

## DWR Climate Change BLOG

*This blog has been approved for posting to public websites, as well as DWR's internal website.*

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**By Jessica Rossell**

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*This is the second part of Jessica's climate blog; the first was posted in December, 2010. Part II is a more technical focus on the climate change work being done in New South Wales, providing context for future collaboration with DWR.*

*Jessica spent two weeks at the CA Dept. of Water Resources in October, 2010. In addition to attending meetings and briefings climate change policy, she presented to the Climate Change Matrix Team, attended the **2010 Water & Climate Change Adaptation Symposium** and made friends throughout the state's water community. Jessica currently leads projects to identify climate change risks to NSW public land; helps develop methods to assess climate change risks to energy, water and transport infrastructure and to integrate climate change impacts into local government planning.*

*All material represents the personal opinions of Jessica Rossell and does not represent the views of the NSW Department of Environment, Climate Change and Water.*

### **What's NSW doing?**

A list of NSW initiatives and projects which may be of interest to DWR is below.

- NSW has adopted a single sea level rise benchmark for planning and landuse decisions (40cm by 2050, 90cm by 2100. For an explanation of how this was derived see:  
<http://www.environment.nsw.gov.au/resources/climatechange/09709technote/sealevelrise.pdf>
  - NSW DECCW has released guidelines on how to incorporate this benchmark into flood risk assessment  
<http://www.environment.nsw.gov.au/resources/water/coasts/10759FloodRiskManGde.pdf>
  - and coastal hazard assessment  
<http://www.environment.nsw.gov.au/resources/water/coasts/10760CoastRiskManGde.pdf>
  - NSW Department of Planning has released guidelines on how to incorporate this into planning:  
<http://www.planning.nsw.gov.au/LinkClick.aspx?fileticket=VYjmQirQIAk%3d&tabid=177&language=en-US>
- NSW has recently passed amendments to its coastal protection legislation. Key provisions include:
  - Allowing landowners in specific locations to place sand or sandbags on the beach under strict conditions in order to reduce the impact of coastal erosion on their property. If the bags cause erosion they are to be removed. Draft Minister's requirements for these works have been released for consultation.

- Requiring consent authorities assessing development applications for long term coastal protection works such as seawalls to be satisfied that appropriate arrangements are in place to restore beaches if they are eroded by the works.
  - Allowing councils to levy a coastal protection service charge on land where the current or past landowners have voluntarily constructed coastal protection works. This charge covers council's costs of maintaining the works and restoring the beach if the works cause erosion.
  - Establishing a NSW Coastal Panel to provide expert advice to the Minister and councils on coastal management issues. The Panel is proposed to be the consent authority for long term coastal protection works where the council does not have a coastal zone management plan in place.
  - Improving arrangements for coastal zone management planning, including coastal climate change adaptation.
  - Strengthening authorised officer powers and order powers relating to illegal dumping on beaches, and increasing penalties.
  - Enhancing statutory exemptions from liability for councils and State agencies when their coastal management activities are carried out in good faith.
- Establishment of the **NSW Climate Change Science Research Network**.
    - The Network is a State-wide group of independent scientists from NSW universities and research institutions with expertise in climate science, and climate change impacts and adaptation science. Members' areas of expertise include climatology, meteorology, engineering, biology, health, coastal geomorphology, and fire behaviour
    - The Network provides advice to the NSW Government through the Director General of DECCW on strategic research needs to support adaptation programs
    - The head of DECCW Impacts and Adaptation Section (policy and programs) is also a member of the Network
- NSW DECCW is leading an inter agency project to develop an **"Integrated Regional Vulnerability Assessment"** (IRVA) of climate change in the NSW South East State Plan region.
    - The IRVA project aims to respond to climate change at a regional scale
    - The project: assesses the impacts of climate change on social, economic and biophysical sectors and their capacity to adapt to climate change; and, integrates these findings to then assess the vulnerability of systems to climate change.
    - The project aims to lay the groundwork for an integrated regional climate change adaptation strategy which is based on identified vulnerabilities and opportunities
- The **Australian Green Infrastructure Council (AGIC)** is a national industry association formed to progress sustainability outcomes for infrastructure. It is designing a scheme to rate the sustainability of Australian infrastructure projects. The scheme will apply to:

- Roads, rail, bridges and tunnels
- Ports, wharves or boating
- Airport airside facilities
- Distribution grids (pipes, poles, wires)
- Water or resource management
- Water infrastructure
- Waterway or foreshore management
- The scheme has seven “themes” against which projects can be assessed and given a performance rating: Project Management and Governance (Climate Change Vulnerability is one component of this theme); Economic Performance; Using Resources; Emissions, Pollution and Waste; Biodiversity; People and Place; and Workforce.
- The scheme will not apply to buildings or suburban developments.
- AGIC was formed by a group of industry professionals from engineering, environmental, planning and construction backgrounds working in both private and public organisations. A list of members is at:<http://www.agic.net.au/>
- DECCW is a foundation member of AGIC and was the first Australian Government to support AGIC.
- The Climate Change component of the scheme was funded by DECCW and were launched at the AGIC National Conference in October 2010: see <http://www.agic.net.au/>
- DECCW administers “**NSWRiverBank**” a 5 year, \$105 million program to buy and manage water to rehabilitate stressed rivers and icon wetlands in NSW.
  - NSW RiverBank works within the existing market, buying and managing water rights only from willing sellers. Water allocations held by NSW RiverBank may be traded, and a business model for self-funding operational costs is being investigated over the first 5 years. The initial areas identified to receive environmental water are the Macquarie Marshes, the Gwydir wetlands, the Lowbidgee wetlands, the mid- Lachlan wetlands and the Narran Lakes.
  - The program is funded by a new “waste and environment” levy applied to local government (also called local councils). The levy builds on the waste levy local councils already have to pay under the Protection of the Environment Operations Act 1997 (NSW):

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