

NRM on farms



A monthly news summary about climate and natural resources in agriculture.

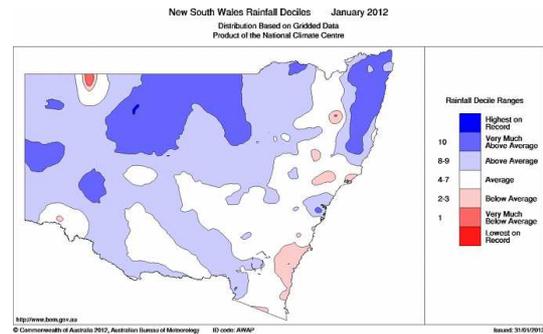
February 2012

CLIMATE

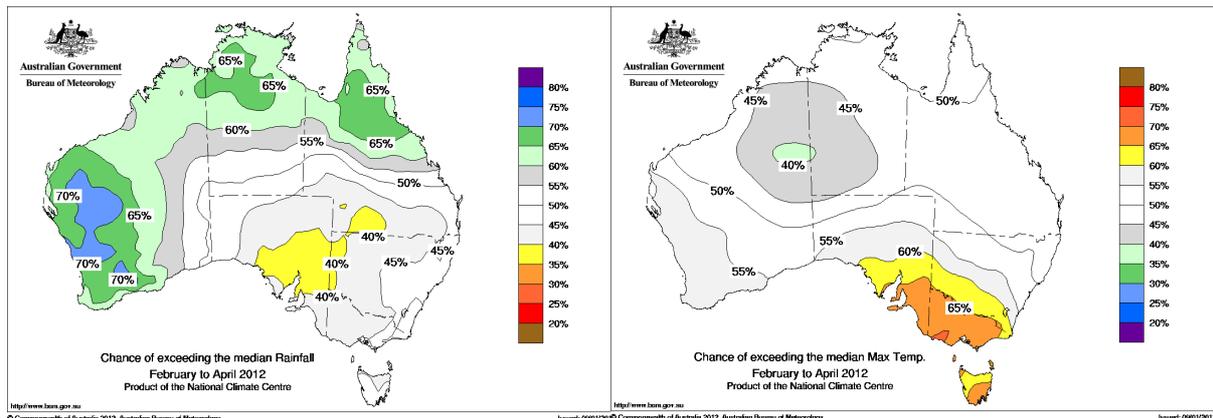
15th wettest January for NSW

NSW recorded a statewide average of 87.7 mm during January, above the historical average of 67.3 mm and the 15th wettest on record. It was the wettest January since 1951 at Tweed Heads and since 1974 at Grafton, Murwillumbah and Broken Hill.

<http://www.bom.gov.au/climate/current/month/nsw/summary.shtml>



NSW seasonal outlook: Average rain, warmer in the south



Western NSW is likely to have a drier than average season in the next three months, while southern NSW is likely to have warmer than average days. Otherwise NSW seasonal conditions are likely to be average. The drivers of this outlook are a warmer than normal Indian Ocean and cool conditions in the tropical Pacific associated with La Niña.

<http://www.bom.gov.au/climate/ahead/>

La Nina weakening

La Nina indicators such as the Southern Oscillation Index (SOI), trade winds and cloudiness over the equatorial Pacific Ocean have shifted towards more neutral values, implying some weakening of the La Niña event. Sea surface temperatures in the central and eastern tropical Pacific has also warmed slightly from their December lows. Most climate models surveyed by the Bureau suggest a gradual decline of the current La Niña, with an end during autumn.

<http://www.bom.gov.au/climate/enso/>

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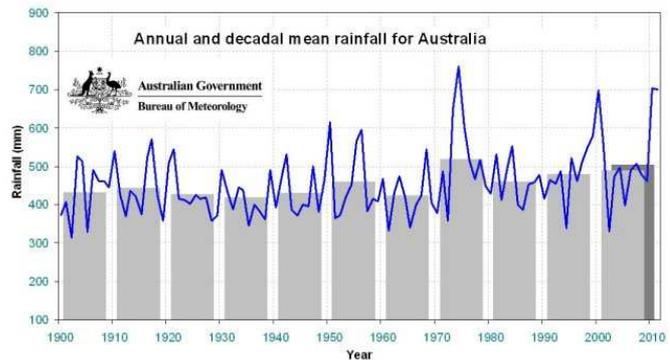
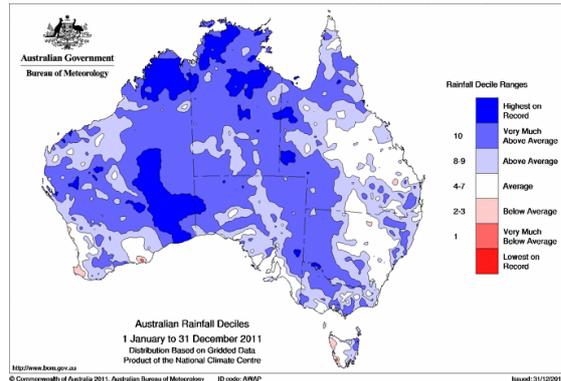
Australia's climate in 2011

Australia's mean rainfall total for 2011 was 699mm making it the third-wettest since 1900. The only regions with below-average rain were patches of southwest WA, western Tasmania and pockets of NSW and SE Queensland.

The 2010-11 La Niña dominated climate patterns during the first part of 2011, and a second La Niña was associated with above average rainfall later in the year. A record warm eastern Indian Ocean also contributed to the above average rainfall.

The Australian area-averaged mean temperature was just below the 1961 to 1990 average, but the southern half of Australia was warmer than usual. Despite the slightly cooler conditions, 2002-2011 is likely to rank in the top two warmest 10-year periods on record for Australia, at 0.52C above the long-term average.

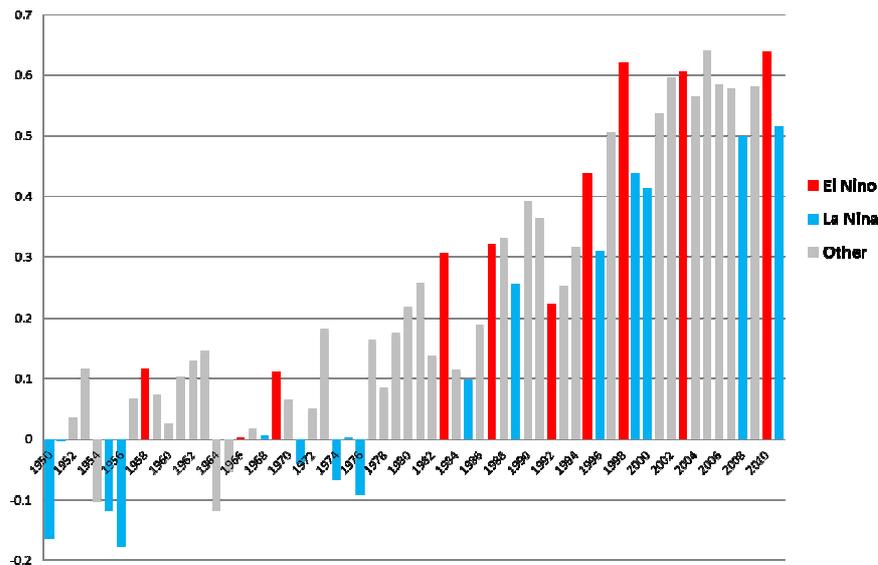
http://www.bom.gov.au/announcements/media_releases/climate/change/20120104.shtml



2011 global climate

2011 tied with 1997 as the 11th warmest year since records began in 1880. It was also the 35th consecutive year, since 1976, that the yearly global temperature was above average. The warmest years on record were 2010 and 2005. The 2011 global average land surface temperature was the eighth warmest on record, and the global average ocean temperature was the 11th warmest. Globally, 2011 was the second wettest year on record, behind 2010..

Annual Global Temperature Anomalies
1950 - 2011



<http://www.ncdc.noaa.gov/sotc/global/>

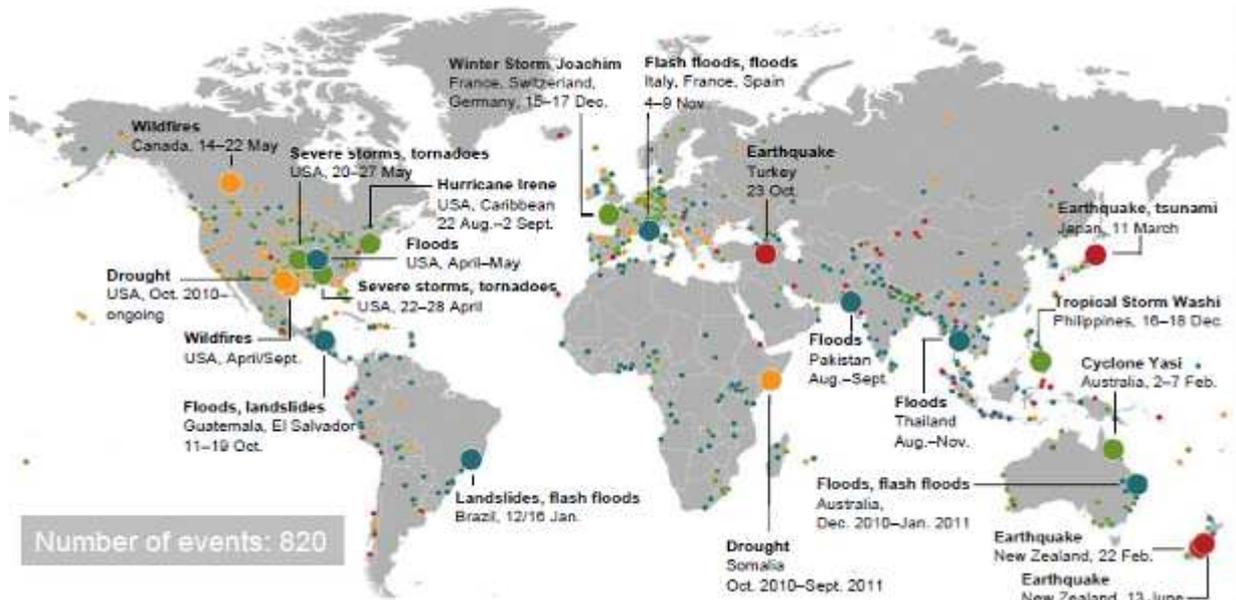
Durban Climate Summit outcomes

The 2011 Durban Climate Summit agreed to negotiate a single agreement by 2015 that will cover all major carbon pollution emitters including China, India and the United States. The Summit also committed to establish a Green Climate Fund to help developing nations invest in clean energy and manage the unavoidable impacts of climate change. All countries agreed to increase national efforts to reduce pollution, but there was no agreement on a framework for new common accounting rules to define and measure the progress countries are making towards their targets.

http://www.climateinstitute.org.au/images/reports/tci_durbanassessment_policybrief_dec2011.pdf

Natural catastrophes in 2011

2011 was the costliest year ever in terms of natural catastrophe losses. 90% of the recorded natural catastrophes were weather-related, but nearly two-thirds of economic losses and half the insured losses stemmed from geophysical events, principally the large earthquakes in Japan and New Zealand. Around 70% of 2011 economic losses occurred in Asia.



http://www.munichre.com/en/media_relations/press_releases/2012/2012_01_04_press_release.aspx

Record year for US climate disasters

US experienced 12 billion-dollar weather disasters in 2011, exceeding the previous record of nine billion-dollar weather/climate disasters in 2008. The US National Oceanic and Atmospheric Administration (NOAA) tallied the 2011 damage at \$52 billion. The events included wildfires in Texas, New Mexico and Arizona, and tornadoes and severe weather event in June. The twelve disasters resulted in 646 deaths, with the US National Weather Service reporting over 1000 deaths across all weather categories for the year.

<http://www.ncdc.noaa.gov/oa/reports/billionz.html>

Increasing importance of summer rain

The proportion of annual rain falling during the summer fallow period in southern Australia has increased in the last 10 years and crop modelling shows that this rain contributes an average 1.0 t/ha or 33% of water-limited attainable wheat yield due to both increased water use and increased water-use efficiency.

<http://www.publish.csiro.au/nid/40/paper/CP11268.htm>

3



Primary
Industries

Melbourne base for Climate Change Authority

The Commonwealth Government's new Climate Change Authority will be based in Melbourne when it starts on 1 July 2012. Chaired by former Reserve Bank governor Bernie Fraser, with other CCA members to be appointed soon, the CCA will advise the Government on carbon pollution caps, the carbon pricing mechanism and other climate change laws. <http://www.climatechange.gov.au/government/clean-energy-future/implementation/the-way-ahead/climate-change-authority.aspx>

CLIMATE RESOURCES

Climate dogs now working in NSW

DPI Victoria's popular Climate Dogs animations have been adapted for NSW climatic conditions. The four dogs help explain the influence of four climate systems on NSW: El Nino, the Indian Ocean dipole, the subtropical ridge, and the southern annular mode. A fifth dog will soon be added to explain east coast lows. <http://www.dpi.nsw.gov.au/agriculture/resources/climate-and-weather/variability/climatedogs>

Climate change scenarios for NSW regions

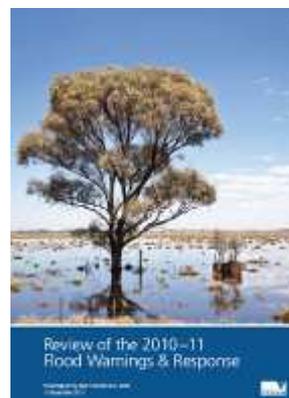
The Office of Environment and Heritage has developed climate change scenarios for each of eight NSW regions to the year 2050. <http://www.environment.nsw.gov.au/resources/climatechange/ccscenariownsw.pdf>

Climate risk assessment guide for NSW local government

This guide aims to help council staff prepare for the impacts of climate change and develop strategies to adapt to changing climate <http://www.environment.nsw.gov.au/resources/climatechange/20110593riskassesslg.pdf>

Floods review recommends major changes

The Victorian *Review of the 2010–11 Flood Warnings and Response 2011* has made 93 recommendations to support reform of the state's emergency management arrangements, including centralised operational control, an 'all hazards all agencies' approach, consistent emergency management plans across the state, improved land use planning, and involvement of communities in all phases of emergency management. http://www.floodsreview.vic.gov.au/images/stories/documents/review_20101011_flood_warnings_and_response.pdf



Social impacts of drought

This recently published report is the findings of a 2008 review of the social impacts of drought on farm families and rural communities and ways to mitigate its impact. http://adl.brs.gov.au/data/warehouse/ClientReports/sidlrd9abps001/sidlrd9abps0010111a/SocImpctDroughtLitRev2008_1.0.0.pdf

Decision making in a changing climate

This UN report is designed to help officials make decisions that support communities and economic sectors to become more climate-resilient. It offers specific, practical strategies and innovative case studies on how to integrate climate change risks into national policies and planning. http://pdf.wri.org/world_resources_report_2010-2011.pdf

EMISSIONS

Approved CFI methodologies

There are now three approved methodologies under the Carbon Farming Initiative: capture and combustion of landfill gas, destruction of methane generated from manure in piggeries, and environmental plantings.

<http://www.climatechange.gov.au/en/government/initiatives/carbon-farming-initiative/methodology-development/approved-methodologies.aspx>

Three other methodologies have been submitted for consideration: avoided emissions from diverting waste from landfill for process engineered fuel manufacture, management of large feral herbivores (camels) in the Australian rangelands, and savanna burning.

<http://www.climatechange.gov.au/government/initiatives/carbon-farming-initiative/methodology-development/methodologies-under-consideration.aspx>

Alberta agricultural emissions methodologies

Alberta, Canada, has developed 33 methodologies to reduce agricultural emissions and qualify for carbon credit schemes. All credits have to be verified by an independent third party.

<http://environment.alberta.ca/02275.html>

DAFF booklet on CFI

This 8 page illustrated booklet outlines the operations of the Carbon Farming Initiative.

http://www.daff.gov.au/_data/assets/pdf_file/0006/1950783/cfi-fact-sheet.pdf

Making cent\$ of carbon and emissions on-farm

This free booklet from DPI Victoria provides examples of actions that farm businesses can take to improve their emissions performance through trees, soils, nitrogen fertiliser, livestock, energy and supply chain.

<http://www.box.com/s/f48mquiuvnef3zmc6te2>



Dairy calculator updated

The DGAS emissions calculator has been updated in response to suggested improvements and methodology changes.

<http://www.dairyingfortomorrow.com.au/index.php?id=47>

Carbon farming in rural Queensland

This 40 page booklet outlines Queensland Government's policies and actions to help the rural sector benefit from the emerging carbon market. It includes information on greenhouse gas abatement in the land sector, operation of carbon markets, features of the Carbon Farming Initiative, potential carbon abatement activities; and government actions to date.

<http://www.climatechange.qld.gov.au/pdf/carbon-farming.pdf>

Winery waste helps reduce dairy emissions

Victorian research has found that feeding dairy cows the stems, seeds and skins from wine grapes reduced their emissions by 20 per cent, increased milk production by five per cent and increased the healthy fatty acids in their milk when green feed was not available.

<http://www.dpi.vic.gov.au/about-us/news/media-releases/category/agriculture/wine-drinkers-boost-eco-friendly-milk2>

Danish farmers lower agricultural emissions

In the past 20 years Danish farmers have reduced agricultural emissions by 28 percent and increased production through optimisation of breeding and feeding, improved utilisation of manure nitrogen, reduced use of fertiliser and changes in tillage.

http://www.agricultureandfood.dk/Danish_Agriculture_and_Food/Environment.aspx

More than just hot air videos

The Primary Industries Climate Challenges Centre has produced four videos explaining greenhouse gases in agriculture, including carbon dioxide, methane and nitrous oxide.

<http://vimeo.com/climateprimaryindustries>

LCA of wood production

This review covers research findings on interactions across the many different carbon pools in all stages of wood production.

http://www.corrim.org/pubs/articles/2011/FSG_Review_Carbon_Synthesis.pdf

Carbon toolkits in agriculture newsletter

This monthly newsletter from DPI Victoria covers news, funding opportunities and new resources about carbon emissions management in agriculture.

<http://www.dpi.vic.gov.au/agriculture/about-agriculture/newsletters-and-updates/carbon-toolkits-network-update>

Carbon offset guide

The latest issue of the Carbon Offset Guide is now available online. The guide is an independent directory of Australian carbon offset providers, including 26 developers, 32 retailers, and 15 brokers. It includes information on offset prices, project descriptions and locations, and accreditation standards. Offset projects include renewable energy, forestry and methane.

<http://www.carbonoffsetguide.com.au/>

WATER

Streamflow forecast

The streamflow forecasts for January to March favour near median or high flows for most of the forecast sites in Victoria and New South Wales.

<http://www.bom.gov.au/water/ssf/index.shtml>

Rise in 2010-11 water allocations

Water allocations in 2010-11 were the highest in six years due to high rainfall and flooding across large areas of Australia, and the value of the market fell to \$1.5 billion from \$3 billion in 2009-10, reflecting significant reductions in allocation trade prices and reduced entitlement trade. Murray Darling basin trading accounted for most of the trading.

<http://www.nwc.gov.au/publications/bookshop/december-2011/australian-water-markets-report-2010-11>

Trading of environmental water

The Commonwealth government is calling for public comment on possible trading arrangements for Commonwealth environmental water. Deadline for comments is 27 April.

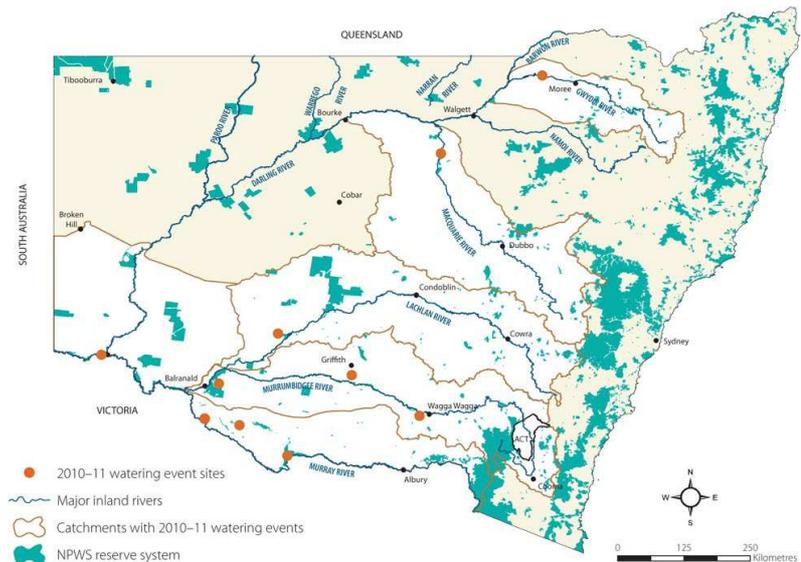
<http://www.environment.gov.au/ewater/publications/pubs/trading-discussion-paper.pdf>

NSW environmental water allocations

In 2010–11, more than 1.1 million megalitres of environmental water was directed to wetlands and areas of high biodiversity value in NSW. Details of the allocations are in the annual report of NSW environmental water use.

<http://www.environment.nsw.gov.au/resources/environmentalwater/20110930envtalwater1011.pdf>

Right: NSW environmental watering event sites 2010-11



Assessment of Australia's water resources

The Bureau of Meteorology' first assessment of the nation's water resources covers all water sources and highlights trends in water availability, quality and use during 2009-10.

<http://www.bom.gov.au/water/awra/2010/index.shtml>

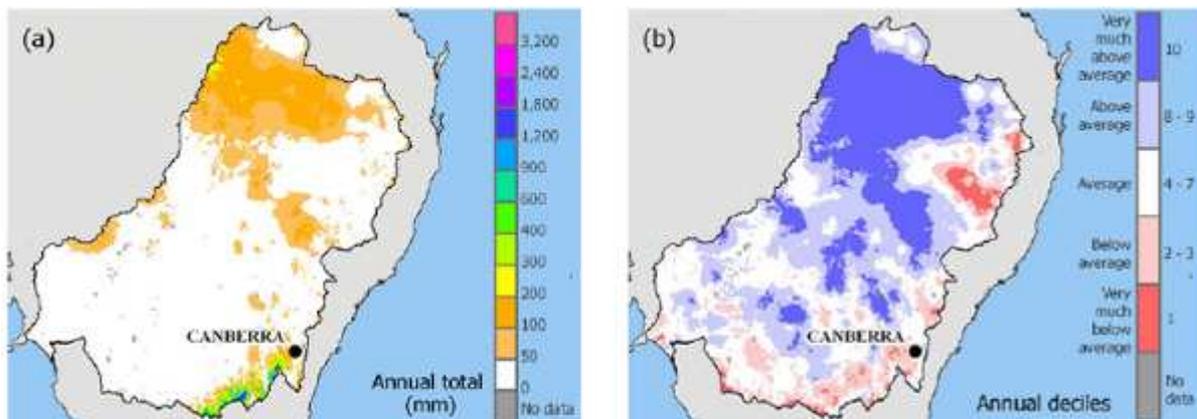


Figure 7-2. Maps of modelled annual landscape water yield totals in 2009–10 (a) and their decile rankings over the 1911–2010 period (b) for the Murray–Darling Basin region

Water reform in the NSW Murray-Darling Basin

This report is a summary of regional water reform and environmental water recovery in NSW between 1996 and 2011.

<http://www.shop.nsw.gov.au/pubdetails.jsp?publication=10987>

Improvement in water plans

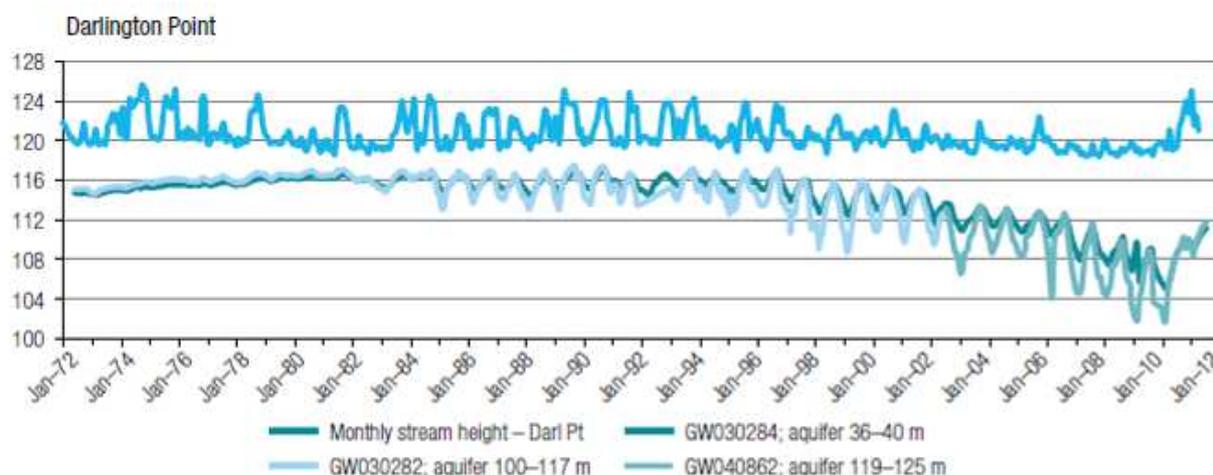
There has been a significant increase in the number and quality of water plans across the country according to the first national water plan report card released in December, but there is room for improvement in interception and environmental water arrangements, compliance and enforcement. Detailed report cards are available for every water plan in each state.

<http://www.nwc.gov.au/publications/bookshop/december-2011/national-water-planning-report-card-2011>

Groundwater is recharging

Australian groundwater levels have risen due to the high rainfall and flooding of 2010-11. Smaller aquifers appear to have fully recharged, but larger aquifers are still affected by both drought and high levels of groundwater extraction, and require more time to fully recharge.

http://www.nwc.gov.au/_data/assets/pdf_file/0004/19858/1239-NWC-GroundwaterReport_FA.pdf



History of water trading

Water markets in Australia: a short history traces the development of water trading in Australia to promote a better understanding of the benefits of water reforms, and the commitment and leadership required to achieve long-term gains.

http://nwc-web01.squiz.net/_data/assets/pdf_file/0004/18958/Water-markets-in-Australia-a-short-history.pdf

Distilled newsletter

To keep up to date with developments in water, subscribe to the National Water Commission's newsletter, Distilled.

<http://www.nwc.gov.au/publications/distilled>

SOILS

Qld appoints soil science committee

The Queensland Government has appointed a committee to ensure that the soil science which informs the state's Strategic Cropping Land legislation is robust, accurate and can withstand independent scrutiny. The committee will be made up of four professional soil scientists, two nominated by the Australian Society of Soil Science, one by the Queensland Resources Council and one by the Queensland Farmers' Federation.

<http://www.cabinet.qld.gov.au/MMS/StatementDisplaySingle.aspx?id=78075>

Cow compaction may limit soil carbon storage

NZ researchers have found that livestock treading reduces soil porosity and leads to a decline in soil invertebrate decomposers, which may limit incorporation of organic matter from the soil surface into the soil profile, and hence the soil's capacity to store carbon.

<http://www.publish.csiro.au/nid/84/paper/SR11119.htm>

Bulk density and soil carbon

A recent Soil Research paper says soil carbon stock changes in southern Australia should be monitored on a decadal scale due to the variability found in measuring soil bulk density.

<http://www.publish.csiro.au/nid/84/paper/SR11161.htm>

Biochar implications for agricultural productivity

This ABARES report focuses on production and application of biochar to soils to improve soil function and the ancillary benefits that may arise.

http://adl.brs.gov.au/data/warehouse/biochar9abcm001/biochar9abcm00101/TR.2011.06_Biochar_v1.0.0.pdf

Biochar trial for plant propagation

A Greening Australia trial is investigating the potential benefits of using biochar to help propagate currently difficult-to-germinate Australian native plant species. It is hoped that the trial will improve re-vegetation outcomes in the field.

http://www.biochar-international.org/profiles/Greening_Australia

National Soil Grids released

The first set of gridded (250m) standard national soil data products for specific soil attributes have been released online. It includes grids of clay content (0-30cm), bulk density (0-30cm) and plant available water capacity (0-1m).

<http://www.asris.csiro.au/themes/NationalGrids.html>

World soil resources and food security

The reference takes an in-depth look at the availability and status of global soil resources available for food production, and how to maintain and improve them. Several chapters focus on South Asia and sub-Saharan Africa where most of the world's 1.02 billion food-insecure people live.

<http://www.taylorandfrancis.com/books/details/9781439844502/>

ENERGY

Alternative transport fuels framework

The Australian Government has released a strategic framework for alternative transport fuels to establish a market-led adoption of alternative transport fuels in Australia.

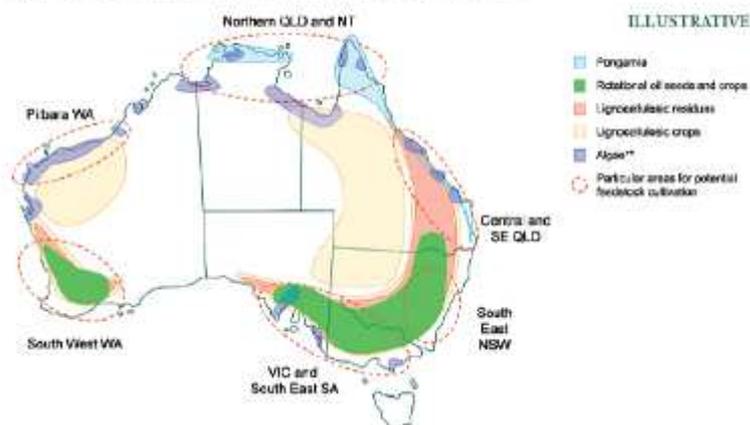
http://www.ret.gov.au/resources/fuels/alternative_transport_fuels/strategy/Pages/AlternativeTransportFuelsStrategy.aspx

Advanced biofuels study

Advanced biofuels are defined as liquid fuels derived from sustainable sources of organic matter such as wood residues, certain oilseeds, and algae that do not compete with food production. This study sets out key issues for industry and Government for the establishment of a sustainable ABF industry in Australia over the next 20 years.

<http://www.ret.gov.au/Department/Documents/clean-energy-future/advanced-biofuels-study.pdf>

Figure 18: Potential biofuel feedstock growth regions¹²⁷



Strategy for primary industry opportunities in bioenergy

A new strategy has been developed to develop opportunities for primary producers to engage in the bioenergy supply chain. A forum will meet in March to start the process of implementing the strategy.

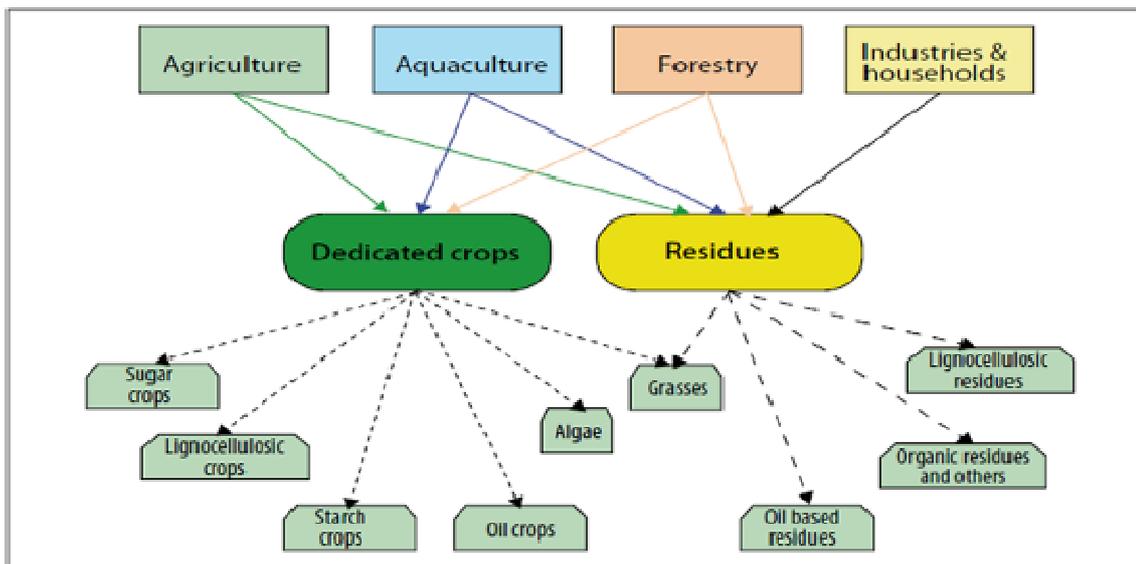


Figure 2. Types of biomass feedstocks and their source³

<https://rirdc.infoservices.com.au/items/11-079>

Bioenergy from NSW native agroforestry

This assessment of the bioenergy potential of native agroforestry in the NSW Central Tablelands found that while farm-based agroforestry linked to a regional bioenergy industry has clear economic potential, there is mistrust of government policy and uncertainty about market returns. The report recommends the establishment of an independent agency to investigate and oversee the regulatory and financial structures needed for a farm-based agroforestry/bioenergy industry in rural Australia.

<https://rirdc.infoservices.com.au/items/11-065>

Biomass potential of native grasses

Initial research in to the biomass potential of native grasses has identified four species with potential but these need evaluation at additional sites. Many more native species remain to be screened to find candidates for production throughout Australia.

<https://rirdc.infoservices.com.au/items/11-101>

Bioenergy, land use and emissions

This IAE report discusses the connection between bioenergy and land use change and the risk that greenhouse gas emissions associated with land use change could undermine the climate change mitigation benefits of bioenergy.

<http://www.ieabioenergy.com/LibItem.aspx?id=6927>

LCA approach for bioenergy emissions

A new publication from the International Energy Agency outlines the key methodological aspects of life cycle assessment that need to be considered in greenhouse gas (GHG) balances of bioenergy systems. Authors include DPI/UNE research scientist Annette Cowie.

<http://www.ieabioenergy.com/MediaItem.aspx?id=7099>

Draft guidelines for NSW windfarms

The NSW government is calling for comment on its draft guidelines for windfarms which outline the matters that will be considered in wind farm proposals, including landscape and visual amenity, noise impacts, potential impacts on property values, potential impacts on threatened species, auditing and compliance provisions, and decommissioning and rehabilitation. Deadline for comments is 14 March.

<http://www.planning.nsw.gov.au/Development/Onexhibition/tabid/205/ctl/View/mid/1081/ID/66/language/en-AU/Default.aspx>

Draft energy White Paper released

This draft provides an overview of Australia's future energy needs to 2030 and a policy framework to guide the further development of Australia's energy sector. The paper highlights the need to work through land or resource use issues associated with coal seam gas development, groundwater and agriculture. Deadline for comments is 16 March 2012.

<http://www.ret.gov.au/energy/Documents/ewp/draft-ewp-2011/Draft-EWP.pdf>

US EPA study links contaminated water to fracking

A three year study by the US Environmental Protection Agency has concluded that chemicals used to hydraulically fracture rocks in central Wyoming are the likely cause of local water supplies being contaminated. The agency's analysis indicated the presence of synthetic chemicals, like glycols and alcohols consistent with gas production and hydraulic fracturing fluids, benzene concentrations well above standards in the Federal Safe Drinking Water Act standards, and high methane levels. The EPA has also begun a national study on the potential impacts of hydraulic fracturing on drinking water resources.

<http://www.nytimes.com/2011/12/09/us/epa-says-hydraulic-fracturing-likely-marred-wyoming-water.html>

Coal seam gas research alliance

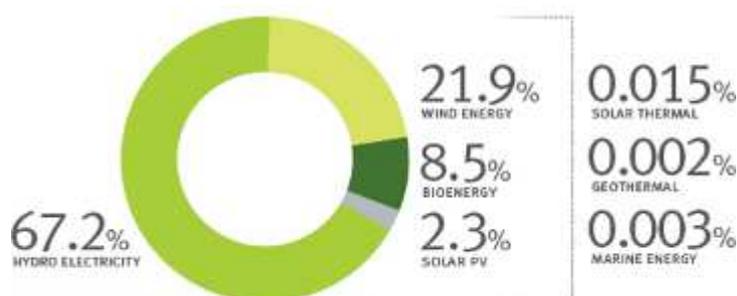
CSIRO and Australia Pacific LNG (a CSG to LNG joint venture between Origin and ConocoPhillips) have established the Gas Industry Social and Environmental Research Alliance to deliver public-good research and synthesise information on the environmental impacts of CSG. The initial focus will be directed at Queensland's CSG-LNG industry.

<http://www.gisera.org.au/>

Clean Energy 2011

Rainfall continues to be one of the strongest influences on Australia's clean energy generation, followed by wind. Hydroelectricity accounted for two thirds of the renewable energy generated in the 12 months to September 2011. Of 10 major projects underway, seven are wind, one bioenergy, one solar photovoltaic and one landfill gas.

<http://www.cleanenergycouncil.org.au/cec/resourcecentre/reports/cleanenergyaustralia>



Bioenergy Australia newsletter

To keep up to date with bioenergy developments in Australia and overseas, subscribe to the free newsletter of Bioenergy Australia

<http://www.bioenergyaustralia.org/>

BIODIVERSITY

Plant diversity is key to ecological functioning

A global study of dryland plant life has found that diversity is a crucial buffer against the negative effects of climate change and desertification. The more diverse an ecosystem, the more ecological functions it performs. Plant species richness may be particularly important for maintaining ecosystem functions linked to carbon and nitrogen cycling, which sustain carbon sequestration and soil fertility including carbon sequestration and soil health. Plant species richness may also promote ecosystem resistance to desertification."

<http://www.sciencemag.org/search?author1=Mohammad+Jankju&sortspec=date&submit=Submit>

Enhancing natural seeding

Recent research from the Future Farm Industries CRC has found natural re-seeding in native perennial grass paddocks occurs best when paddocks are rested in spring and grasses are left uncut. Some light scarifying, ant control and limited herbicide can also help.

http://www.futurefarmonline.com.au/publications/Technical%20Reports/Technical_Reports

New fireweed guide

Fireweed: A best practice management guide for Australian landholders has been produced as part of a fireweed control research project with UNE and CSIRO.

http://www.ruralfutures.une.edu.au/fireweed/resources/Fireweed_BPM_Guide.pdf



Roadshow of pest animal management techniques

The Invasive Animals CRC will showcase innovative management techniques for wild dogs, foxes, feral cats, feral pigs, and rabbits during its Australian roadshow over the next three months. The roadshow will also feature the PestSmart toolkit which has been developed over the past seven years. NSW locations include Forbes and Albury in early February, Bourke on 28 February and Armidale on 20 March.

<http://www.feral.org.au/pestsmart/roadshow/>

NSW native vegetation report 2010

More than 1 million hectares of native vegetation were conserved or improved in NSW in 2010. Legal clearing of 3600 hectares was approved where environmental values were maintained or improved through mechanisms such as the use of offsets. As well, 425 private native forestry property vegetation plans were approved allowing 68,600 hectares of native forest that can be logged, as long as environmental outcomes are improved or maintained.

<http://www.environment.nsw.gov.au/resources/vegetation/110685NVAR2010.pdf>

Microscopic worlds

A new series of three books by Kerry Swanson uses 3D images from scanning electron microscopes to explore the miniature biological world. The titles are *Bugs of the ocean*, *Bugs of the land*, and *Bacteria, fungi lichen and plants*.

<http://www.publish.csiro.au/nid/18/pid/6805.htm>

FOOD

Achieving food security in the face of climate change

This report from the Commission on Sustainable Agriculture and Climate Change recommends integrating food security and sustainable agriculture into global and national policies, and raising the level of global investment in sustainable agriculture and food systems. It also recommends sustainable intensification of agricultural production, healthy and sustainable eating patterns, and reduced loss and waste in all stages of the food chain. http://ccafs.cgiar.org/sites/default/files/assets/docs/climate_food_commission-spm-nov2011.pdf

Draft dietary guidelines released

Drafts of the Australian Dietary Guidelines and the Australian Guide to Healthy Eating are now available for public comment. The drafts suggest that Australians need to eat more vegetables and legumes/beans, fruits, wholegrain cereals, low fat dairy products, fish, seafood, poultry, eggs, legumes and beans (including soy), and nuts and seeds, and less starchy vegetables, refined cereals, high and medium fat dairy foods, and foods high in saturated fat, sugar and salt. Young women need to eat more red meat, and adult men less. http://consultations.nhmrc.gov.au/open_public_consultations/dietary-guidelines

Northern Rivers Foodlinks program

The NSW north coast Foodlinks program has produced three Youtube videos about its work over the past two years in building closer links between food production, distribution and consumption. You can find out more at

<http://www.youtube.com/user/Foodlinks?feature=mhee>

The project has now finished but you can access its publications and reports at

<http://www.northernriversfoodlinks.com.au/>

and keep up to date with regional food developments at

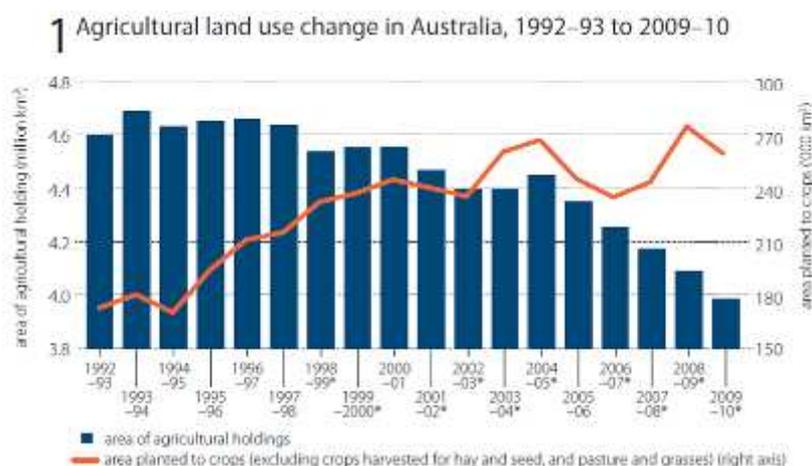
<http://sustainfood.com.au/>

SUSTAINABILITY

Tracking land use change in Australia

Land use in Australia is changing, with an overall decline in areas used for agriculture, and increases in more intensive agricultural uses including cropping and horticulture. Areas devoted to conservation, protected and minimal use and intensive land uses (including urban) are also on the increase.

http://adl.brs.gov.au/data/warehouse/litlud9abl079/litlud9abl0790111a/SEI2011.2.2LndscplnTrans_HR_1.0.0.pdf



Blueprint for Australian agriculture

The Blueprint for Australian Agriculture is a joint initiative between the National Farmers' Federation (NFF) and Westpac to develop a single coordinated vision for the future of agriculture. Once complete, the Blueprint will form the key policy document for Australian agriculture and will be presented to Government. Consultation includes workshops in each State/Territory. The NSW workshop is in Wagga Wagga on 4 April 2012.

<http://www.nff.org.au/blueprint.html>

2011 State of the Environment report

Australia's 2011 State of the Environment report says the principal drivers of Australia's environment—and its future condition—are climate variability and change, population growth and economic growth. The land section of the report says invasive species, inappropriate fire patterns and grazing are having a significant impact on much of our land environment. Trends in many indicators of land environmental values are negative, and are likely to be exacerbated by climate change.

<http://www.environment.gov.au/soe/2011/report/index.html>

New NRM website

This website focuses on Caring for Our Country program which funds communities, farmers and other land managers to protect Australia's natural environment and sustainability. This site provides up-to-date funding information and features CFOC projects around the country.

<http://www.nrm.gov.au/index.html>

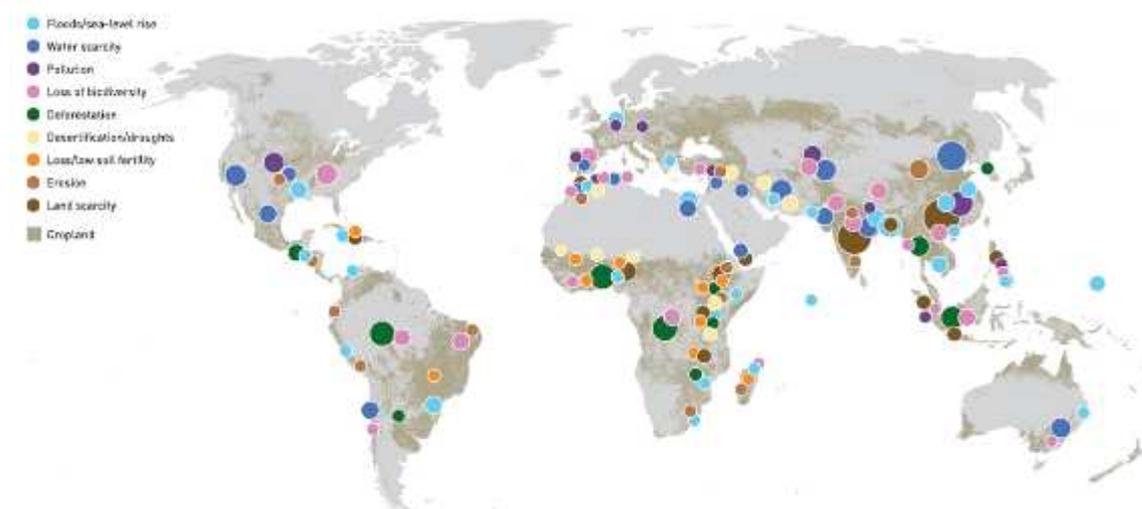
New book: Urban consumption

This collection of papers explores the prospect for winding back current levels of household consumption in high income societies, including energy, water, food, housing and travel.

<http://www.publish.csiro.au/pid/6472.htm>

Food and agriculture under threat

FAO's 2011 evaluation of the global resources available for food and agriculture says land and water systems face the risk of breakdown due to demographic pressure, unsustainable agricultural practices and external drivers such as climate change, competition with other sectors and socio-economic changes.



<http://www.fao.org/nr/solaw/solaw-home/en/>

EVENTS

February 6-8	6th Australian stream management conference, Canberra www.asm6.org.au/
February 21-24	Floodplain management conference, Batemans Bay http://www.floodplainconference.com/index.php
March 6-7	Outlook 2012, Canberra http://www.daff.gov.au/abares/outlook
March 6-7	3rd national acid sulfate soils conference, Melbourne www.scu.edu.au/nationalassconference
March 27-28	Groundwater-surface water interactions forum, Canberra http://www.nwc.gov.au/media/events/water-events-calendar
April 10-13	IUSS fifth global workshop on digital soil mapping , Sydney http://www.pedometrics.org/dsm_oz/abstract.html
April 12	Resource extraction in Australia, Brisbane Rachel.Williams@csiro.au
April 16-17	Australian soil information symposium, Sydney http://soilscienceaustralia.com.au/images/stories/natsoilsymposium/soilsymposiumflyer.pdf
May 1-3	Water and climate : Policy implementation challenges http://www.climatechange2012.org/index.asp?IntCatId=14
May 1-4	Water and beyond, Griffith NSW www.waterandbeyond.com.au
June 6	Biochar in agriculture workshop, Wollongbar rsvp@seftonpr.com.au
June 18-20	AWA biosolids and source management, Gold Coast http://www.awa.asn.au/bsmconference/
June 26-28	Climate adaptation in action, Melbourne http://www.nccarf.edu.au/conference2012/
September 3-5	National landcare conference, Sydney http://www.landcareonline.com.au/donate/landcare-awards/
September 16-20	4th international biochar congress, Beijing http://www.ibi2012.org/
October 8-11	15 th international RiverSymposium , Melbourne www.riversymposium.com
October 14-18	16 th Australian agronomy conference, Armidale http://www.agronomy.org.au/events/2012/
November 15-16	Tapping the turn, water's social dimensions, Canberra http://tappingtheturn.org/
December 2 – 7	Soil solutions for diverse landscapes, Hobart http://www.cdesign.com.au/soilscience2012/

MAILING LIST

To subscribe to NRM on farms, email Rebecca Lines-Kelly at rebecca.lines-kelly@dpi.nsw.gov.au.