Australian Government
Department of Sustainability, Environment, Water, Population and Communities

WISE USE OF WETLANDS IN AUSTRALIA

The Ramsar Convention is an international intergovernmental treaty which aims to halt and, where possible, reverse, the worldwide loss of wetlands and to conserve those that remain through wise use and management.

Wise Use and the Ramsar Convention

Australia is Contracting Party to the Ramsar Convention on Wetlands (Ramsar, Iran, 1971). The Convention's mission is 'the conservation and wise use of all wetlands through local and national actions and international cooperation, as a contribution towards achieving sustainable development throughout the world'. The Convention commits its member countries to promote the conservation of their Wetlands of International Importance (Ramsar wetlands) and to plan for the wise use of all of the wetlands in their territories[1].

Convention guidelines emphasise that 'human use on a sustainable basis is entirely compatible with Ramsar principles and wetland conservation in general'[2].

Wise use of wetlands results in benefits for poverty eradication, mitigation of and adaptation to climate change, and prevention of disease and natural disaster.

A definition of wise use was adopted by the Parties in 1987, and was updated in 2005. This definition states that:

> 'Wise use of wetlands is the maintenance of their ecological character, achieved through the implementation of ecosystem approaches, within the context of sustainable development.'[3]

The three key elements of the definition of wise use are:

- **ecological character**, which is the combination of the ecosystem components, processes and benefits/services that characterise the wetland at a given point in time
- **ecosystem approaches**, which consider the complex relationships between every element of an ecosystem, and promote the integrated management of land, water and living resources (including humans)
- **sustainable development**, which is a pattern of resource use that aims to meet human needs while preserving the environment so that these needs can be met not only in the present, but also for generations to come.






The wise use concept is about maintaining wetland values and functions, while at the same time delivering services and benefits now and into the future, for human well-being. Wise use, in promoting maintenance of environmental, economic and social sustainability, encourages compromise (or tradeoffs) between individual and collective interests[4]. To achieve sound decisions on wetland use and management, decision-makers at local, regional and national levels need to enable participation by relevant stakeholders and to balance a variety of objectives and perspectives.

Guidance, at the international level, on implementing 'wise use' is provided through the Ramsar toolkit, which is available at: http://www.ramsar.org/

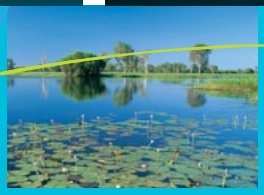
Wetland Values

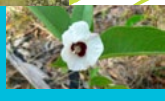
Wetlands are among the most important and productive ecosystems in the world. The services delivered by wetlands have been valued at US$ 14 trillion annually[5]. In particular, the principal supply of renewable fresh water for human use comes from a variety of inland wetland habitats, including lakes, rivers, swamps and shallow groundwater aquifers.

Australian wetlands provide the following ecosystem services:

- supporting the diversity and abundance of plants and animals, and providing important habitat and refuges for many migratory, rare, or threatened species
- forming part of natural hydrological cycles, providing water passage and storage and the recharge of aquifers
- nutrient cycling and improving water quality by trapping nutrients and sediments
- flood mitigation and providing coastal protection against destructive natural events, such as cyclones
- supporting species to adapt to the effects of climate change by providing refugia and landscape connectivity
- contributing to the sequestration and storage of carbon, to mitigate against climate change
- contributing to Australia's economic productivity by providing essential water sources for agricultural, urban and industrial uses, vital breeding, nursery and harvest sites for edible fish, molluscs and crustaceans, brood-stock for aquaculture, and areas of pasture for stock
- contributing to cultural heritage, spiritual values, and day-to-day living of Aboriginal and Torres Strait Islander peoples
- contributing to the well-being of people through landscape diversity, heritage values, aesthetic appeal and recreation.





What is Wise Use of Wetlands in Australia?

Wise use of wetlands in Australia involves:

Using an ecosystem approach

Wetlands need to be seen as dynamic systems, which are part of a series of catchments at a range of scales, from local catchment, to river basin to region. An ecosystem or landscape approach to managing wetlands allows for consideration of variability of the Australian environment, geographically and over time. It is important to integrate land and water management and planning at local, catchment and landscape scales.

Balancing uses

Wise use of Australia's wetlands involves achieving a balance of uses which will deliver ecosystem, economic and social/cultural benefits over the long term.

It is important that decisions on management of a wetland involve key stakeholders in the uses, values and benefits of the wetland. There needs to be consultation, coordination and cooperation between land managers, government agencies and the community. In particular, wetland management should involve participation by local communities and Indigenous peoples and be supported by Indigenous and traditional knowledge.

Understanding and implementing sustainable use

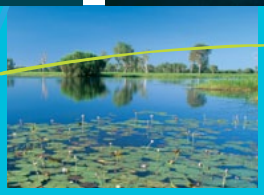
Wetland resources can be used by humans for water, food, fuel, fibre, medicines, transport, recreation, housing and development and a range of other services.

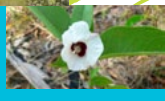
Sustainable use involves understanding the natural variability of a wetland's attributes and knowing the limits to use, beyond which damage to the ecosystem components or services will occur. This requires monitoring of resource stocks (both quantity and quality) and ecosystem function over the long-term, to assess and understand natural patterns of change. This enables action to be taken to address threats to those services. Current threats to Australian wetlands include drainage, changed river flows as a result of diversions and regulation, pollution, livestock grazing, and exotic species such as carp and weeds.

Using the best available information

A variety of information and tools exist to inform wise use of wetlands, including through the National Environmental Research Program, the National Water Commission, the Tropical Rivers and Coastal Knowledge Research Hub, Murray-Darling Basin Authority and CSIRO. Other valuable sources include Ramsar Information Sheets, Ecological Character Descriptions and Management Plans, and relevant Environmental Impact Statements.





Applying the wise use concept in Australia

Australia's policy and planning framework

Wise use in Australia has been established through international treaties, national policies and strategies, national and state/territory legislation, coordination, planning and programs. At the national level, wise use of wetlands is promoted through the impact assessment and management planning provisions of the *Environment Protection and Biodiversity Conservation Act 1999* and the provisions of the *Water Act 2007*.

Integrated planning and management has been implemented by the Australian and state or territory governments through natural resource management policies and programs which aim to maintain the health of Australia's landscapes; protect environmental assets; facilitate sustainable and productive land and water use; support viable rural communities; and better engage with Indigenous Australians.

The challenges of implementation

There are a number of factors which impact on the character of Australian wetlands and provide challenges to their wise use in Australia:

- Australia has a highly variable and unpredictable climate
- Australia's aquatic ecosystems are adapted to these highly variable climatic conditions
- Australia is the driest inhabited continent, and climate modelling indicates that water availability in the southern part of the continent is likely to decrease
- human demand for water is increasing, due to a growing population and demand for goods and services
- on-going threats to wetlands include changes in watering regimes, clearing for agriculture, urban encroachment, salinity, fire, weeds, pests and pollution.

1 About the Ramsar Convention http://www.ramsar.org/cda/en/ramsar-about-about-ramsar/main/ramsar/*1-36%5E7687_4000_0__*
2 Ramsar Secretariat – What is wise use of wetlands http://www.ramsar.org/cda/en/ramsar-about-faqs-what-is-wise-use/main/ramsar/*1-36-37%5E7724_4000_0__*
3 Resolution IX.1 Annex A
4 Resolution IX.1 Annex A
5 Millennium Ecosystem Assessment

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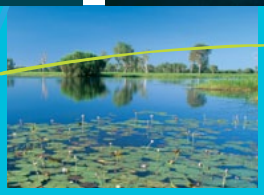


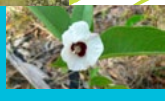

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