A DIRECTORY OF IMPORTANT WETLANDS IN AUSTRALIA

Introduction

A Directory of Important Wetlands in Australia is a cooperative project involving the Australian and state and territory governments. It is coordinated by the Australian Government Department of the Environment and Water Resources (DEW) and was first published in 1993. The scientific basis of the Directory has been developed cooperatively, and site information is provided by state and territory conservation agencies and, for sites managed by the Australian Government, by DEW.

The first two editions of the *Directory* contained descriptions of our nationally important wetlands. The third edition of the *Directory*, published in 2001, gives a national overview and summary information and analyses for each jurisdiction, but does not contain site data. The site descriptions, for both nationally and internationally important wetlands, are now available online from the web address below.

Purpose and application of the *Directory*

The *Directory* not only identifies nationally important wetlands, it provides a substantial knowledge base of what defines wetlands, their variety, and the many flora and fauna species that depend on them. In addition, it contains information about their social and cultural values and some of the ecosystem services and benefits they provide.

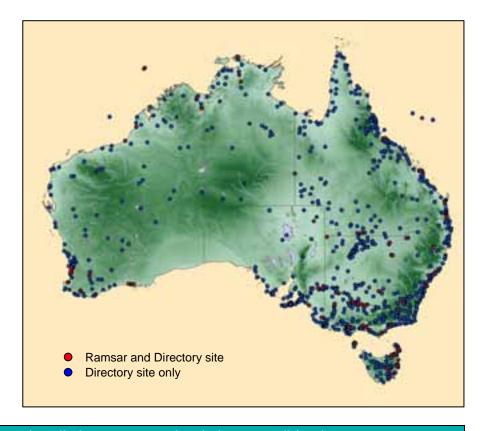
Policy makers, biodiversity professionals and the community use the *Directory*:

- to identify sites and the wetland values present in their local area, particularly in relation to regional natural resource management planning and investment:
- to identify sites of importance for particular taxa, including threatened and migratory species; and
- as the primary data source for identifying potential Ramsar sites, and potential sites for the East Asian-Australasian Shorebird Site Network.

Scientific basis of the *Directory*

The definition of a wetland used in the *Directory* continues to be that adopted by the Ramsar Convention. That is, 'wetlands are areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres'.

Within this broad definition, the wetland classification system used in the *Directory* identifies 42 different wetland types in three categories:



Site data for nationally important wetlands is accessible via: www.environment.gov.au/wetlands and follow prompts.

A—Marine and Coastal Zone wetlands (which has 13 wetland types), B—Inland wetlands (19 types), and C—Human-made wetlands (10 types). The system is based on that used by the Ramsar Convention, and has been adapted for Australia.

In addition to these wetland categories and types, a higher level of "ecological systems" is also being progressively adopted, based on the following wetland classes: Marine, Estuarine, Riverine, Lacustrine, Palustrine (or "Basin" where these cannot be distinguished), Subterranean, Nival, and Reservoir (artificial water bodies).

To be considered nationally important, a wetland must meet at least one of the six nationally agreed criteria. The criteria cover the following areas: biogeographic representativeness; important ecological or hydrological functions; provision of animal habitat during times of vulnerability or adverse conditions; support for more than 1% of the national population of any taxa; support for threatened taxa or communities; and historical or cultural significance.

Using the online Directory

The *Directory* is now essentially an online publication, with site information and maps contained in a database that is accessible via the Internet. This means that the latest information on existing and new nationally and internationally important wetlands is available as soon as it is entered into the *Directory* database.

The *Directory* interface is set up to provide users with as much functionality as possible. Site data can be sought through search forms that allow users to query the data via a number of fields. There is also an interactive map that allows users to search a point, line or area for nationally important wetlands. A "Help" facility for the online *Directory*

is provided, with contact details if you need further help or wish to provide feedback.

Summary of data and level of coverage of the *Directory*

No. of wetlands and approx. area by jurisdiction **Jurisdiction** No. of sites Area (ha) Australian Capital Territory 13 1,257 New South Wales 187 2,340,815 4,033,230 Northern Territory 33 Queensland 210 42,964,286 South Australia 4,225,387 84 Tasmania 89 51,514 159 557,888 Victoria 120 2,583,325 Western Australia 1,146,552 **External Territories** Total 904 57,904,254

The *Directory* currently* describes 904 wetlands that have qualified as nationally important. Of these wetlands, 64 are listed as Wetlands of International Importance under the Ramsar Convention.

There are some significant biases in the distribution and representation of nationally important wetlands in relation to bioregions, reflecting climatic regime and other factors such as remoteness, as well as gaps in primary information. For example, analyses from the Directory's 3rd edition (2001) showed that five of Australia's 12 drainage divisions did not have wetlands of international importance listed under the Ramsar Convention, and 56 of our 245 river basins had no recognised nationally important wetlands. Similarly, nine of 80 bioregions (IBRA 4.1) had no recognised nationally important wetlands

Future development of the *Directory*

The special values and functions of wetlands can only be maintained if ecological processes can operate normally. Unfortunately, wetlands

are amongst our most threatened ecosystems. Compiling an inventory of our wetlands is essential to better understand their values and location, and to minimise further loss of important wetland habitat in Australia.

While the Directory cannot be considered a comprehensive catalogue of Australia's wetlands, it provides a significant coverage of sites currently recognised as nationally important. Work is currently underway to assess wetlands in underrepresented regions, and future additions to the Directory are expected from survey

projects in a number of jurisdictions. The *Directory* also provides a basis for the future development of a national wetlands inventory to document all of Australia's wetlands, not just those that are considered to be nationally or internationally important.

The Australian and state and territory Governments are working together to develop a framework to enable the capture of inventory information from across the continent. The proposed Australian Wetland Inventory will document the location, extent, and core values of Australia's wetland assets. This will help guide their conservation, wise use, management and restoration.

*Note the information given here is current as at December 2005. Due to the dynamic nature of the *Directory* and ongoing inventory work and identification of nationally important wetlands, the numbers of wetlands and area figures may have increased.

FOR MORE DETAILS CONTACT:

Wetlands Section
Department of the Environment and Water Resources
GPO Box 787
CANBERRA ACT 2601

Telephone: +61 2 6274 1111 Facsimile: +61 2 6274 2268

Email: <u>ciu@environment.gov.au</u>



Visit our web site at: www.environment.gov.au/wetlands