



Australian Government

Department of the Environment, Water, Heritage and the Arts



CONVENTION ON WETLANDS  
(Ramsar, Iran, 1971)

## Australian Ramsar Wetlands Bi-annual Newsletter (No 2: July 2010)

*The Convention on Wetlands of International Importance, the Ramsar Convention, is an intergovernmental treaty that provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources. There are currently 159 countries and 1890 sites registered with the Ramsar Convention. In Australia, there are 64 'wetlands of international importance'. A Wetlands and Waterbirds Taskforce provides nationally coordinated advice to Ministers on wetland-related issues including the implementation of the Ramsar Convention in Australia. The Taskforce consists of wetlands experts from Australian federal, state and territory government agencies, and New Zealand.*

This newsletter provides information on topical issues, from a national perspective, relevant to the management of Australia's Ramsar estate, but many issues are relevant to wetlands management more generally. If you would like more information on any issue, contact your state or territory Wetlands and Waterbirds Taskforce member, call the Department's Water Information Line – Freecall 1800 218 478, or email your query to [wetlandsmail@environment.gov.au](mailto:wetlandsmail@environment.gov.au)

### KEY ISSUES (JANUARY- JUNE 2010)

#### Take a virtual tour of a Ramsar site

The Australian Wetlands Database now boasts eight 'virtual tours' of Ramsar sites. The online interactive photographic experiences are available for the Cobourg Peninsula and Kakadu National Park in the Northern Territory, Lakes Argyle and Kununurra and the Ord River Floodplain in Western Australia; and Jocks Lagoon, Moulting Lagoon, Little Waterhouse Lake and Floodplain Lower Ringarooma River in Tasmania.

To view a virtual tour, go to the Australian Wetlands Database, select the desired Ramsar site and click on the 'virtual tour' tab.

#### Caring for our Country – Priority sites for investment

The 2010-11 Business Plan identified 14 Ramsar sites as priorities for investment. The main focus was on sites in northern and remote Australia which had identified management actions consistent with the scope of the program. The sites are Cobourg Peninsula in the Northern Territory; Eighty-mile Beach, the Ord River Floodplain, Roebuck Bay and Lake Toolibin in Western Australia; Currawinya and the Great Sandy Strait in Queensland; Coongie Lakes and Bool and Hacks Lagoons in South Australia; the Macquarie Marshes in New South Wales; the Barmah Forest and Western Districts Lakes in Victoria; and Jock's Lagoon and Lavinia in Tasmania. More information is available through the *Caring for our Country* website.

### TOOLS AND GUIDANCE

#### Ecological Character Descriptions

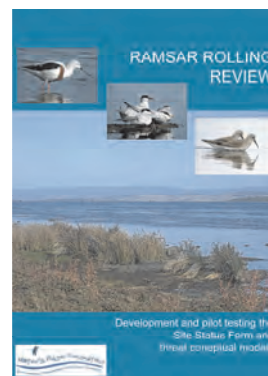
Ecological Character Descriptions (ECDs) and updated Ramsar Information Sheets are currently being prepared for 16 sites across Australia. While they are in various stages of development, all should be completed by June 2011. Once they are completed, there will be an ECD in place for all 64 Australian Ramsar sites.

Some ECDs were prepared before the development of the *National Framework for Describing the Ecological Character of Australian Ramsar Wetlands 2008*. Others have been prepared using the ECD Framework, but before supplementary guidance was developed (for instance on the development of Limits of Acceptable Change - LAC). There will be a need to revisit these pioneering ECDs, particularly ECDs where the LAC need further work, and the Australian Government will work closely with site managers and owners to progress this work.

### Rolling Review of Ramsar sites

The Rolling Review is designed to help in the systematic, regular review of the ecological condition of Ramsar sites. This in turn will help to better target resources / investment to address site specific threats and impacts.

The pilot project, testing the Review methodology, is now finished. Threat conceptual models and site specific site status forms (SSF) have been developed for all 64 Ramsar sites, and the methodology has been tested at 20 sites by populating the SSF with real data. Wetlands and Waterbirds Taskforce members are now reviewing the results, after which the report will become publicly available. A number of changes to the methodology and SSF will be made. The second phase of the project has started and it will complete the conceptual models and SSF for the remaining 44 Ramsar sites, a process requiring ongoing consultation with site managers and/or owners. The first completed 'cycle' of the Rolling Review is due in May 2011.



Developing effective ways to share the outputs of the Rolling Review with site managers and other interested parties to provide a basis for improved site management is an important part of the Review.

### Acid sulfate soils in inland aquatic ecosystems – new national guidance

Acid sulfate soils ('ASS') are soils or sediments that undergo chemical reactions that produce acid when disturbed or exposed to oxygen. While coastal ASS have been recognised as a serious concern for some time, inland ASS are now seen to be an emerging issue of national significance. The impact of ASS on wetlands and other aquatic ecosystems can be very significant if not properly managed. Increasingly limited water availability (including as a result of drought) is resulting in the exposure of ASS in many inland aquatic ecosystems.



New national guidance has been developed to help wetland and other natural resource managers respond to the challenges ASS present. The guidance is designed to help managers identify and manage these soils to reduce or eliminate the risks they pose to inland aquatic ecosystems in a drying climate. The guidance will be available online in September 2010 at <http://www.environment.gov.au/water/topics/acid-sulfate-soils.html>

Wetland managers with an interest in ASS might also like to view ASSAY - the free national quarterly electronic newsletter about ASS issues, available online at <http://www.dpi.nsw.gov.au/aboutus/resources/periodicals/newsletters/assay>

### Development of an Australian National Aquatic Ecosystem Classification Scheme

There are many different wetland classifications used in Australia, most of them state or territory specific. A nationally consistent classification system for aquatic ecosystems (wetlands) is now under development. The planned national Classification Scheme needs to be scientifically robust but practical – in that existing systems need to be able to be mapped or 'translated' to it, and it needs to operate at multiple levels – national, state/regional and local.

Data limitations suggest a Classification Scheme based on describing and differentiating aquatic habitats on their physical characteristics, such as the attributes of geomorphology (e.g. shape, substrate), hydrology (e.g. wetting and drying regime), chemistry (e.g. salinity regime etc) and vegetation, rather than their detailed biodiversity or ecological functioning.

Targeted consultation on a possible draft Classification Scheme is proposed for later this year.

## LEGISLATION, REGULATION, POLICY AND REPORTS

### Environment Protection and Biodiversity Conservation ('EPBC') Act 1999

#### Review of the Act

The EPBC Act seeks to protect the environment, especially the agreed matters of National Environmental Significance - one of which is Ramsar wetlands. An Independent Review of the Act was commissioned in October 2008, with the Final Report publicly released in December 2009. Key recommendations relevant to Ramsar sites and to wetlands more broadly, included the following:

- The Act be amended to include 'ecosystems of national significance' as a new matter of national environmental significance - and that it is a sites 'ecological character' that should be protected;
- Water plans that authorise actions likely to have a significant impact on a protected matter undergo strategic assessments and approvals; and
- The Act be amended to enable the Minister to prepare management plans for Ramsar wetlands where the collaborative processes have not produced effective plans; and require the Minister to consult with the owner/manager of the protected area when preparing these plans.

The Government is currently considering its response to Report.

#### New listings under the Act

Under the Act, the Threatened Species Scientific Committee advises the Minister on species and ecological communities that should be listed as threatened, on the identification of key threatening processes, and on the development of threat abatement plans and recovery plans. It also advises on matters that it thinks should be investigated for possible listing under the Act in the future. Over the last six months the following matters, important to wetlands, have been listed under the Act.

Key threatening process: *Loss and degradation of native plant and animal habitat by invasion of escaped garden plants, including aquatic plants* - listed in January 2010.

Potential impacts from introduced plant invasions include reducing genetic diversity; introducing diseases; competing for resources; stopping germination / growth of native plants; altering ecosystem process; and changing the abundance of indigenous fauna. The Australian Weeds Strategy and existing state and territory measures to control weeds /plant introductions preclude the need for the development of a threat abatement plan.

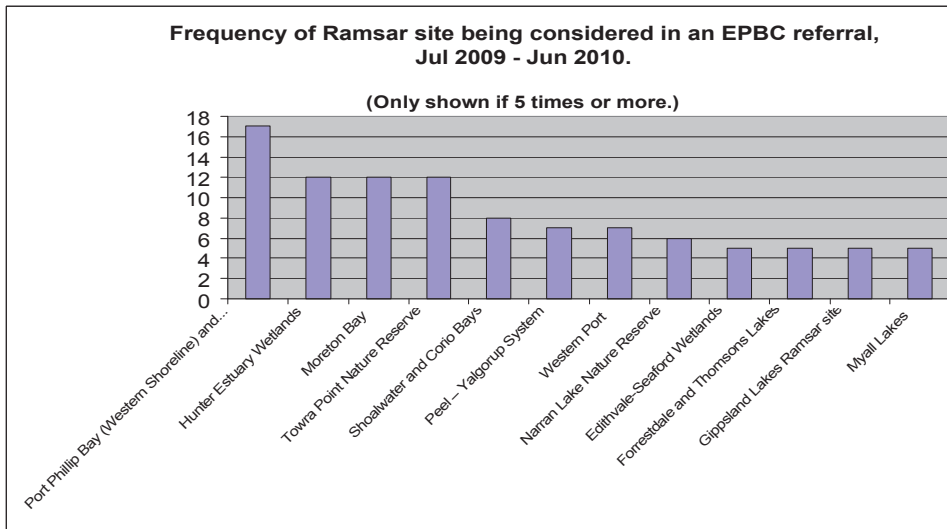
Ecological community: Thrombolite (Microbial) Community of a Coastal Brackish Lake (Lake Clifton)

Matters for priority assessment: The following relevant matters are currently under assessment:

Item	Australian distribution	Completion times
<b>Ecological communities</b>		
Lower Murray River and associated wetlands, floodplains and groundwater systems from the junction of the Darling River to the sea (nominated as Coorong and Lower Lakes (Lakes Alexandrina and Albert))	SA, Vic and NSW	30 September 2011
Riffle/Pool/Bar River Community of the South Eastern Queensland Bioregion	NSW and Qld	31 March 2012
Wetlands of the Darling Basin (nominated as the Macquarie Marshes)	NSW	31 March 2012

## Referrals under the Act

As Ramsar sites are one of the agreed matters of National Environmental Significance under the Act, proposals which have the potential to impact on Ramsar sites must be referred under the Act. Since July 2009, around 186 proposals have been referred on this basis.



Many of the referrals relate to small localised actions, but others are more significant. The Minister for Environment Protection, Heritage and the Arts, the Hon Peter Garrett AM MP recently gave approval under the Act for the Northern Victoria Irrigation Renewal Project (NVIRP) to proceed. This project aims to reduce incidental irrigation water losses through increased irrigation infrastructure efficiency. The Minister approved the project subject to a large number of conditions to ensure that no significant impact occurs to Ramsar wetlands, listed migratory species, and listed threatened species and communities. For more information on this proposal and the Minister's decision click [here](#).

## The Water Act 2007

### Murray-Darling Basin Plan

The Murray-Darling Basin Authority is due to release a draft Basin Plan later this year. Ramsar wetland sites are one of the criteria being used to identify 'indicator assets' to inform the development of sustainable diversion limits under the Plan. The Authority is using the ECDs prepared for Basin Ramsar sites to assist in its planning.

In April the Authority released a Preliminary Report on the environmental water needs of the Basin. The document outlined the approach that the Authority proposed to take and presented its list of 18 'indicator assets'. It presented detailed results for 3 of the indicator sites: Barmah-Millewa Forest, Macquarie Marshes and Riverland-Chowilla Floodplain - all of which are or include Ramsar sites.

In late June the Authority advised that it would hold an additional stage of consultation on the Plan, by releasing, in early August, a comprehensive *Guide to the Proposed Basin Plan*. This will be accompanied by a series of regional public information sessions across the Basin, where local communities will be able to discuss the guide with senior Authority staff. Updates from the Authority can be obtained via [twitter](#) or the MDBA website.

### Commonwealth held environmental water

By 31 May 2010 some 811 gigalitres (GL) of water had been acquired for environmental use by the Commonwealth within the Murray-Darling Basin. These entitlements, purchased through Water for the Future and managed by the Commonwealth Environmental Water Holder, are expected to deliver an average annual volume of 545 GL of water for the environment.

The Commonwealth works closely with local organisations (including environmental water advisory groups and catchment management authorities) to deliver its environmental water, including to determine which environmental assets should receive water and to ensure timely responsive actions. Advice is also sought from an independent scientific advisory committee and proposed watering

actions are assessed against a set of published criteria. To date, 179 GL of water has been made available to 35 rivers, wetlands and floodplains in the Basin.

Ramsar sites watered by the Commonwealth in 2009-10 include Lake Albert (Coorong and Lakes Alexandrina and Albert), the Macquarie Marshes, Chowilla Floodplain (Riverland), parts of the Hattah-Kulkyne Lakes, and parts of Millewa and Werai State Forests (Central Murray State Forests).

## **WATERBIRDS, SHOREBIRDS AND MIGRATORY SPECIES**

### **National data workshop**

The Wetlands and Waterbirds Taskforce hosted a workshop in March 2010 to better understand the data availability and requirements for governments to meet their obligations under relevant treaties and conventions - including the Ramsar Convention and migratory bird agreements such as the 'Japan Australia Migratory Birds Agreement', known as JAMBA.

The workshop was attended by state, territory and Australian government officers, CSIRO, representatives from non-government groups including the Australasian Wader Studies Group, Birds Australia and Wetlands International Oceania; and other waterbird experts.

The workshop was considered a valuable first step. Agreement was reached on a common understanding about Australia's key obligations in relation to the protection of waterbirds, what data we have and how data could best be co-ordinated to meet national needs. A reference group, including all participants, was established to share information as further work is done in this area. It was agreed that a framework and supporting paper should be developed for submission to Ministers.

### **East Australasian Flyway**

A study is now underway to review trends in migratory bird numbers at two Western Australian Ramsar sites - Eighty Mile Beach and Roebuck Bay.



Great Knots (B. Furby & DEWHA)

Species such as the Great Knot and Red Knot use these sites as stopovers on migration from sites in the Yellow Sea region (including Korea).

It is thought that wetland reclamation in the Yellow Sea region may have impacted on the bird species using the East Asian Australasian Flyway.

These Western Australian Ramsar sites and sites in the Yellow Sea region are essential resting and feeding grounds for birds migrating to the Arctic to breed

## **AUSTRALIAN RAMSAR SITES**

Detailed information on all 64 Australian sites can be found on the Australian Wetlands Database

### **Bool and Hacks Lagoons (SA) - Monitoring ecosystem health**

Good rainfall in late 2009 allowed the piloting of monitoring protocols at Bool and Hacks Lagoons for aquatic vegetation, fish and waterbirds as part of an Integrated Monitoring Program for the site.



Bool & Hacks Lagoons (R. Breen & DEWHA)

The Program will be used to monitor the site's ecological character, the implementation of the management plan, activities funded under *Caring for our Country*, and to support reporting under the Ramsar Rolling Review.

Monitoring protocols ensure data is collected using consistent methods and provide quality assurance allowing the data to be used for multiple purposes.

The Program and piloted monitoring protocols will be available through the Australian Wetlands Database by September 2010.

### **Central Murray State Forests (NSW) - Assessment of possible character change**

This site has been in the news for some time over concerns about the potential impact of logging practices on its ecological character, and third party representations for an Article 3.2 notification were first made in late 2008. Formal assessment of potential ecological character change was deferred until such a time as the related EPBC Act compliance issue was resolved, and the NSW Natural Resource Commission completed its report [River Red Gums and Woodland Forests in the Riverina bioregion](#).

As these matters have concluded or are close to resolution, an Article 3.2 assessment has now started for the Central Murray site. The assessment will explore a range of purported changes but it is likely that the main focus will be on forestry practices and watering regimes.

### **Coorong and Lakes Albert and Alexandrina (SA) - Long-Term Plan**

The Long-Term Plan for the site was jointly released by Ministers Wong and Caica on 4 June 2010.

Minister Wong also announced the approval of Australian Government funding for four 'early works' projects under the Plan. These focus on diluting hypersaline water in the Coorong South Lagoon and further addressing the acid sulfate soil threats at the site.

South Australia is also developing a number of further proposals to help implement the Long-Term Plan.

The Australian Government has allocated \$200 million under *Water for the Future* to develop and implement the Long-Term Plan.



The Coorong (J. Baker & DEWHA)

### **Gwydir Wetlands (NSW) - Draft Adaptive Environmental Management Plan**

In April the NSW Government released the Gwydir Wetlands Draft Adaptive Environmental Management Plan, which will guide restoration of the ecological structure and function of this wetland system. In a broad sense the Plan is a guide to restoring resilience – the capacity of ecological and social systems to adapt to, and shape change. Once finalised, the Plan will provide a valley scale context for management of the Gwydir Wetlands Ramsar site.

The Gwydir Wetlands has been identified as one of 18 indicator assets being used to inform the development of sustainable diversion limits under the Murray-Darling Basin Plan.

### **Hattah Lakes (Vic) - Environmental watering**

Hattah Lakes is a complex of 20 freshwater lakes fed by the River Murray, and like many sites along the Murray, its ecosystems have been showing signs of severe water stress.

In 2009 the Lakes received some 11,099 megalitres (ML) of environmental water from the Commonwealth holdings, the Victorian Government and *The Living Murray* program, inundating around 362 hectares.

Following this watering, canopy cover increased among river red gums, trunks and leaves appeared healthier, and trees fringing watered lakes developed green shoots. Aquatic vegetation responded well, benefiting fish and insects, and waterbirds flocked to the Lakes.



Watering Hattah Lakes (H. Conkey & DEWHA)

The Lakes will receive a further 11,400 ML of environmental water during autumn/winter 2010 to continue to build the sites' resilience.

This environmental watering continues the collaborative management effort evident at the site, with water from the Commonwealth Environmental Water Holder (6,000 ML), *The Living Murray* program (5,000 ML) and donations through the Australian Conservation Foundation (400 ML).

### **Hunter Estuary Wetlands (NSW) - Re-establishing a wetting / drying cycle**

At the Shortlands Wetlands component of this site there has been concern for some time regarding tree dieback in the Melaleuca Swamp - home to an ibis and egret rookery. The Hunter Wetlands Centre is undertaking a feasibility study into long term options to establish a more appropriate wetting and drying cycle in the Swamp.

Proposed works include the installation of infrastructure to allow manipulation of water levels and may include the re-instatement of an old drainage channel discharging to an adjacent creek. The project is subject to approval under the EPBC Act.

### **Kakadu National Park (C'wlth) - Merger and expansion**

Kakadu National Park will become a single, internationally recognised Ramsar wetland, with the expansion and merger of its two separate Ramsar sites.



Yellow Waters (J Baker & DEWHA)

Historically, there have been two Ramsar sites within Kakadu National Park: Kakadu National Park (Stage I including wetland components of Stage III) and Kakadu National Park (Stage II). Kakadu National Park Stage I was originally listed as a Ramsar site in 1980 and expanded in 1995, while Stage II, a separate Ramsar site, was listed in 1989.

The recent addition of another 600 000 hectares brings the Ramsar boundary in line with the existing park boundary.

The merger and expansion sends a clear signal that Kakadu will also be managed for its international wetland significance, taking a whole-of-landscape approach to conservation.

### **Other Parks Australia sites (C'wlth) – boundary adjustments**

An additional three Ramsar sites managed by Parks Australia will also undergo boundary amendments, increasing Parks Australia's Ramsar estate. Amendments will be made to Ramsar sites in the Indian Ocean territories, at Pulu-Keeling National Park and in Christmas Island National Park, to Hosnies Springs and The Dales Ramsar sites.

Of particular note, the Hosnies Springs Ramsar site will be expanded from 0.33 hectares to 202 hectares to give greater protection to the unique and ancient freshwater mangrove stand

### **Narran Lakes (NSW) - Flush with water**

This year has been an exceptional year for flows in the rivers in north western NSW – including to the Narran Lakes at the end of the Narran River. Regular flow updates have been provided by NSW officers over the last few months which have provided not only up-to-date information on flow volumes and extent but also information on ecological responses in the area including bird breeding events.

The following excerpt is from the late May update: “Of continuing interest is the bird breeding at a number of wetlands – with the Narran Lakes being of particular importance...Aerial photography taken last week has revealed quite a scatter of nests throughout the reserve and a few on the margin of Narran Lake itself. Several species that started nesting in January have produced fledged young (notably Nankeen Night Herons but we are also starting to see Straw-necked Ibis young “flapping” and no doubt some are flying)”.

### **Riverland (SA) - Assessment of possible character change**

The Riverland site has seen continued decline in the health of keystone habitat species - river red gum and black box, since listing in 1987. This change was flagged in the recently completed ECD and confirmed in a specially commissioned tree health survey. A formal Article 3.2 assessment has now begun for the site.

Notwithstanding this process, site management needs are under active consideration as a result of the recently completed (May 2010) Management Plan 2010-2015. The next step for the site will be the development of an annual environmental watering plan to target the delivery of water to address the impact of drought on river red gum and black box communities.

## INTERNATIONAL NEWS

### World Day to Combat Desertification



The World Day to Combat Desertification has been held each year on 17 June since 1995.

In keeping with the International Year of Biodiversity in 2010, the focus of the 2010 World Day is the value of soil biodiversity for the wellbeing of our lives and our ecosystems. Desertification, land degradation and drought dramatically affect the biodiversity resident in the soil.

Our increasing ecological interdependence means that “enhancing soils enhances life everywhere”. Healthy soils produce life, and yet soil health depends a lot on how individuals use their land. What we do to our soils determines the quality and quantity of the food we eat and how our ecosystems serve us. For further information [click here](#).

### Review of the Regional Wetlands Action Plan for the Pacific

In August the Secretariat of the Pacific Regional Environment Programme will host a workshop in Noumea, New Caledonia to review implementation of the Regional Wetlands Action Plan for the Pacific Islands. Australia is providing financial support for the workshop and will engage with the workshop as part of a broader Ramsar regional engagement program.

The workshop seeks to engage relevant government officers from the Pacific Island Ramsar Contracting Parties, other Pacific Island Countries and Territories, and other partners, to review implementation of the Action Plan and to provide guidance on the development of a new Action Plan. This is an excellent opportunity to revitalise interest in the Ramsar convention in the Pacific region.

## UPCOMING ISSUES (JULY - DECEMBER 2010)

### Wetlands and climate change adaptation workshop

A technical workshop on “Adaptation options for wetlands in the Murray-Darling Basin” is being convened by the *National Climate Change Adaptation Research Facility* and Charles Sturt University’s Institute for Land, Water and Society. The workshop will be held in Canberra on 12-13 July 2010 and will be dealing with both the ecological and social dimension of adaptation.

In recognition of the continuing work on wetlands and climate change being under taken by the Scientific and Technical Review Panel of the Ramsar Convention, Deputy Secretary General of the Convention, Prof. Nick Davidson will be attending the workshop.

The workshop is seen by the convenors as the start of a process that will examine these issues in greater detail. Given the development of the Murray-Darling Basin Plan, the workshop is topical.

### National Wetlands Policy Statement

Work continues on a first draft of the statement which is being prepared by the Wetlands and Waterbirds Taskforce. Consultation on the draft is anticipated in the first half of 2011.

### Do you have an interesting story about a wetland in your region?

*Wetlands Australia – National Wetlands Update*, is an annual publication bringing together information and resources from across Australia relating to wetlands conservation, management and education. The 2011 edition is currently being produced.



Articles are welcome for consideration in the 2011 edition. Articles could cover environmental issues, the latest scientific research, and conservation success stories.

The 2011 issue is themed "Wetlands and Forests" and will also focus on the 40<sup>th</sup> anniversary of the Ramsar Convention. We aim to include articles from all states and territories and on as many wetland types as possible. If you would like to contribute (500- 800 words by 5 August 2010), please contact Jennifer Andrew on 02 6239 1955 or [jennifera@netspeed.com.au](mailto:jennifera@netspeed.com.au)

For the 2010 issue of Wetlands Australia click [here](#).

If you would like to sign up for an annual subscription to receive *Wetlands Australia* each year, please email [wetlandsmail@environment.gov.au](mailto:wetlandsmail@environment.gov.au).

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