes on downstream is much longer. "However, we must be prepared for the potential impacts on other ferries downstream of Lock 1 (at Blanchetown)." Mr Steele said a 12-tonne vehicle weight limit would be introduced to other River Murray ferry services because of the falling water levels. "Vehicles above the 12-tonne weight limit will need to make contingency plans," he said. "In December, the Tailem Bend ferry will have to work to the 12-tonne weight restriction and then, in January some time, both the Walker Flat and Purnong ferries, and later the ferry at Swan Reach." Vehicles over the 12-tonne limit will have to use Swanport or Blanchetown bridges. At this stage, services at Wellington and Narrung will continue unrestricted and ferry services above Lock 1 will not be affected. Mr Steele said the department was working with emergency services, primary producers and school bus operators. "All are working through contingency plans," he said. A spokesman for state Transport Minister Patrick Conlon did not return phone calls yesterday afternoon.

Drought-stricken growers march on Parliament

A determined group of about 50 Riverland producers took their protest against drastic cutbacks in irrigation allocations to Parliament House today. Many said it was the end of their livelihoods – and of their communities. After heckling their local member, River Murray Minister Karlene Maywald, they shouted for Premier Mike Rann to address their concerns, particularly on short-term funding. When Mr Rann did not appear, they took their protest into the House for Question Time. They stayed about 30 minutes, quietly watched proceedings, and then left. State Opposition Leader Martin Hamilton-Smith said he would ask Mr Rann to answer the concerns by SA growers. Bill Lakakis, a spokesman for the Murray Community Survival Group, said unless more water and drought relief funding became available "we will end up living in a dust bowl". "It will destroy the livelihood of Riverland communities, as it will everyone living along the Murray." The State Government this week announced a modest rise in irrigation allocations for this season – to about 22 per cent from December 1. Loxton resident Ros McLintock, from the protest group, said the it was "too much of a coincidence" water allocations had slightly increased, given the rising protests around election time. "This release of water was in direct response to the dire situation we are in," she said. "We are marching on Parliament House and have asked Premier Mike Rann to be honest and tell us what the grand plan for water is. "We need water to get through this summer and then we need to address the long-term issues." Greens Senate candidate Sarah Hanson-Young said 30 years or more of over-allocations in the Murray-Darling Basin had led to the crisis. Another Senate candidate, SA politician Nick Xenophon, said the drought-affected water allocations to the Riverland was a "catastrophe" which could lead to the loss of 11,000 jobs by 2010 and \$1 billion loss of gross state product. "That is a bigger crisis than the State Bank and closure of Mitsubishi Motors," he told the rally.

Drought whacks growth

South Australia's economy grew at the slowest rate of any state in the 2006-07 financial year, data published yesterday shows. SA's agriculture, forestry and fishing sector was down a huge 38.5 per cent compared to the previous year - from \$3.5 billion to \$2.2 billion, the Australian Bureau of Statistics reported. This restricted SA to overall growth of just 0.8 per cent in gross state product - which was put at \$65.7 billion in chain volume terms. The 0.8 per cent growth lagged national growth of 3.2 per cent which was led by resource-rich Western Australia on 6.3 per cent. Drought had a major impact, Business SA chief executive officer Peter Vaughan said. "Agriculture contributes significantly to the SA economy and therefore the drought has had a detrimental impact," he said. "This highlights the importance of fast-tracking a desalination plant in this state in an attempt to solve the looming water crisis." A spokeswoman for Treasurer Kevin Foley said the gross state product growth was "similar" to the Budget estimate of 1 per cent. "It is important to note that the non-farm sector recorded solid growth of 3.1 per cent in 2006-07," the Treasurer's spokeswoman said. "The SA economy continues to diversify and in the future we will see increasing growth in the mining and defence sectors." However, Opposition Leader Martin Hamilton-Smith noted national growth outpaced SA growth in 12 of 18 industry categories. "We need to be looking at our performance relative to other states," he said.

He was concerned business investment grew only 1 per cent in SA compared to 7 per cent nationally and by manufacturing, up by only 0.2 per cent. Best sectors for growth were construction (up 10.3 per cent to \$4 billion) and finance and insurance (up 8.6 per cent to \$4.1 billion).

19th

FarmOnLine

Farmers left to dry on climate change

One of the main differentiations for voters at this election is climate change and the way the major parties are dealing with it, and Labor leader, Kevin Rudd believes farmers have been let down by a Government which has poorly prepared the sector for climate change. Mr. Rudd said the Howard Government had boasted about its achievements on Australian carbon emissions while the bulk of that contribution "has come from the work of farmers changing their practices on land clearing". "So Australian primary producers have actually borne the lion's share of the burden in recent years on this point," Mr. Rudd said. "Rural Australia has been badly served again by a bunch of climate change skeptics in the government who have effectively stalled the preparation of the rural economy and the general economy to deal with the climate change challenge. "You can't just stick your head in the sand and expect these problems to be solved - you've got to tackle them head-on." Mr. Rudd said Labor has a \$60 million climate change adaptation partnerships program on the table for farmers to help them capitalise on the opportunities arising from climate change, which would include on-farm trials to better understand soil sequestration and greenhouse gas emissions from farms. "We've also got a \$55m climate change adjustment program and a \$15m climate change and productivity research program and a lot of that work we've prepared by way of policy having consulted with the National Farmers Federation. "So that's Labor's \$130m climate change and primary industries policy, and it's yet to be matched by the Howard Government." Mr. Rudd said clean green energy and clean green food must be Labor's two continuing objectives for the country. "But where the Howard Government has been negligent in preparing farmers for the challenges of climate change and the intensification of drought conditions... means the Government has effectively allowed farmers to swing in the breeze while not taking appropriate national and international climate change actions to deal with the impact that this will have on our economy. "Mr. Howard and Mr. Vaile have been touring round the place warning of the economic risks of acting on climate change. "They have never been upfront or honest with rural Australia on the economic risks of not acting on climate change."

Adelaide.now

Dying river 'betrayed'

The dying River Murray is being ignored by the major parties in the federal election campaign, despite widespread drought and renewed climate change warnings. The Coalition and Labor have yet to declare any significant policy for the Murray during five weeks of campaigning, even though the river was a key issue in the 2004 poll. Scientists and conservation experts say the major parties must wake up and should be proposing drastic policy initiatives. The scientists say the need for action is highlighted by the release in Spain yesterday of an international report on global warming, which predicts a 4C increase in temperatures by the end of the century and water shortages in Australia. Professor Barry Brook, of Adelaide University, said the report showed Australia would have longer dry periods and this meant "the recharge rate for the Murray won't be the same this century as it was last century". "It doesn't bode well for industries which rely on the river for their water supplies," Professor Brook said. "This is not a once-in-100 years anomaly. This is something we could be facing every decade." As the Murray-Darling basin suffers through what is now recognised as the worst drought in more than a century:

THE Australian Conservation Foundation expressed alarm at the lack of debate and said both parties needed to show they were "fair dinkum".

PRIME Minister John Howard blamed lack of action on the Victorian Government for failing to support his \$10 billion Murray Darling rescue plan.

OPPOSITION Leader Kevin Rudd said Labor had put forward a \$1 billion urban water plan which would help provide measures such as desalination plants and would help meet the challenges facing SA.

WENTWORTH Group scientist Professor Peter Cullen called for all of the \$3 billion earmarked for water entitlements in the rescue package to be spent in the next term of Government.

FERRIES across the Murray are about to be closed because of low river levels.

Mr Howard said he thought it was a tragedy that a plan that everybody - including all the experts - recognised had a long-term answer to the problem, and that the Commonwealth was prepared to pay for, was being held up by one state.

Mr Rudd said everything possible needed to be done to assist SA to secure long-term water supplies.

ACF executive director Don Henry said both parties needed to show they were "fair dinkum" on one of the most crucial issues facing SA.

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The foundation released its election scorecard four weeks ago, which asked for 1500 gegalitres of water a year to be provided for the environment by 2014, in addition to the Living Murray's quota of 500 gegalitres, for the River Murray to have a moderate chance of restoring it to health. Mr Henry said it was not enough that both parties supported the \$10 billion national plan. "South Australia should be doing a 'please explain immediately' to both major parties," he said. "We're talking about the future of Adelaide's drinking water supply, the wetlands, the river red gums, tourism and drinking water for regional towns along the Murray." He said hardly any of the funds to buy back entitlements had been allocated to be spent in the next term of Government and by the time it did, the environment would have suffered too much to recover. He said at least half of the funds should be fast-tracked to be spent by 2010. "What we need is really fast action," he said. "Where is the urgency? Where is the commitment?" Professor Cullen said implementation of initiatives had "been slower than we all would have liked" and it was possible the election had held up its progression. "I think it's been obvious for 12 months that the Murray-Darling Basin is running out of water," he said. He said all water bought back from entitlements should be provided only to the environment, rather than the 50 per cent currently proposed.

Ferry aground for first time in 71 years

IN just days, ferry driver Faye Horstmann will be forced to halt a Mannum ferry because the River Murray has fallen more than 1m below its usual level. Water continues to recede from the river's edge in the town, meaning the ferry will soon be unable to dock safely without sinking into the riverbed. So, for the first time since 1936, when locks and weirs were introduced to the Murray system, the Transport Department will close one of the town's two ferries. The SA Water website says the level of the River Murray downstream from Lock 1 is 12cm. Chris Marriott, who owns Breeze Hire in Mannum, said this was about 1.45m lower than normal. He warned that the ferry closure would cause inconvenience for tourists. "This has already caused problems but now they have decided to close one of the ferries, it is going to put enormous pressure on the second ferry and the ferry operators," he said.

Climate right for Murray commitment

The alarm bells about the river's health have only grown louder, despite grand promises and plans. During the 2004 election campaign, the Murray was a big issue. Prime Minister John Howard unveiled a \$2 billion water plan. Labor vowed to add 1500 gegalitres to the river's flow, including 450 gegalitres within three years. Since then, significant parts of Australia have been gripped by record drought. Flows into the Murray catchment and in the river itself are at record lows, with no prospect of relief in the short term. Adelaide, which relies heavily on the Murray for water, is enduring harsh water restrictions. The livelihood of Riverland irrigators is under extreme pressure, because they simply do not have enough, if any, water for their orchards and crops. Since the 2004 election, climate change has become a defining global issue. It has become widely recognised that dramatic changes must be made swiftly to prevent potentially catastrophic changes to the environment. Yet, amid this backdrop, both of Australia's major political parties have effectively ignored the River Murray during five weeks of campaigning for the November 24 poll. Mr Howard's \$10 billion plan for national control of the Murray/Darling Basin and environmental improvements was torpedoed by election-year politics. State Labor leaders, spearheaded by Victoria, thwarted any realistic prospect of the federal funds being unlocked. Opposition Leader Kevin Rudd has chosen to look on glibly, too afraid of being wedged by Mr Howard to use his authority to force change in the Murray's interest. Mr Howard, however, should take his share of blame. For more than 11 years he has been unable to use the authority of the highest job in the land to achieve enduring change to save the river. His \$10 billion Murray takeover plan, released in January, had many virtues. But there were questions over the costings and whether Mr Howard had merely cobbled something together to give him a big hit at the start of an election year. Time is running out. There are only five days of campaigning left. It is time for both major parties to give some genuine attention to the River Murray. Tragically, it may be too late. The Murray might already be in terminal decline. But South Australia in particular cannot afford to give up on the river, which is a lifeline for the state. There are five seats in SA which are likely to heavily influence the outcome of the election. Voters across the state – particularly in the critical marginal seats – should carefully weigh the policies of both major parties concerning the River Murray. Now is the time for South Australians to make their voices heard on an issue of critical importance to the state's future. It is a chance which might not come again.

The Australian

Key Lib backs Kyoto signing

NSW opposition energy spokesman Peter Debnam has contradicted Coalition climate policy, saying Australia should have signed the Kyoto protocol long ago. His stance puts him at loggerheads with Prime Minister John Howard, who warmly endorsed Mr Debnam in his failed bid earlier this year to become NSW premier at the state election. The

former NSW Liberal leader today told the NSW Energy Summit that Australian progress on developing clean energy had been distracted by the prolonged debate about ratifying the Kyoto protocol on climate change.

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"I wish we had ratified Kyoto long ago and then led the world with bold initiatives in clean energy," he told the summit. Opposition Leader Kevin Rudd meanwhile is refusing to back Peter Garrett as his environment minister if Labor wins government. Mr Rudd today continued to hammer the message that the government had failed to take action on global warming. If Labor wins government on November 24, Mr Rudd has said he will attend the United Nations climate change conference in Bali in early December. But asked today whether Mr Garrett would be by his side as environment minister Mr Rudd indicated that apart from a few key frontbench positions that decision would be made when and if Labor won. "With all our frontbenchers, they're doing a fantastic job, including Peter," he told reporters. "He's a believer that action needs to be taken (on climate change)." Mr Rudd said most of the frontbench decisions would be made after next Saturday's poll. "That will be based entirely on the performance of the team in the lead-up to the election and who is elected at the election," Mr Rudd said. Mr Rudd has only confirmed that treasury spokesman Wayne Swan, industrial relations spokeswoman Julia Gillard and finance spokesman Lindsay Tanner would keep their portfolios, maintaining the core of Labor's economic team. Greens leader Bob Brown has attacked environmental scientist Dr Tim Flannery for endorsing Coalition Environment Minister Malcolm Turnbull. In The Age newspaper today the Australian of the Year says he would vote for Mr Turnbull, and that Federal Parliament needs more people like him to tackle climate change. Senator Brown says he cannot understand the endorsement. "How Tim can support a Minister who's backed a pulp mill which is going to keep 200,000 hectares of forest ... to be logged and burnt over the next 20 years is beyond me," he said. After his speech Mr Debnam said he hoped what he said would provoke debate, and for good measure he added another contrary view about nuclear energy. Federal Liberals are supportive of a nuclear energy option for Australia. But the former NSW Liberal leader said nuclear power "is simply not going to happen in Australia and it shouldn't". "After looking at community concerns, construction costs and long-term decommissioning and storage costs, it is clear for Australia that renewables beat nuclear," Mr Debnam said. He said achieving a renewable energy replacement target of 20 per cent by 2025 "should be a walk in the park". "I think 20 per cent by 2020 is a better target," he said. Mr Debnam also said the term "clean coal" was an oxymoron and Australia should be focused on solar power. He said he wanted proceeds from the impending privatisation of the NSW electricity industry to pay for three large-scale solar generators, not coal-fired power stations. Outside the summit, Mr Debnam denied he was causing trouble for his federal colleagues ahead of Saturday's election. "I think the community wants people to say: 'Look, get real' and NSW is the biggest problem," he told reporters. "All I'm saying is once we get past the federal election let's focus on NSW because they are about to take up to \$15 billion (from the privatisation of electricity) and blow it." Mr Debnam predicted the NSW Labor government would accelerate its plans to privatise the state's electricity after the federal election and complete the process, banking a multi-billion windfall, within the next two years.

Rudd vows to take charge on climate change

Kevin Rudd yesterday hailed the UN's latest climate change warning as a "call to arms", saying he would personally lead Australia's delegation to the crucial Bali climate conference next month if he won government. The fourth report from the UN's Intergovernmental Panel on Climate Change, released in Spain on the weekend, says the evidence for climate change is "unequivocal" and there is a 90per cent chance the warming is caused by human activity. It says climate change may bring "abrupt and irreversible" effects such as more heatwaves, melting glaciers and rising sea levels, as well as permanent damage to sites such as the Great Barrier Reef. UN Secretary-General Ban Ki-moon said the climate change already under way was more terrifying than any science fiction movie because it was real. Reaffirming Labor's commitment to immediately ratify the Kyoto Protocol in government, the Opposition Leader said yesterday the world had to act now to tackle climate change. "This is a call to arms for the nation, a call to arms for the world to act now on climate change before it is too late," Mr Rudd said. "This is a core future challenge to the environment and to the economy." Mr Rudd said that if elected he would take charge of the nation's climate change agenda, including leading the delegation to the Bali conference early next month. He said he would travel

Act now to avert greenhouse grief

The world's leading scientists have urged nations to take immediate action on climate change to avoid the "catastrophic" fallout from a warming planet. The fourth report from the UN's Intergovernmental Panel on Climate Change says there is now "unequivocal" evidence of global warming, and warned of "abrupt and irreversible" effects. The report warns that, if unchecked, global warming will spread hunger and disease, put further stress on water resources, cause fiercer storms and more frequent droughts, and could drive up to 70 per cent of plant and animal species to extinction. It warns that by 2020 the Great Barrier Reef and Queensland wet tropics could lose significant biodiversity, and by 2030 water security problems would intensify in the southeast of Australia. The report is the

culmination of the efforts of hundreds of scientists over the past four years, and brings together the findings of three reports released by the IPCC earlier this year.

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Releasing the report in Spain over the weekend, UN Secretary-General Ban Ki-moon said climate change was more terrifying than any science fiction movie because it was real. But Mr Ban said countries could still take action to avert the worst scenarios, and the UN climate change conference in Bali next month provided a "critical opportunity" to move forward. "The world's scientists have spoken clearly and with one voice," Mr Ban said yesterday. "I expect the world's policy-makers to do the same." Australians involved in the report said there was no doubt the climate had warmed over the past 100 years. "Not only are there changes in temperature but these changes in temperature are already affecting many other natural systems," said David Karoly from the School of Earth Sciences, University of Melbourne - and a lead author on the IPCC report. The increase in greenhouse gas emissions had led to marked increases in concentrations of CO₂ and methane, which Professor Karoly said were "not only much higher than they were in 1750, they are unprecedented for at least the last 650,000 years". Neville Nicholls from Monash University's School of Geography and Environmental Science - and a member of the writing team for the report - said the greenhouse gases being pushed into the atmosphere had committed the globe to warming of about 1C, and that could blow out to 4C by the end of the century if no action was taken. "Further warming will put us into uncharted territory regarding heatwaves and deaths," Professor Nicholls said. Barry Brook, director of the Research Institute for Climate Change and Sustainability at the University of Adelaide, said the report was "science policy at its most compelling, with our very future at stake". He said that, under the most stringent mitigation scenario proposed, there was a high confidence that a slew of "catastrophic impacts" would unfold. These included the loss of 30 per cent of species, major coastal flooding, most corals bleached and significant global water stress. "The fossil-fuel intensive business-as-usual scenario runs off the chart, with a disturbingly plausible risk of up to 6.8C-8.6C warming - truly 'game over' for humanity and most other life on this planet," he said. He said there was one bit of good news: "The costs involved in moving fast to address the emissions problem are incredibly small, or perhaps even beneficial overall, and that's before we count the social and environmental cost of not taking action." The report offered dozens of measures for avoiding the worst catastrophes if taken together - at a cost of less than 0.12 per cent of the global economy a year until 2050.

Additional reporting: AP

Desalination plant caught in middle

Victoria's \$3.1 billion desalination plant faces new hurdles, with both sides of federal politics pushing for the project to be subject to strict environmental guidelines and intense public scrutiny before it proceeds. And local Liberal MP Greg Hunt, parliamentary secretary to Foreign Minister Alexander Downer, has written to opponents of the plant saying the Victorian Government should commit to a local ballot before pushing ahead with the plant. The project has become a key issue in the contest for the federal Victorian marginal seat of McMillan, held by the Liberals with a 5 per cent margin, and to a lesser extent, Mr Hunt's nearby seat of Flinders. State Labor has yet to commit to conducting an environmental effects statement before the plant is built near the South Gippsland electorate's town of Wonthaggi. But the Liberal MP for McMillan, Russell Broadbent, and the Labor candidate, Christine Maxfield, are insisting the project be subject to wide public consultation as well as an environmental effects statement. Mr Broadbent, who has raised his concerns directly with federal Environment Minister Malcolm Turnbull, said he would battle to ensure a re-elected Coalition government did not approve the plant unless his conditions were met. He said the desalination plant should be subject to the same level of regulatory scrutiny as the proposed Gunns pulp mill in northern Tasmania. "(If the federal Coalition was re-elected), I'd be opposed to the desal plant and I'd attack that as furiously as I have attacked other positions in the past," he said. However, he said he would find it more difficult to oppose if the state Government consulted and met the environmental criteria. Mr. Turnbull said yesterday the plant "would need to be assessed and meet all the relevant environmental approvals and I would expect that would involve public consultation". Mr. Hunt said the Victorian Government had abandoned sensible plans to free up billions of litres of drinking water by treating the output of Melbourne's main sewage outfall and using it to cool the Latrobe Valley power stations. "Desalination can be part of the solution in Australia, but the priority has to be recycling," he said. Anthony Albanese, federal Labor's infrastructure and water spokesman, said the ALP would consider backing the Victorian plant on certain conditions. "A Rudd Labor government will consider supporting the proposed Victorian desalination plant under our \$1 billion National Urban Water and Desalination Plan if we are satisfied it is consistent with environmental best practice and includes a commitment to being carbon-neutral," he said. Ms Maxfield refused explicitly to express support for the project, and said federal Labor's backing was conditional on wide community consultation, an environmental impact study and the project being carbon-neutral.

Farmers trade water to survive drought

Water trading has helped farmers survive the drought but there is still strong opposition to the resource being traded permanently out of a community, a new report has found.

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Head of the National Water Commission Ken Matthews said the report, *The Economic and Social Impacts of Water Trading*, was a first step in monitoring the trade: "Water trading has helped many people adjust to the drought, and they wouldn't have been able to adjust without it." The report found that water was moving out of old public or collectively owned irrigation systems with shared channels to greenfields sites and private infrastructure. "It has turned out to be more economical to start with a greenfield and to establish an irrigation structure in exactly the way you would do it in the 21st century rather than retro-fitting," Mr Matthews said. "What it illustrates is that some communities, and this is the sort of thing we need to monitor, are likely to be losing water, and some communities are likely to be growing." Under the National Water Initiative, no more than 4 per cent of the water in a region can be traded out in one year. "One of our tasks is to review the effectiveness of that 4 per cent limit," Mr Matthews said. "The NWI was designed to encourage the introduction of water trading, but at the same time there are a number of safety measures that were built into it." The report also found water trading gave farmers greater flexibility and offered a means of managing risk and cash flow, especially in dry times. Brian Peadon manages the Water Exchange, which is essentially a stock exchange for water trading. He said there had been a record number of trades this year, but the volumes were small. "In the last two months, we had traded \$90million worth of water. Our whole season last year was just under \$70million. That is reflecting the value: it is worth five or six times as much as last year." Mr Peadon said many farmers were trading for the first time. "With the scarcity of water, prices have gone to unsustainable levels. The average this season is probably over \$1000 (a megalitre, for a temporary trade) and has traded as high as \$1200/ML, which is pretty ridiculous." He said rice growers in the NSW Murrumbidgee system were not putting in a crop, but were making their income from the temporary trade of their water. "Most of those people don't have the intention of walking away. They will wait this season out, or next, until they do get a decent allocation and that is when they will farm."

Dry 'to doom Murray-Darling'

Another dry winter would leave the Murray-Darling facing doomsday, NSW Liberal senator Bill Heffernan has warned. "If we have another dry year, I don't know what will happen. Wake up Australia - you can't eat cash," he said. Last year was the driest on record, and this year is not much better. Senator Heffernan, who leads a taskforce investigating development of the north, said it would be critical to move agricultural activity to where the rain is falling. "I have farmers - irrigators - ringing me every day asking, 'Where should my sons go for the future, Bill?'," he said. "We need to work to answer that question, we need the science." Peter Cullen, leading water scientist and member of the Wentworth Group, warns that the Murray-Darling is drying out. "With the climate shift and the increasing competition for water, we're probably going to be dealing with about half the water, and it's going to become more variable," he said. "We're going to have a lot more competition for water, from urban, electricity generation, irrigation and so on, and the environment." Murray Darling Basin Commission chief executive Wendy Craik said there was more than a 75 per cent chance the amount of water available next July would be less than this year. This water year commenced in July, with zero irrigation allocations and a ban on outside water use along the Murray River. Irrigation allocations have recently risen to 20 per cent on the Victorian side of the Murray, and 22 per cent in South Australia. They remain zero in NSW. The long-term average inflow into the Murray is 11,200 gigalitres a year. The average over the six years ending June 2007 has been 4200GL. Last year, inflows were a record low of 1211 GL. Professor Cullen said the question was whether the money from John Howard's \$10billion water plan should be invested to create a 21st-century irrigation system "or are we going to prop up failing infrastructure of the past?" He said there was likely to be a reduction in perennial crops - "and goodness knows, we're getting that now because they're dying, we can't water them" - an increase in opportunistic annual crops such as rice and cotton, and bigger farms with more diversity of enterprises. The plan is also funding the northern taskforce, which Senator Heffernan says is due to report in 2009, with the science to be completed by 2011. "We need to do the monitoring and the science and do away with the guesswork once and for all," he said. The Prime Minister said the best way to fix the Murray-Darling was to implement his \$10billion plan. "And the person that's holding that up more than anybody else is the Labor Premier of Victoria," he said.

Herald Sun

10 billion litres to quench city

The Brumby Government is raiding 10 billion litres of water from the Yarra to prop up Melbourne's diminishing water supply. Environment Minister Gavin Jennings confirmed yesterday the Government would immediately start taking 45 million litres a day from flows that were supposed to ensure the environmental health of the river. The move will

increase the likelihood of dangerous blue-green algal blooms and fish kills, but most people would not see any changes to the Yarra because its lower reaches are tidal. Mr Jennings said the Government would reduce Yarra flows to 200 million litres a day, taking out 10 billion litres between now and July 1.

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With the river flowing about 245 million litres a day, the Government can divert 45 million litres at Yering Gorge, in the Yarra Valley, every day and pump it through a pipeline to Sugarloaf Reservoir. It will boost city water supplies, which yesterday stood at 40.4 per cent capacity. The Government has considered the Yarra raid -- and taking a further 10 billion litres from the Thomson River -- for some time. It decided yesterday to go ahead immediately. Mr Jennings said the Government would monitor the Yarra to minimise the environmental impact of the diversion. "This extra contingency measure allows us to take more water from the Yarra now before the spring flows end, and . . . keep water in the bank for the summer ahead," he said. Mr Jennings said regular tests would be conducted at six sites along the Yarra, checking temperature and keeping watch for blue-green algae outbreaks. "With this increased monitoring we will be able to act quickly to deal with any emerging environmental issues through measures such as providing flushing flows down the river," he said. The Government last raided the Yarra in 2003 after a drought but before last year's election, it promised extra environmental flows for the river. Yesterday's decision not only dumps the election policy, it eats into the existing Yarra flows. Community river watchdog Ian Penrose, of the Yarra Riverkeepers Association, said the Government's decision was totally irresponsible. "The situation is terrible," Mr Penrose said. The risk of fish kills and algal blooms would increase with reduced flows and warmer temperatures, as the water became more nutrient-rich, he added. Platypus breeding would also be likely to diminish. Mr Penrose said the Government conducted a study in 2005 that recommended more water for the Yarra -- which the Government had promised before the election last year. "They are ignoring their own work and their own advice," he said. "It will be bad for all flora and fauna along the river. "It's a total turnaround from the Government. "The Government is ignoring its responsibilities to the river's health, a river that is really important to Melbourne."

Pipeline talks unplugged

Opponents of the north-south pipeline have condemned Melbourne Water for giving little advance warning of community meetings to discuss the project. Details of the meetings were published in local papers last week and appeared on Melbourne Water's website on Friday. Meetings took place on Saturday at Toolangi and Kinglake, and another yesterday at Yea. Other meetings will be held at Glenburn today and Yarra Glen on Saturday. The 70km pipeline is being built to help drought-proof Melbourne by taking water from the Goulburn River across the Great Dividing Range to Sugarloaf Reservoir, near Yarra Glen. Plug The Pipe spokeswoman Jan Beer said residents at Kinglake and Toolangi only found out about the meetings late last week. As a result, Mrs Beer said only 12 people turned up to the Toolangi meeting and she doubted there would have been any more at Kinglake. "Melbourne Water is not interested in keeping us fully informed," she said. "They just want to be able to say they have consulted the community." Mrs Beer said a notice appeared in the Yea paper on Wednesday but many don't get the paper until Thursday. She said Melbourne Water was rushing the community consultation process so construction could begin as soon as possible. "Many in our community are worried about the environmental impact this pipeline will cause," Mrs Beer said. "We have been told it will cross the Yea River three times but when the conditions are right the river can flood up to six times a year." Melbourne Water spokesman Ben Pratt denied notices of the meetings were sent out late. Mr Pratt said advertisements appeared in four local newspapers in the second week of November and on local radio. He said further information sessions were being planned along the pipeline corridor. "The sessions under way are the second round in a series of meetings we are having both with the community as a whole and with individual landowners," Mr Pratt said. He said the final pipeline route would be announced within a few months.

Water will bypass Eildon

Water earmarked for struggling Lake Eildon will flow to Melbourne through the controversial north-south pipeline. A report to the State Government yesterday called for Melbourne to get its 75-billion-litre share of the water in 2010-11 no matter what. This should happen even if savings expected by improvements to the Goulburn-Murray irrigation system did not eventuate in time, the report said. The Food Bowl Modernisation Steering Committee's final report, released yesterday, called for further assessment of the environmental impact of guaranteeing supply to Melbourne. "These arrangements can have significant environmental impacts," the report said. "Any use of environmental water for Melbourne needs measures to offset that use. These could be by paying back the borrowed volumes in later years or by investments in river health improvements." But Melbourne's entitlement to water from the Goulburn-Murray would be capped at 75 billion litres a year, even if savings exceeded expectations. The \$1 billion project is designed to increase the amount of water available by improving the efficiency of the Goulburn-Murray irrigation system. That system loses about 800 billion litres of water a year through evaporation, seepage and other inefficiencies.

It is expected the project will recover 225 billion litres a year by 2012 and those savings would be split between Melbourne, the irrigators and environmental flows to boost river health. Premier John Brumby said a cap on the Murray-Darling system meant that no new dams could be built in Victoria's north. "If you want more water, new water, the only way we're going to get it in the future is by investing in water saving," Mr Brumby said.

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"I think this is a great project for the state. I urge people to get behind it."

AWA

*Today, 19th November is World Toilet Day, a stark reminder that over 2.6 billion people lack any form of 'improved' sanitation; one-sixth of the world's population get their water from sources contaminated by human and animal feces; 50% people in developing countries have an illness linked to poor sanitation; and every six seconds, a child dies of diarrhea.

*The Australasian Biosolids Partnership (ABP) - an AWA-led initiative seeking to lead public engagement and support the water industry on the beneficial use of Biosolids - now has twenty-five organisations committed to fund the initiative for the next three years. AWA are seeking a Program Manager for the initiative: see Jobs spreadsheet.

*The CSIRO report, Water Availability in the Border Rivers, one of a series covering the entire Murray-Darling Basin, has been released by the Department of the Environment and Water Resources., It was commissioned by the Prime Minister and state Premiers at the November 2006 Water Summit.

*Hobart's eastern shore project, the \$4.8M Clarence City Council/Hobart Water project to improve water pressure and availability in the Howrah-Warrane region, is scheduled for completion late 2008. It includes construction of a 9ML reservoir, three pipelines, two pump stations, a new disinfection station, together with associated infrastructure.

*The 2007 Derwent Estuary Report Card, released last week, shows improvements in the health of the estuary, most notably a marked decline in heavy metal levels in shellfish. Nearly \$40 million worth of Wastewater Treatment projects are expected to further deliver major improvements

*Sydney Water has announced five winners, for achieving significant water savings, at the annual 'Every Drop Counts Business Program' Awards ceremony. They are Amcor Fibre Packaging of Botany, Stockland for 2 Sydney properties, Boral Transport Sydney Tippers, BHP Billiton for Illawarra Coal and GPT Office properties.

*Amid local concerns about the effect of large water losses to the area through conveying 75 billion litres of water/annum - savings via the region's Food Bowl Modernisation Project - from the Goulburn River to Melbourne's Sugarloaf Reservoir from 2010, project directors have again confirmed that the Pipeline will take no more than this form the local system.

*On November 9, the ACT Health Protection Service advised the National Capital Authority that the entire Lake Burley Griffin be closed to primary contact recreation, such as swimming, and secondary contact recreation, such as boating, as results from water tests have indicated unacceptable levels of Faecal Bacteria. The lake remains closed as at end of the week.

*SA Minister for the River Murray, Karlene Maywald says Irrigation allocations for 2007-08 will increase to at least 22% from December 1, based on the latest assessment from the Murray-Darling Basin Commission. This is because of an increase in available water across the basin due to better inflows than previously forecast and more water released from the Snowy Mountains Scheme.

*Veolia Water has funded a Chair in Water Recycling at the University of Queensland. Initially funded for five years, the professorship is the first of its kind in Australia.

*Last week, CSIRO ran a two day Cutting Edge Science Symposium - Hydrological Consequences of Climate Change opened by Australia's chief scientist Dr Jim Peacock. The focus was on the link between CLIMATE and WATER. - scientific understandings of how future climate projections are likely to affect water availability in Australia.

*The Victorian Government will provide \$250,000 towards a \$520,000 innovative community water reuse project that will provide water for WALWA's town oval, in a display of support for the parched rural towns and their communities. The grant is being provided to Towong Shire Council under the Small Towns Development Fund.

*Last week, some 2,000 tonnes of fuel oil seeped into environmentally sensitive waters of the Kerch Strait in Black Sea, after a fierce storm wrecked five ships, including an oil tanker. WWF estimates that it will take a month for fuel oil from the sea surface to disperse and will have a negative impact on the environment for many months after.

*Farmers are a bit concerned about water policy in the upcoming election scramble for votes as parties compete with bids for pet projects.

*A sewage leak continues to close Canberra's Lake Burley Griffith and has meant that water to the famous Captain Cook fountain which tourists see as a symbol of the city remains off.

*Labor's environment spokesman, Peter Garrett, has again admitted he believes that, in the light of impacts of climate change future governments should play a role in determining where people farm and what they farm.

*Lots of foreign water companies are vying for the contracts for Perth's second (and future) and for Victoria's first seawater desalination plant.

*Another dry winter would leave the Murray-Darling facing doomsday, NSW Liberal senator Heffernan has warned. Last year was the driest on record: this year is not much better.

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20th

NEWS.com.au

Council withdraws support for pulp mill

Launceston City Council has withdrawn its support for Gunn's controversial \$1.7-billion pulp mill to be built in the Tamar Valley. The council yesterday passed by 7 to 5 a motion from Greens alderman Jeremy Ball that recommended support be withdrawn. Mr. Ball's motion outlined five major issues he said had not been thoroughly investigated despite being identified by council in its September 2006 submission to the Tasmanian government's Resource Planning and Development Commission (RPDC) as potentially having a significant impact on Launceston.

The issues included transport, air quality, health, water and compliance. In putting the recommendation to council, Mr Ball argued that because the issues had not been thoroughly investigated, the pulp mill posed an unknown risk to the public health, safety and future well-being of the citizens of the Launceston municipal area, the council said. "It's about integrity, whether we as a council, giving fresh consideration to the matter, will act and finally keep our word and the pledge we made to the people in our RPDC submission," Mr Ball told the *Launceston Examiner*. Former mayor Ivan Dean, who was overthrown because of his support for the mill, was at times jeered by the large crowd that attended the Town Hall meeting. He said the two modern mills he visited overseas were "absolutely clean" and Gunns was "not an ogre out there to destroy the state". Federal Environment Minister Malcolm Turnbull last month gave final clearance to the Gunns project in the Tamar Valley, north of Launceston, subject to 48 conditions. But The Wilderness Society is challenging in court Mr Turnbull's environmental assessment of the proposal. The issue has also put Mr Turnbull under pressure in his Sydney seat of Wentworth, where preferences flowing from the Greens to Labor could tip him out.

The Australian

Libs at war over Kyoto

NSW opposition energy spokesman Peter Debnam has contradicted Coalition climate policy, saying Australia should have signed the Kyoto protocol long ago. His stance puts him at loggerheads with Prime Minister John Howard, who warmly endorsed Mr Debnam in his failed bid earlier this year to become NSW premier at the state election. The former NSW Liberal leader today told the NSW Energy Summit that Australian progress on developing clean energy had been distracted by the prolonged debate about ratifying the Kyoto protocol on climate change. "I wish we had ratified Kyoto long ago and then led the world with bold initiatives in clean energy," he told the summit. Opposition Leader Kevin Rudd meanwhile is refusing to back Peter Garrett as his environment minister if Labor wins government.

Mr Rudd today continued to hammer the message that the government had failed to take action on global warming. If Labor wins government on November 24, Mr Rudd has said he will attend the United Nations climate change conference in Bali in early December. But asked today whether Mr Garrett would be by his side as environment minister Mr Rudd indicated that apart from a few key frontbench positions that decision would be made when and if Labor won. "With all our frontbenchers, they're doing a fantastic job, including Peter," he told reporters. "He's a believer that action needs to be taken (on climate change)." Mr Rudd said most of the frontbench decisions would be made after next Saturday's poll. "That will be based entirely on the performance of the team in the lead-up to the election and who is elected at the election," Mr Rudd said. Mr Rudd has only confirmed that treasury spokesman Wayne Swan, industrial relations spokeswoman Julia Gillard and finance spokesman Lindsay Tanner would keep their portfolios, maintaining the core of Labor's economic team. Greens leader Bob Brown has attacked environmental scientist Dr Tim Flannery for endorsing Coalition Environment Minister Malcolm Turnbull. In *The Age* newspaper today the Australian of the Year says he would vote for Mr Turnbull, and that Federal Parliament needs more people like him to tackle climate change. Senator Brown says he cannot understand the endorsement. "How Tim can support a Minister who's backed a pulp mill which is going to keep 200,000 hectares of forest ... to be logged and burnt over the next 20 years is beyond me," he said. After his speech Mr Debnam said he hoped what he said would provoke debate, and for good measure he added another contrary view about nuclear energy. Federal Liberals are supportive of a nuclear energy option for Australia. But the former NSW Liberal leader said nuclear power "is simply not going to happen in Australia and it shouldn't". "After looking at community concerns, construction costs and long-term decommissioning and storage costs, it is clear for Australia that renewables beat nuclear," Mr Debnam said. He said achieving a renewable energy replacement target of 20 per cent by 2025 "should be a walk in the park". "I think 20 per

cent by 2020 is a better target," he said. Mr Debnam also said the term "clean coal" was an oxymoron and Australia should be focused on solar power. He said he wanted proceeds from the impending privatisation of the NSW electricity industry to pay for three large-scale solar generators, not coal-fired power stations. Outside the summit, Mr Debnam denied he was causing trouble for his federal colleagues ahead of Saturday's election. "I think the community wants people to say: 'Look, get real' and NSW is the biggest problem," he told reporters.

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"All I'm saying is once we get past the federal election let's focus on NSW because they are about to take up to \$15 billion (from the privatisation of electricity) and blow it." Mr Debnam predicted the NSW Labor government would accelerate its plans to privatise the state's electricity after the federal election and complete the process, banking a multi-billion windfall, within the next two years.

Top scientist urges population curbs

Halting population growth in developing countries should be part of a global strategy to reduce mankind's impact on the environment, according to an eminent expatriate Australian scientist. Immediate past president of the Royal Society Robert May said that, given the threat of climate change, a declining global population was "a prerequisite" if humanity was to achieve a sustainable ecological footprint in the future. Addressing the Lowy Institute in Sydney last night, Professor Lord May said a priority was educating and empowering women, "particularly in those cultures where this is not currently the case". Lord May, a former chief scientific adviser to the British government who was made a companion of the Order of Australia in 1998, said this would be assisted by achieving universal primary school education and promoting gender equality. The UN estimates 700 million women, or two-thirds of all those married or in stable unions, use some method of contraception. "In my view, religious beliefs or other ideological prejudices prompt some major international organisations to oppose contraception, forbidding distribution of condoms or even advice about fertility control," Lord May said. He said it was encouraging that in the past year global fertility rates fell below replacement levels for the first time in recorded history, with the average female now having slightly less than one female child. Global population is predicted to increase to 9 billion by 2050, driven by strong growth in developing countries, while declining birth rates in developed countries create their own inter-generational problems. Lord May warned that cutting population alone would not address environmental problems, as smaller populations tended to be associated with increasing standards of living and higher environmental impacts per capita. He warned of the growing threat of conflicts and mass movements of people as the world's population fought over limited water supplies and other resources. "All this rolls together with rapid and continuing advances in information technology, which simultaneously makes things better and worse," he said. "Better because we can more easily and effectively coordinate action, once motivated to do so; worse because in such a global village the massive inequities between groups are clearly exposed." Lord May warned that the re-emergence of fundamentalism in the world was a reaction against the liberating force of the new information age.

Final storm warning

The cold war over climate change is ending. For the past year both sides of politics have been promising what they would do to help address the global greenhouse threat should they win this Saturday's election. Next month the winner has to start doing some heavy lifting. Internationally it's a similar story. The weekend report from the Intergovernmental Panel on Climate Change was the last in this year's carefully stage-managed summary of mainstream climate science. The IPCC reports every five years and this year it has all but confirmed people are accelerating climate change and that the scale and urgency of this threat is real and potentially catastrophic. This final synthesis report has been timed deliberately to have the greatest influence on governments and negotiators at next month's key UN meeting in Bali. In terms of raw information, the latest report is not new. It simply summarises the three technical reports released earlier this year, which were summaries of hundreds of technical papers and data from the previous five years designed to deliver a unified and authoritative message on the threat posed. What has changed is the rhetoric. UN Secretary-General Ban Ki-moon flagged the prospect of sea-level increases by 6m if the Antarctic ice sheet melts. "These scenes are as frightening as a science fiction movie but they are more terrifying because they are real," Ban says. The IPCC has made global headlines all year with its successful campaign to consolidate and elevate the scale of the scientific warnings. The next challenge is to convert the urgency and severity of the science into global action. It won't be easy. The Bali meeting of the UN Framework Convention on Climate Change has been hailed as a make or break negotiation. The Australian Labor Party is taking it so seriously, Opposition Leader Kevin Rudd has committed to representing Australia if Labor wins government on Saturday. Ratification of Kyoto has been the punchline to Labor's \$3 billion climate change package. Labor may want to present itself as a frugal economic manager, but on greenhouse it is outspending the Coalition. Its policy is also more comprehensive. Both Labor and the Coalition have committed to introducing an emissions trading scheme from about

2011. Implementation will be a substantial task and work will need to begin immediately to meet these timelines. Neither side is mentioning increases in electricity prices and regional economic pressure that will result from these structural changes. Both main parties have deferred the tough decision on setting a short-term emissions reduction target by 2020 until after the election. This will set the all important price on greenhouse emissions. Neither party has provided details on how the scheme will work.

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The Coalition has modelled its proposed scheme on the work of the Prime Minister's emissions trading task group, which is drawn heavily from the model proposed by Reserve Bank board member Warwick McKibbin. Treasury has already started work on assessing the consequences of different emissions targets on the economy and industry. Labor has commissioned Australian National University economist Ross Garnaut, whose views will most likely dovetail into the Treasury analysis. The next government will need to call for submissions early next year on how the all-important allocation of the permits to emit greenhouse gases should be distributed, whether they should be all auctioned off, given to households and industry or allocated in some other way. McKibbin expects this to ignite heated debate between different sectors of the economy. He argues they should be shared between households and large industrial energy users. "I think it's a great idea to have these things as widely disbursed through the economy as possible so that people understand through improved information what the value of greenhouse emissions are," McKibbin says. "You want all the mums and dads to have this in their super funds, to be watching the evening news, watching what the value of carbon is." The main points of difference between the two parties emerge beyond the bipartisan support for a national emissions trading regime. In raw figures, Labor has committed \$3 billion to the environment while the Coalition's commitment is closer to \$1 billion. Labor promised a mandatory renewable energy target of 20 per cent by 2020. The Coalition pre-empted this with its own clean energy target of 15 per cent by 2020, which defied its own emissions trading task group. In reality, most of both of these targets will probably be met by wind energy as the lowest cost, proven, low-emission technology likely to be available during the next decade. The Howard Government started strongly on climate change policy when it came to office, negotiating manageable targets under Kyoto and establishing the Australian Greenhouse Office. It appeared to drift on the issue after the 2001 election, with cabinet uncertain about the science and then defined by its symbolic support for the Bush administration in opposing Kyoto. As late as June last year Prime Minister John Howard was defiant, declaring Australia would be a future energy superpower. It is rhetoric that has dated remarkably quickly. Public and business opinion has since shifted with astonishing speed, wrong-footing the Coalition. Howard responded by installing Malcolm Turnbull as the repair man in the environment portfolio and establishing forums such as the task group to allow him to change direction on key policies, while trying to sustain a credible position on climate change. The Coalition's turnaround has been breathtaking. But it was a long way behind. Under Rudd, Labor moved early this year to outflank the Coalition and has since retained its advantage. Labor staged the first national climate change summit in April. It was hastily convened and didn't achieve anything, but that wasn't the point. Since February it has rolled out \$3 billion worth of climate change programs as part of its 10-point climate change blueprint. A Rudd government may end up spending as much as \$10 billion subsidising renewable energy under its targets and billions more if it decides to go ahead with banning electric hot water systems in Australia to try to force households on to solar. Labor's climate plan leaves few stones unturned. It includes a \$500 million renewable energy fund to help develop, commercialise and deploy renewable energy technologies, an important complement to its renewable target. It has also committed another \$500 million to develop clean coal technologies, \$500 million more to establish a green car industry in Australia and \$489 million to subsidise solar energy in all Australian schools. Then there is its \$300 million plan to provide low interest loans to up to 200,000 households to install energy efficiency improvements, \$200 million to rescue the Great Barrier Reef from the effects of climate change and \$150 million to subsidise landlords who install insulation in 300,000 rental homes. Another \$240 million will help business and industry deliver energy and water efficiency projects, and there's a further \$150 million for an energy innovation fund to help retain scientists and researchers. The business fund will spend \$90 million to retrofit commercial buildings to make them more energy efficient, \$75 million in grants to make business more efficient and \$75 million more to help commercialise clean technologies. The innovation fund includes the already announced \$50 million solar institute at Newcastle, \$50 million for photovoltaic research and \$50 million more for general clean energy and efficiency research. Labor has also promised \$50 million to assist the development of the hot rock industry, \$15 million to promote clean energy exports and \$20 million to help small energy companies get export ready. It's a comprehensive plan that, while generous in parts, has won support from researchers and the renewable energy industry and maximised the difference between the two parties. The Coalition has, by comparison, been more modest in its promises and played on minimising the issue. It has already financed a \$500 million fund to support the development of low-emission technologies and is still rumoured to be planning similar announcements this

week, with more to come on clean coal research. To date its main new policy announcement has been \$75 million towards emerging renewable technologies and \$20 million towards a new solar project in NSW. The Coalition remains officially opposed to ratification of Kyoto, despite yesterday's remarkable speech by former NSW Opposition leader Peter Debnam and reports that Turnbull lobbied cabinet for a change of heart two months ago. Given these constraints, Turnbull's tactic has been to focus on the future rather than the Government's record on climate change policy and to warn of the need for hardheads in the tough international negotiating environment that lies ahead.

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During his debate with Opposition environment spokesman Peter Garrett two weeks ago, Turnbull made the most of his rival's earlier comments offering to exclude big emitters from any future negotiation, saying other economies would be looking to take industries from Australia. "They will see a Labor government as a soft touch, somebody to take advantage of, to our great disadvantage," he said. "This negotiation is not for the soft; it's not for the faint-hearted. It has to be conducted realistically." Kyoto and the Bali negotiations will be one of the first important tasks for the next Australian government. If Labor wins, expect prime minister Rudd to arrive with great fanfare to ratify Kyoto. A standing ovation is a certainty. Once he resumes his seat, climate change will remain unaltered as an urgent global threat. In policy terms, the only tangible change will be that Australian-based companies will have direct access to the Clean Development Mechanism program. This allows them to earn credits for projects that help reduce emissions in developing countries. There will be 189 countries represented at Bali and, despite the severity of the latest warnings, progress is likely to remain modest. Negotiators will be looking to agree on a road map for a post-Kyoto deal from 2012 that can turn around and accelerate cuts in greenhouse emissions from developed countries while also finding a way to limit emissions from key developing countries such as China and India. A global deal will not be ready until the Copenhagen meeting in 2009 at the earliest. The biggest challenge for the next prime minister will be at the host of multilateral and bilateral meetings between national leaders from the Group of Eight industrialised nations and the Asia-Pacific Economic Co-operation forum, where a global deal will be brokered. Last year was one of acceptance on climate change. This year has been one of promises. Next year will be the year of action. *Matthew Warren is The Australian's environment writer.*

Muddying the Green waters

The ecological debate took unexpected twists yesterday with Greens leader Bob Brown attacking environmentalist Tim Flannery, and failed NSW Liberal leader Peter Debnam undermining federal Coalition policy. Both moves affect the battle for the marginal Sydney seat of Wentworth, where Environment Minister Malcolm Turnbull is under electoral pressure over his failure to ratify the Kyoto protocol and his approval of Gunns's proposed Tasmanian pulp mill. Professor Flannery, a noted writer, scientist, campaigner on environmental issues and Australian of the Year, angered Senator Brown for publicly supporting Mr Turnbull. In a newspaper interview, Professor Flannery said he would vote for Mr Turnbull if he had the chance and that parliament needed more people like him to tackle climate change. But Senator Brown said Professor Flannery's praise was "rewarding bad behaviour". Mr Turnbull was the minister who, in approving Gunns, had given the green light to "increasing greenhouse emissions by 2 per cent, or 10 million tonnes per annum", Senator Brown said. Following Senator Brown's attack, Professor Flannery said his views had a logical thread. "I think the Liberal Party has had an appalling record over the last 11 years," he told The Australian. "That doesn't mean there are not good people in the party." The NSW Greens have struck a preference deal with Labor which covers Wentworth. The state party used their votes in the NSW upper house to scupper an attempt by the Liberals to have the NSW Government release a key document which could cast light on the disputed validity of the nomination of the Labor candidate for Wentworth, George Newhouse. Senator Brown has criticised that move, and yesterday called on Mr Newhouse to release his letter of resignation from a government tribunal and answer questions about it. Mr Debnam, who as Liberal leader orchestrated the Coalition's dismal campaign at the last state election, made a potentially career-ending speech yesterday in which he attacked key tenets of the federal Coalition. Mr Debnam, who is now the state Opposition's energy spokesman, said in his speech he wished the federal Coalition "had ratified Kyoto (a) long time ago". He attacked the federal Government on its policy towards supporting "clean coal" technology, describing the concept as an oxymoron. Mr Debnam also cast doubt on the federal Liberals' interests in the nuclear energy option. "After looking at community concerns, construction costs and long-term decommissioning and storage costs, it is clear for Australia that renewables beat nuclear," Mr Debnam said.

Adelaide.now.com

Labor launches national water plan

Federal Labor and the Coalition launched their water plans for Adelaide today, both promising to invest millions of dollars for South Australian water projects. Labor this morning vowed to invest an extra \$1.5 billion in water reforms and take \$400 million from the \$10 billion National Plan for Water Security, to fast-track water efficiency and

infrastructure projects and confront over-allocation. Opposition water spokesman Anthony Albanese, joined by Adelaide MP Kate Ellis and Hindmarsh MP Steve Georganas, was at the University of Adelaide footbridge to outline Labor's vision on tackling the water crisis. About 30 minutes earlier, Federal Water Resources Minister Malcolm Turnbull promised an extra \$50 million for Adelaide's urban water projects, \$40m for more stormwater harvesting and \$10m to scope out and finalise plans for a desal plant in Adelaide. Mr Turnbull said a Coalition Government would consider a 50-50 funding deal with the State Government to pay for the plant. He also pledged \$85 million for a series of clean energy initiatives.

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Mr Albanese said "urgent" action was required by all governments, industry and consumers to change their water-use habits. He said Adelaide should be "at the centre of any national water plan" because it is at the end of the Murray-Darling system. However, there were no specific details of how South Australia would benefit from the plan, other than a generalised statement promising to "assist Adelaide to diversify its water supply and reduce its reliance on the Murray". "If South Australia proceeds with a desalination plant for Adelaide then, once a site is determined, a Rudd Labor Government will be a financial partner in a carbon neutral desalination plant for Adelaide," Labor's policy document says. Mr Albanese said while the State Government had made clear its intention to build a desalination plant for Adelaide, no environmental study had been conducted and a final site was yet to be selected. He said under federal Labor, the State Government could apply for up to \$100 million of funding to help it build the desalination plant. The 50GL desalination plant would cost more than \$1.4 billion. Mr Albanese ruled out a "50-50" funding arrangement.

Stanvac hot fancy for desal plant

Port Stanvac is firming as the favoured site for the state's major desalination plant despite concerns over the slow clean-up of the former Mobil refinery. Mobil confirmed yesterday the State Government had discussed the issue with company officials. Treasurer Kevin Foley, in a written reply to a question from Opposition frontbencher Duncan McFetridge, says Port Stanvac is an option for the plant. He says the Desalination Working Group is considering possible sites for a desalination plant, one of which is Port Stanvac. "Any decision as to whether to approach ExxonMobil regarding Port Stanvac will depend on the outcome of the investigations," Mr Foley says. The working group, headed by former Premier's Department chief executive Ian Kowalick, has made an interim report to the Government. Water Security Minister Karlene Maywald says Cabinet will consider the working group's final report in the coming weeks but no decision has been made on a preferred site. "Very preliminary discussions will occur with the landholders of potential sites prior to Cabinet's consideration of the report," she says. The clean-up of the Port Stanvac site remains the only significant issue likely to block its use for a desalination plant. The Environment Protection Authority has confirmed it has had two reports from Mobil – in February and August – on progress. There are several key remedial programs on the site – the foreshore area, research into soil treatment and the wastewater treatment system. Mobil has been questioned by the EPA about the rate of progress of the remedial work because a decision on the site's future is due by July 1, 2009. EPA senior adviser on site contamination Rebecca Hughes said yesterday the authority had expressed concerns to Mobil about the speed at which remedial work was being carried out. "They are doing quite a bit of remediation work on site, but our main concern was the pace at which it was being done," Ms Hughes said. He says another progress report is expected early next year.

Closed ferry to delay fire trucks

Country Fire Service trucks will not be able to cross parts of the deteriorating River Murray during the bushfire season, potentially putting lives and property at a greater risk. Falling water levels have forced the closure of one Mannum ferry, and led to forecast 12-tonne weight restrictions at the Taillem Bend, Walker Flat, Purnong and Swan Reach ferries between December and March. CFS trucks weigh up to 20 tonnes when fully loaded with water, but the CFS yesterday said public safety would not be jeopardised because of the restrictions. It would not, however, detail to The Advertiser what contingency plans it had in place. A shack owner at Wellington, who did not wish to be named, said the problem surrounding the ferries and CFS trucks could prove disastrous. "If a fire happens on the wrong side of the river to where the local CFS are stationed, it is going to put some people in dire s . . t," he said. "For support crews coming from elsewhere to fight the bigger fires it is also going to affect the time in which they arrive." SA Farmers Federation president Wayne Cornish said it would cause widespread issues and safety fears within local communities. "The only bridges where people can cross the Murray are at Murray Bridge, Blanchetown and Berri and if ferry services are not being able to take CFS trucks, it's going to add a lot of kilometres and time to a journey," he said. Transport department spokesman Ross Stargatt said it had "the ability to be flexible in the event of an emergency" with its ferries. CFS Operations Service manager Malim Watts said the CFS "already has contingency plans as part of our continuous response planning processes to deal with these kind of issues". "If the ferries were out of action for a period of time or operating at a reduced capacity we have local alternative arrangements in place to respond to emergencies," he said. Yesterday, a scrub fire continued to burn in scrub at Bruno Bay, near Cobdogla on a River Murray peninsula.

It caused smoke to drift across the Berri, Renmark, Paringa and Moorook areas. No properties were threatened.

Labor puts water back on agenda

Industries that use a lot of water would be subsidised to cut their consumption under a new "water efficiency opportunities" program to be announced by the Opposition in Adelaide today. Under the plan, heavy consumers of water, such as beer producers, would be encouraged to find ways of making their processes more water efficient and to eliminate wastage. Labor's water resources spokesman Anthony Albanese will make the announcement. While the cost of the scheme has not been identified, it is expected to be funded from within the existing budget.

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The announcement comes just days after both sides of politics were criticised by The Advertiser for failing to elevate water management as an issue at the election. Responding to that criticism, Opposition leader Kevin Rudd said he understood the scale of the water problem particularly in South Australia where it was at its most serious. "I see climate change and water as part and parcel of the policy equation, we've got to act on climate change otherwise we're not acting on water long-term," he said. He said a future Labor government would invest \$260 million on two desalination plants for South Australia - one in the upper Spencer Gulf, and another "\$100 million from Labor's \$1 billion urban water infrastructure fund". With the election campaign in its final week, Mr Rudd continued his practice of campaigning almost exclusively in relatively safe Liberal held seats. This has seen the Rudd campaign machine staging visits in two Liberal seats in Victoria in the last two days - McEwen, held by Small Business Minister, Fran Bailey and LaTrobe, held by backbencher Jason Wood. However, the momentum was momentarily stalled yesterday during a visit to Berwick Secondary College when year 9 student, Rebecca Sanders, who had been chosen by the school to accompany Mr Rudd during his visit and the subsequent press conference, fainted. The incident caused grave concern initially prompting Mr Rudd to halt the press conference to provide what assistance he could. Ms Sanders quickly recovered and the press conference resumed with Mr Rudd quipping, "when I speak, I often have that effect on people".

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FarmOnLine

Changing climate challenge for farmers: NFF

Australian farmers recognise the threat of a changing climate is potentially the biggest issue they will face in the future. The commitment by the Labor Party to work closely with farmers to adapt to a changing climate is a clear recognition of the importance of this issue to rural and regional Australians. "Farmers need access to the right tools to effectively manage the risks and capitalise on the opportunities of a changing climate. We are pleased the Labor party have committed to work with farmers on this challenge and have highlighted the issue in their agriculture statement," National Farmers Federation (NFF) president, David Crombie, said. "The NFF is also pleased bipartisan support has been given for the current drought relief package. We have made it clear that any work on the challenges of a changing climate should recognise those farmers in the grip of this current, devastating drought crisis. "Today the Labor Party also reiterated a range of constructive initiatives to assist farmers combat weeds, innovate in food processing and their support to work with farmers near the Great Barrier Reef in Queensland. "The NFF is also positive about Labor's commitment to the crucial rural Research and Development (R&D) model. A robust R&D program, enabling a sector that accounts for 20 per cent of Australia's export income to keep pace with developments is crucial. "A robust, science based quarantine system is a vital component of the Australian agricultural system. There is a lack of confidence in the current arrangements and NFF will fully engage in the proposed Labor Party review of the system, if elected. The NFF believes it is essential to rebuild confidence in Australia's Biosecurity arrangements. "On Genetic Modification (GM), the Labor Party could have taken a stronger leadership position, given the strength of the robust regulatory framework and the industry management systems already in place pre-farm, on-farm and post-farm. "There are clear productivity and environmental benefits that will flow from GM, and Australian farmers are well placed to responsibly harness the enormous opportunities gene technology offers. The NFF supports farmers having the opportunity to adopt the method of production best suited to their customers' needs – be that GM, conventional, organic or any combination of these methods. "While NFF is pleased the Labor Party has highlighted some priority areas for farmers, it is disappointing that no new funding has been allocated to the primary industries portfolio. By using existing program funding, the NFF seeks an assurance that successful programs such as FarmBis are in no way adversely affected."

Labor releases ag policy

A major regional food program, stronger labeling requirements, fairer prices for farmers and moves to improve the data compiled by ABARE are just some of the areas Labor has focused on its agricultural policy paper, released today. The policy brings together Labor's big agricultural commitments from the year on climate change, wheat marketing and protecting the Great Barrier Reef, with other commitments for quarantine, food labeling and promotion, weeds and

research and an inquiry into supermarket prices if Labor wins government this weekend, as widely tipped. It was released by Labor's primary industries spokesman, Kerry O'Brien, in Mackay in Queensland, just four days out from the election. Senator O'Brien said Rudd Labor Government will "reprioritise" \$190 million over five years to invest in the development and growth of Australian primary industries. "Labor has a proud history of introducing positive reforms to agriculture policy," Senator O'Brien said. "But there is now more work to do to secure a prosperous future for the Australian farming community. "After 11 years of Howard Government inaction, there is a need for new leadership in primary industries."

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The three major policy announcements previously announced by Labor are a \$130m "Australia's Farming Future" commitment to climate change research, adaptation and adjustment in the farm sector; a new wheat marketing model which opens up the single desk to multiple sellers; and a \$200m promise to help clean up water run off from cane farms to the Great Barrier Reef. A \$35m five-year regional food producers innovation and productivity program promises to fund projects which encourage innovation in production, processing and value adding in the regional food industry. The program requires matching contributions from industry and \$10m will be dedicated to the seafood industry. While backing the existing exceptional drought assistance support, Senator O'Brien has flagged the need for reforms to help prepare farmers for future droughts, and link future assistance with natural resource management. A major review of Australia's quarantine is a definite under Labor, and will look at the functions of both Biosecurity Australia and the Australian Quarantine and Inspection Service. Labor has already identified the scope of the review, and said it must examine the capacity of existing quarantine programs to protect our borders as well as the import risk assessment (IRA) process and quarantine research. Senator O'Brien said the Federal Government does not produce a reliable productivity report card for the various sectors of the Australian agriculture industry, and has committed to improving this through both ABARE and the Australian Bureau of Statistics. Senator O'Brien said the party would match the Government's spend on research and development, and has also provided funding to make up for a shortfall in producer levies due to drought, but this money must be spent on agricultural climate change research. If it makes it to government, Labor will develop a strategic rural research investment plan to prioritise research and draw up new performance measurements against certain benchmarks. A new \$5 million initiative to help promote Australian produce has also been promised, while a recently released weeds research and productivity commitment, worth \$15m, was part of the policy. SOURCE: Rural Press Ltd's Canberra Bureau

Labor will "fix" Menindee Lakes

A Rudd Labor Government will invest up to \$400 million in water saving projects to improve water efficiency and make massive water savings at Menindee Lakes on the Darling River in western NSW. Federal Labor's investment of up to \$400 million will be used to reduce evaporation and improve water efficiency at Menindee Lakes, secure Broken Hill's water supply, protect the local environment and heritage and return up to 200 billion litres to the Darling and Murray Rivers. Shadow Minister for Infrastructure, Anthony Albanese, said Labor would work with the local community and the NSW Government to fix the Menindee Lakes water storage system which loses 426 billion litres of water in an average year. "Every drop of water saved at Menindee Lakes means improved water security for Broken Hill and more water flowing to Adelaide," he said. "Federal Labor will also invest up to \$12 million to fund the missing link pipeline between Warren and Nyngan in western NSW to provide greater water security for the communities of Cobar and Nyngan and return up to two billion litres per year to the Murray Darling Basin."

Big bread maker hit by drought, price rises

Australia's biggest publicly listed food group, Goodman Fielder, has joined a growing chorus blaming drought and rising commodity prices for an expected flat profit this financial year. It said yesterday that it was unable to recoup the rising price of wheat, edible oil and dairy products from retailers, so the increase would hit the bottom line. The announcement follows similar comments from wine, beer, grain and meat companies including McGuigan Simeon Wines, Foster's, Grain Corp and the Australian Agricultural Company. Ricegrowers have also said that their harvest would be down from about 112 million tonnes to about 15 million tonnes. But the two dominant supermarket chains have been quick to tell customers they are not responsible for higher prices and profit margins are tighter than ever. Goodman Fielder said commodity costs would rise about 40 per cent this year, or \$180 million. The effect would be to keep profits at near \$222 million compared with a 2006-07 bottom line of \$239.8 million. GoldmanSachs JBWere said in a note to clients that the bread and margarine maker was finding it difficult to pass on the increased costs to supermarkets and other retailers because many of its products were sold as "private label". Private label foods are different from mainstream consumer brands in that they are not "household names" but usually earn a higher margin for the retailer. The 13 bread brands the company produces are reliant on stable wheat prices but these have increased more than 50pc this year and are expected to continue to rise. The company also makes canola oil, margarine and mayonnaise, pastry, cake mixes, dips and cheese. These have been affected by the rising price of

canola oil, pushed up because it is in demand for biodiesel. Dairy farmers have also increased milk prices to cover increased grain costs. Graeme Hart, New Zealand's richest man, sold his 20 per cent stake in the company for \$2.12 a share last month. Goodman Fielder shares yesterday fell by 12.5c to \$1.98. SOURCE: The Sydney Morning Herald, a Fairfax Media newspaper.

News.com.au

Greens have water on brain

We already knew Greens leader Bob Brown was against building dams for city water.

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Uh, oh - now we find he's against desalination plants as well. What a bizarre phenomenon are the Greens - a political party that's fighting any realistic plan to stop Melbourne from running out of water. How did so many of us get to so hate humans? For months Brown has railed against the big new dam planned for the Mary River to stop southeast Queensland - already on level six restrictions - from running completely dry of drinking water. "Dams are so last century," Brown scoffed. "Water efficiency and recycling are the new way forward." Brown's brand of eco-fundamentalism has also been enough to scare the Brumby Government off building the cheap dam growing Melbourne clearly needs. Instead, the Government plans to spend three times as much on a desalination plant in Gippsland. And - big surprise - now we find that Brown is against that as well. On Sunday he was down at Kilcunda, the planned site for the plant, to tell local protesters he had a much better plan. "The rain falls from the heavens on to our houses," he declared as the rain that has fallen so freely on Gippsland this spring, flooding its undammed rivers, towns and the coal pit of the Yallourn power station, fell once more on the protesters. "Let us collect it and let us use it." Pardon? Rainwater tanks? That's Brown's plan to not just stop Melbourne from running dry, but to get enough new water for the one million more residents we expect over the next 18 years? To see how insane Brown's plan truly is, just do the maths. A new dam in the Mitchell River national park - which used to be a dam reservation until this Government decided to lock it up - would cost about \$1 billion, according to Melbourne Water. That could give us a dam about the size of the Thomson, Melbourne's biggest. Now compare. To hold the same amount of water in rainwater tanks, the city would need another 500,000,000 standard 2000-litre tanks, (2000-litre water tanks lets get real let's talk gallons. A standard tank used to be a 12000 gallon tank – that is 53472-litres) or about 150 for every Melburnian. And the cost? About \$1000 billion, at standard retail prices. Enough to build 1000 Thomson dams. It staggers me that the leader of a party that may hold the balance of power in the Senate after the election could propose something so fantastically expensive and still be treated seriously by the ABC and so many influential snowfield socialists. But when did mere details like money matter to the Greens, which seems a party imbued with the spirit of the daddy-pays children and feckless wives of today's guilty rich. Want another example? Then take the policy of the Greens' candidate for Melbourne to spend \$2 billion to fit half the buildings in that single electorate with solar hot water systems, insulation and solar panels. With 150 electorates in the country, that works out to a national policy that would cost \$300 billion. That's six times what the Federal Government spends on health and hospitals in an entire year. I'm working on the Greens own figures, so multiply again. And add extra for the electorates with heavy industry, which tends not to work so well on solar panels, especially at night. And figure that all this will do zero to stop global warming anyway, and all we'll really have is a deep black hole your money will never, ever fill. True, the Greens claim they'll pay for this promise by grabbing the savings in your power bills. To which the reply is: Yeah, right. If the savings were so sure, we'd do the solar paneling ourselves. How strange this is, that so many Australians support a party that promises to bankrupt them, that would kill the coal-fired power stations that give them light, and stop the dams that give them water. One day we'll look back and wonder what madness possessed us. Trouble is that we may then be looking back from the mouth of our dark caves. **If the Greens control the Senate what hope do we have? Thank whoever they will not be forming Government.**

The Australian

Kyoto targets flouted

Greenhouse gas emissions from the world's industrialised countries are again on the rise and closing in on record levels, despite most having signed the Kyoto Protocol. UN figures released last night - just weeks ahead of a key meeting to start brokering a new global deal to cut emissions - show greenhouse gases from Kyoto's 41 industrialised and transition countries approaching "an all-time high". Emissions fell between 1990 and 2000 but they rose 2.6 per cent between 2000 and 2005, for when the latest figures are available. The UN Framework Convention on Climate Change said the increase was driven by continued growth in the world's highly industrialised countries and the accelerating economies of the former Soviet bloc nations, led by a big increase in emissions from transport. The figures show Australia's greenhouse emissions in 2005 were about 25.6 per cent above 1990 levels, although the figure falls to a rise of 4.5 per cent when the effect of bans on land-clearing is included. This puts Australia on track to meet its generous Kyoto target of an 8 per cent increase on 1990 levels by 2012. Despite this latest upturn, the UNFCCC

said last night all Kyoto signatories were projected to meet their target of cutting emissions by 5 per cent from 1990 levels by 2012, although most of these cuts were the result of the economic collapse of Eastern European countries at the end of the Cold War. Their recent economic recovery has helped push emission rates back to record levels, even though their total emissions are still 35 per cent lower than those reported in 1990. UNFCCC executive secretary Yvo de Boer said that while the Kyoto signatories should together meet their modest targets, "we should not hide the fact that there is continuing greenhouse gas emissions growth on the part of several countries and they must do more to rein in their emissions".

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Fast-growth countries such as Turkey, Spain and Portugal have ratified Kyoto but still reported increases of about 50 per cent or more since 1990, while emissions from fellow signatory New Zealand have increased by 23 per cent, Canada by 54 per cent and Austria by 14 per cent. Emissions from the US, which, like Australia, has not ratified the protocol, are up 16.3 per cent since 1990. Countries that breach their Kyoto targets during the compliance period from next year to 2012 face theoretical penalties, although these appear unlikely to be enforced. They can also cut their emissions by buying emissions credits and investing in Kyoto's "flexible mechanisms", which include investing in programs in developing countries that cut emissions. Some developed economies including Denmark, Sweden, France and Britain have managed to reduce their total emissions since 1990. The latest greenhouse estimates come just days after the release of the final summary report from the UN's Intergovernmental Panel on Climate Change. At the weekend, the Nobel-winning IPCC warned that climate change was accelerating faster than previously predicted and could wreak "abrupt or irreversible" damage if unchecked. The publication of the greenhouse data and the IPCC report will feed into the key UNFCCC meeting in Bali next month. The meeting of 198 governments is expected to agree on a road map for negotiations to frame a new global climate deal, which will come into force after 2012, when the Kyoto Protocol expires. Crucial to the negotiations will be finding agreement on measures to rein in emissions from developing economies, especially China and India. Environment Minister Malcolm Turnbull said last night the latest report "shows the world urgently needs a new and effective agreement, that includes developing countries, to cut global greenhouse emissions". "Developing countries such as China and India must be part of the deal or the world simply won't achieve the necessary cuts," he said. John Howard and Kevin Rudd have both pledged to lead the Australian delegation to Bali if they win government on Saturday. Labor has promised to ratify the Kyoto Protocol if it wins, but will have a mainly symbolic impact on the global negotiations, which are now focused on brokering a post-2012 deal. Under the Kyoto Protocol, only industrialised countries that have ratified the agreement are required to make targeted cuts in their emissions. Developing countries do not have these pledges. Australia and the US - the world's biggest carbon polluter in 2005 but widely tipped to be overtaken by China this year - remain the two main countries that have refused to sign it, although they remain members of the UNFCCC and will be involved in key negotiations next month and beyond. The UNFCCC believes the Kyoto signatories can together cut total emissions by 10.8 per cent by 2012. But Mr. de Boer admitted the adoption of Kyoto's "flexible mechanisms", such as emissions-trading and credits earned for clean-energy projects in developing countries, would be needed for many Kyoto signatories to meet their 2012 targets. He said a mix of tools was needed as countries shaped a post-2012 deal for tackling global warming. "A future, ambitious UN climate change regime needs to continue and expand the central elements of the Kyoto Protocol, whilst making use of other policy tools, such as carbon taxes and other effective policy packages," he said. *Additional reporting: AFP*

Rooftops in policy mix for warehousing water

The rooftops of western Sydney warehouses could form part of a national catchment area to secure capital city water supplies. Stormwater harvesting - a central plank of the Coalition's National Urban Water Plan, released in Adelaide yesterday - would make unnecessary controversial projects such as the Goulburn Valley-Melbourne pipeline and Queensland's Traveston Dam. The policy, which includes pledges to spend several hundred million dollars to assess how to capture rainwater, even cites the "very large roof areas" of western Sydney warehouses and distribution centres as a catchment area. Launched by Water Resources Minister Malcolm Turnbull, it nominates water security as the nation's greatest climate change challenge and says stormwater harvesting is a major part of the response. The policy documents say stormwater is a significant untapped resource and that runoff from roads and rooftops is equivalent to major cities' entire water consumption. The Coalition, if re-elected, will spend tens of millions in each major city to capture that stormwater. Adelaide will get the biggest funding, with \$50 million, followed by Sydney, which will receive \$40 million. Melbourne, Brisbane and Perth will receive \$30 million each. Adelaide and Perth already capture storm runoff and store it in aquifers under the cities. Funding to both will expand those projects. In Sydney, the money will pay for feasibility studies for taking water from the Botany aquifer, which the documents predict could provide 8 per cent of the city's water needs. Melbourne and Brisbane will get "comprehensive assessments" of opportunities to capture stormwater. "Almost all of our cities have as much water as they need falling

as rain on (them) and invariably being entirely wasted, going off into creeks, rivers and oceans," Mr Turnbull said yesterday. "A key part of the new urban water agenda is to make every drop count in our cities and to harvest stormwater. "There is a vital interest in harvesting as much as we can." Labor has outlined spending of \$1 billion on urban water supplies through recycling, stormwater capture and desalination. Yesterday, it promised to bring forward spending of \$400 million from the National Water Security Plan to return flows to the Murray River by buying back water licences.

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Opposition water spokesman Anthony Albanese, also campaigning in Adelaide, condemned the Coalition for not returning a "single drop" to the Murray. He promised the return of 500 gigalitres as a matter of urgency.

Murray just 4cm above sea level

THE River Murray below Blanchetown has fallen 19cm in less than a week and now is just 4cm above sea level. Hot and dry conditions over the past week have drastically increased evaporation in the Murray-Darling system's lowest pool. The rapid deterioration before summer has led to environmentalist warnings of a salinity crisis in the lower river. The river level below Lock 1 now is 71cm below normal levels - believed to be the lowest in more than 40 years. Water Security Minister Karlene Maywald said the state was receiving flows of 3340 megalitres each day. That was almost half of the 6000 megalitres normally received in November. "Evaporation and water use have been exceeding flows, so the water level is continuing to decline," she said. "The level at Lake Alexandrina is extremely low at only 9cm above sea level. The level there is forecast to fall below sea level next month." River, Lakes and Coorong Action Group chairman Henry Jones said over-allocation of Murray water to irrigators was forcing a drop in river levels. The State Government has announced an increase in allocations from 16 to 22 per cent from December 1. "A majority of irrigators know the river has been over-allocated for a long time but it can't go on like it is," he said. "They've got to realise the environment is in real stress and without a healthy river they'll have nothing. About 1000 tonnes of salt comes down the river each day. Things are getting saltier and saltier as the flow simply isn't there. It's only going to get worse over Christmas."

Fires along the river!

Residents flee as winds fan fires

Strong winds and lightning lashed Cobdogla last night as firefighters battled dozens of spotfires sparked by bushfire embers drifting across the besieged Riverland town. Hours after police warned residents to leave, strong southeasterly winds were fanning the contained bushfire near the town last night. Country Fire Service crews were hoping a forecast change would bring rain to the town this morning. The town was not under direct threat last night, but CFS crews were at full stretch extinguishing the dozens spot fires sparked by embers. Earlier in the day, police had warned residents to evacuate or stay to defend their homes. Many of the 250 Cobdogla residents, including school children and the elderly, were evacuated about 11.30am amid fears the fire would tear through the town. The blaze, which began on Sunday when lightning struck long grass in Moorook Game Reserve, had earlier continued to smoulder, with strong winds causing spot fires less than 200m from the town. Almost 1000 ha of scrubland was destroyed. Firefighters had feared the strong winds and temperatures of up to 36C could drive the fire toward Cobdogla and nearby Loveday. A CFS volunteer hit by a falling tree branch had leg injuries and an amateur photographer was bitten by a snake. Both were being treated at Renmark Hospital. The CFS said more than 100 firefighters helped tackle the blaze. A community meeting was held at the Cobdogla Club. Resident Lisa Broekers rushed from work yesterday to collect her son Daniel, 9, from school before returning home to pack the family's most treasured possessions. "I've just grabbed photos, clothes and our pets and put them in the car," she said. "I'm not hanging around here. We'll head to a friend's place or something, but not here." Police patrols issued letters warning all residents to flee the town or prepare their homes for a bushfire. Mia Fuller and fiance Graeme Dyer stayed to protect their home on the main street of Cobdogla. "We've just watered the whole place down – to hell with the water restrictions," she said. Following police advice, about 70 Cobdogla Primary School students were immediately evacuated with parents arriving to collect children directly from their classrooms. Holiday-makers and residents at a local caravan park were also urged to leave and many headed to nearby Barmera or Renmark.

Adelaide.now.com

Climate alliance calls for action

An alliance of community, environmental and business groups has urged political leaders to tackle climate change urgently and effectively. The climate alliance of 15 groups, representing most sectors of society, aims to protect Australians from the potential catastrophies of climate change. The newly formed group ran prominent advertisements in newspapers across the country today, in a bid to generate support for action over the growing environmental problem. The group wants Australia to become a world leader in clean and renewable energy. In a joint statement, the

alliance said Australian scientists warned that urgent action was needed to avoid dangerous climate change. As an enterprising nation, Australians could create exciting new business opportunities and jobs by turning the threat into opportunity, the alliance said. Australian Conservation Society executive director Don Henry said the unprecedented alliance represented millions of Australians. Mr Henry said "terrifying" UN climate change reports had triggered action to strengthen the voice for Australia's future. "Climate change is the moral issue of our times and it demands action now," Mr Henry said. "There is no more important issue for the future of our kids - it's going to affect their health and our environment.

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World Vision Australia chief executive Tim Costello said Asian and African communities had been "kicked in the guts" from a dramatic increase in natural disasters, particularly in South-East Asia, as a result of global warming. Mr Costello said it was time Australia's experts and politicians became world leaders in climate change, rather than the country being "a follower and observer". "Global warming is the greatest example of market failure," Mr Costello said. "We need global leadership and we need Australians, that have have been leaders in so many areas ... to take the lead - we have been playing way behind." The alliance's signatories are AgForce, AngliCORD, the Australian Conservation Foundation, ACOSS, the CFMEU Mining Division, CHOICE, The Climate Institute, Bishop George Browning, Doctors for the Environment Australia, Investa, the Property Council of Australia, Szencorp, the Uniting Church in Australia, Westpac and World Vision.

Canberra.times

Turnbull stymied climate project

Federal Environment Minister Malcolm Turnbull overruled an expert scientific panel's recommendation for the Australian National University to co-host a new \$50 million national climate change adaptation centre. Government sources say the bid by the Universities Climate Consortium an alliance formed by the ANU, Monash University, the University of NSW and the University of Melbourne was widely regarded as "unbeatable" because of the world-class expertise and international reputations of its key climate scientists. They claim the expert panel's recommendation was overturned after pressure from Prime Minister John Howard to support a rival bid led by a university based in the safe Liberal seat of Moncrieff on Queensland's northern Gold Coast. Eight candidates are contesting the seat, which covers Surfers Paradise, Mermaid Beach and the affluent blue-ribbon suburb of Southport. Despite a safe margin of 19.5 per cent, the sitting member, Liberal MP Steven Ciobo, faces intense competition from Labor opponent Sam Miskowski, an investment broker and former chief executive of Queensland's Australian-Israeli Chamber of Commerce. Mr. Ciobo won a bitter pre-selection battle for the seat in 2001, and is a member of an influential "ginger group" of 23 Liberal backbenchers. Sources at the Australian Greenhouse Office, which oversaw the competitive bid process for the new national climate adaptation centre the first of its kind in Australia and proposed by the Council of Australian Governments earlier this year described the recommended proposal as drawing together "a who's who of world-class climate expertise across Australia". The bid involved collaboration with CSIRO, the Bureau of Meteorology and Bureau of Rural Sciences, and was structured to achieve maximum scientific independence by not being tied to a regime of matching state and federal funding. Those involved in shaping the bid included the director of the ANU's Fenner School of Environment and Society, Professor Will Steffen, who previously led a global ecosystems research program involving 10,000 scientists in 80 countries. The bid also involved University of Melbourne Federation Fellow David Karoly, regarded as one of the world's foremost authorities on global climate variability and UNSW atmospheric scientist and global climate modeling expert Professor Andy Pitman. Government sources told The Canberra Times the bid was endorsed by an expert scientific panel, chaired by Australia's chief scientist Dr Jim Peacock, which applied "a thorough and rigorous process" to shortlisting and interviewing applicants. They claim the panel sent its final recommendation to Mr. Turnbull in mid-September but members were not told of the decision until last week, shortly before the announcement was made by the minister during a campaign visit to the Gold Coast. Flanked by Mr. Ciobo, Mr. Turnbull announced a group of eight universities led by Griffith University's Gold Coast campus would host the new centre. Mr. Ciobo said it was Griffith's "leadership and range of scientific expertise that encouraged the Coalition to select the Gold Coast campus to establish a Centre for Climate Change Adaptation, the first of its kind in Australia." A spokesman for the minister said the decision was made "before the caretaker period was announced", but ANU sources say the university was not notified its bid had been rejected until it received a telephone call several hours before the minister's decision was announced. Others involved in the rejected bid said they had "heard nothing" about an impending decision by the minister prior to the election being called and had assumed a decision would be deferred during the caretaker period. The expert panel made its final recommendation to the minister in mid-September, submitting two proposals for consideration but favouring the ANU bid. The winning bid involves Griffith University, the Queensland University of Technology, the University of Newcastle, Macquarie University, Murdoch University, the University of Southern Queensland, James Cook University and the University of

the Sunshine Coast. One of Australia's leading climate scientists, former chief of CSIRO's atmospheric research division, Graeme Pearman, described the Government's decision to reject the climate consortium bid "as totally bewildering". Dr Pearman, who recently briefed former US president Al Gore on new developments in climate change research during his visit to Australia, described the rejected bid as "way out in front of all other possible contenders" to host the new national centre. "It was such a strong proposal because of the quality of the people involved."