

AUDITOR GENERAL FOR WESTERN AUSTRALIA

Serving the Public Interest

# **Auditor General's Report**

# Management of Ramsar Wetlands in Western Australia



Report 9 September 2006



## THE PRESIDENT LEGISLATIVE COUNCIL

## THE SPEAKER LEGISLATIVE ASSEMBLY

### MANAGEMENT OF RAMSAR WETLANDS IN WESTERN AUSTRALIA

I submit to Parliament my report *Management of Ramsar Wetlands in Western Australia* pursuant to section 95 of the *Financial Administration and Audit Act* (FAAA). This Report has arisen from work undertaken pursuant to section 80 of the FAAA.

D D R PEARSON AUDITOR GENERAL 13 September 2006

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MANAGEMENT OF RAMSAR WETLANDS IN WESTERN AUSTRALIA



# Auditor General's Perspective – Western Australia's 'Ramsar' Wetlands

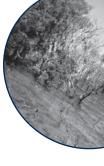
This is the last report that I have the honour of submitting to the Parliament as Auditor General for Western Australian (WA). In my 15 years as Auditor General I have purposefully sought to continuously improve both the type and usefulness of performance information provided to Parliament. In this regard I wish to acknowledge the staff of my Office for their skill and dedication.

This evolution in reporting performance over the last 15 years has seen the Office progress from a focus on our traditional area of financial performance to now building a tradition of examining environmental management and sustainability. This report follows a progression of examinations over the past few years in this highly significant area. Indeed, I believe there is now an expectation by the public that they will receive independent and reliable assessment of the way government agencies are managing the environment.

The report focuses on WA's management of wetlands, specifically the 12 listed as being of international importance under the International Convention on Wetlands that was established in 1971 in the Iranian city of Ramsar. The Convention is an intergovernmental treaty dedicated to the conservation and 'wise use' of wetlands.

Since European settlement WA has lost, and continues to lose, much of its wetlands. Wetlands are a litmus test for the broader environment – healthy wetlands are indicators of healthy land around them, and vice versa. It follows that good management of wetlands is an important part of protecting the environmental assets of the State for the benefit of Western Australians into the future.

While there is every evidence that the people working on the management of these internationally recognised wetlands are committed to their protection, I am not assured that the State is equally committed. The State has rightfully gained kudos from the nomination of wetlands to the Ramsar Convention, but it will miss opportunities for long-lasting benefits unless it prudently provides for the continuing needs of those wetlands.



# Management of Ramsar Wetlands in Western Australia

# **Overview**

Wetlands are a vital part of the natural environment. They are indicators of health for the landscape around them and provide refuge, breeding sites and food to vast numbers of animals and plants. Wetlands across the world including WA are under threat. For example, since European settlement there has been a 70 per cent loss of wetlands on the Swan Coastal Plain.

Western Australia has 120 wetlands of national importance, 12 of which are listed as being of international importance under the International Convention on Wetlands (the Convention) that was established in 1971 in the Iranian city of Ramsar. The Convention is an intergovernmental treaty dedicated to the conservation and 'wise use' of wetlands (see Appendix 1 for criteria for selection to the Convention). The Ramsar Convention was one of the first intergovernmental treaties for the conservation of natural resources. There are 150 signatory countries to the Convention and 1 591 wetlands of international importance listed. Australia was one of the first nations to become a contracting party to the Convention. At present there are 64 Ramsar wetlands in Australia. Nine of the 12 WA sites were nominated in 1990; the remaining three were nominated in 2000 (see Appendix 3 for their locations). Eight new sites in WA are being considered for nomination.

Management of the WA Ramsar wetlands rests with the State under a complex legislative and policy framework that includes a Commonwealth-State Bilateral Agreement. However, the Commonwealth as the signatory to the convention is ultimately responsible for Australian commitment and compliance with the convention.

The Department of Environment and Conservation (DEC) is principally responsible for managing the 496 000 hectares which make up the Ramsar wetlands. Whilst this constitutes a significant area for management, it makes up only two per cent of the 25.7 million hectares of estate for which DEC is responsible. The Conservation Commission (the Commission) is the other key agency, being the vesting agency for most of the Ramsar sites, overseeing planning and management by DEC, and providing advice to the Minister. This examination reports on the management of Ramsar wetlands by these two principal agencies.

### **Key Findings**

The State has recognised the importance of registering rare and unique wetlands under the Ramsar Convention. However, conservation of these sites needs to improve, particularly the management planning and implementation of strategies if degradation is to be prevented and prohibitive rehabilitation costs avoided.

#### **Policy and Direction**

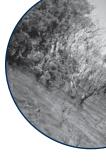
- Whilst we expected to find Ramsar sites managed in accordance with overarching policies and strategies we found that this is not the case. Rather, they are managed as individual sites with significant differences in activity and control across the 12 sites.
- The protection of Ramsar wetlands in Western Australia is generally supported by the legislative and policy framework though aspects such as more specific recognition of these wetlands should be improved.

#### Funding of Activities

• There is no dedicated program of funding by either the Commonwealth or State for Ramsar wetlands. However, significant funding by DEC for purposes such as tackling salinity has benefited five Ramsar sites. Small amounts of funding have been provided for other sites as part of DEC's general conservation activities. Management activity to prevent site degradation is limited in the absence of funding.

#### Management and Reporting

- At the sites we visited, we found committed and skilled staff who were undertaking work of high quality. We also observed that work at one site has received national acclaim.
- A lack of coordinated and uniform monitoring means that DEC cannot provide an overview of the health of the 12 wetlands.
- There is clear evidence of a worsening in ecological character in at least two Ramsar wetlands. DEC has not reported to the Commonwealth on such changes since 1999. The Commonwealth and the States are currently developing a system to report on changes in the ecological character of wetlands.
- Six of the 12 Ramsar wetlands at present have no plans for their management. The preparation of management plans is a State obligation. Without a management plan DEC is restricted in the conservation activity it can undertake. DEC in June 2006 sought external funds for preparation of the remaining management plans.
- There is no agency with final responsibility for the protection and management of the ecological character of three Ramsar sites and part of a fourth. DEC is charged with implementing the Ramsar Convention but it has no legal authority to do so on these four sites because they are not vested in the Conservation Commission.



### What Should Be Done?

- DEC as the lead agency for management of Ramsar wetlands should establish and communicate a clear direction for their conservation. This direction should include:
  - explicit objectives for the overall management of Ramsar wetlands
  - prioritisation and timelines for the preparation of management plans. We note that a 2004 DEC discussion paper proposed targets for the preparation of management plans for Ramsar sites into the future
  - systematic plans for monitoring and scientific activities.
- DEC should clarify with the Commonwealth and other stakeholders the respective responsibilities for Ramsar implementation including funding.
- DEC should as a priority develop and implement management plans for those Ramsar sites which lack them.
- DEC on behalf of the State should investigate options to obtain clear authority for sites not vested in the Conservation Commission. This might include:
  - vesting these lands in the Commission
  - MOUs between relevant agencies and DEC.

It should also advocate that any new or amended legislation provides clear responsibilities for such sites.

- DEC should conduct a gap analysis of research and monitoring that has occurred on Ramsar wetlands. Following this DEC should develop and implement a monitoring program that will allow it to report regular and reliable information regarding all Ramsar sites.
- In the absence of an agreed methodology for assessing ecological character and wetland indicators, DEC should report emerging concerns to the Commonwealth.
- DEC and the Commission should establish procedures to end delays that occur in the finalisation of management plans such as regular review of progress against internal deadlines. In addition, DEC and the Commission on behalf of the State should consider proposing legislative amendments to provide statutory deadlines for finalising stakeholder agreement.



DEC supports some of the findings but these must be placed in context recognising that the principal responsibility for Australian Ramsar site obligations rests with the Commonwealth Government. DEC's view is that there is scope for additional Commonwealth assistance to both the State and private land managers in the development of Ramsar site management plans and also in the implementation of these plans, as required under the Commonwealth *Environment Protection and Biodiversity Conservation Act*. DEC does not support the notion that Ramsar sites should be managed separately from other Conservation land management. There is scope to improve coordination of management of Ramsar sites, particularly those that have a range of tenures and are not conservation reserves. This has the potential to be addressed in the finalisation of the proposed State Biodiversity Conservation Strategy, State Biodiversity Conservation Bill and revision of the State Wetland Conservation Policy.

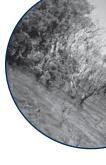
### **Response by the Conservation Commission**

The Commission supports the findings and recommendations presented in this report.

## What Did We Do?

The examination assessed the management of Ramsar wetlands in WA with particular focus on the operations of DEC and the Conservation Commission. We also held discussions with the Water Corporation, the Environmental Protection Authority and the Department of Water. We examined management activity and interviewed personnel in Perth, Esperance and the Kimberley. Key audit areas were:

- the extent that the legislative and policy framework supported the protection of Ramsar wetlands
- State compliance with relevant Commonwealth-State Agreement and expectations of the Ramsar Convention including:
  - protection of the ecological character of listed wetlands
  - appropriate land tenure
  - dedicated management plans for each wetland
  - nomination of new wetlands to the Convention



- the existence of clear and explicit direction for provision of focused activity
- the level of management activity at Ramsar sites
- the level of monitoring and reporting of the ecological character to the 12 wetlands.

Our examination was confined to State Government organisations. We did not review activities of Commonwealth organisations or non-government bodies such as Natural Resource Management organisations. We did interview some non-government organisations involved in the management of some Ramsar wetlands but did not review their activity.

# What Did We Find?

### **The Legislative and Policy Framework**

The legislative and policy framework for the management of Ramsar wetlands in WA is a complex arrangement involving international agreements, Commonwealth and State legislation, agreement and policy, and numerous government agencies. The framework generally supports the protection of Ramsar wetlands though some difficulties are nevertheless evident:

- Ramsar wetlands have limited recognition in Western Australian legislation or policy. As a consequence, they are not afforded special consideration as expected of territory recognised as internationally important.
- DEC as the lead agency does not have authority over all Ramsar sites because the sites are not vested in the Commission. Under the *Conservation and Land Management Act 1984* (CALM Act), DEC only has management authority over territory vested in the Commission. Three sites and parts of a fourth are not vested in the Commission. These sites are on Unallocated Crown Lands or are vested in the Water Corporation or Local Government, or are in private hands.
- There is a lack of agreement between the Commission and DEC as to responsibility for the prioritisation and finalisation of management plans.

The key elements of the framework are the Ramsar Convention, the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), WA's CALM Act and *Environmental Protection Act 1986*, and a 2002 Bilateral Agreement for delivery of moneys provided under the Natural Heritage Trust and WA's Wetland Conservation Policy. The expanded framework is shown at Figure 1.





**Ramsar Convention** 

Asia-Pacific Migratory Waterbird Conservation Strategy

Japan-Australia Migratory Birds Agreement (JAMBA)

Chine-Australian Migratory Birds Agreement (CAMBA)

#### NATIONAL

Environment Protection and Biodiversity Conservation Act 1999

NHT Commonwealth-State Agreement 2002

Regional Natural Resource Management groups administer NHT funds

#### STATE

#### CALM Act 1984

**Environmental Protection Act 1986** 

Wetlands Conservation Policy 1997

WA Planning Commission – Draft Wetland Buffer Guidelines 2005

WA Planning Commission – Statement of Planning Policy 1-3

Draft Environmental Protection (Swan Coastal Plains Wetlands) Policy 2006

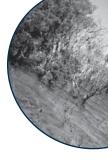
EPA – Environmental Protection of Wetlands Position Statement 2004

EPA – Environmental Offsets Position Statement 2006

#### Figure 1: Legislation and Policy framework

Numerous pieces of legislation, agreements and policy affect the management of Ramsar wetlands.

Source: OAG



Australia's responsibilities under the Ramsar Convention are recognised in the EPBC Act and administered by the Commonwealth Department for the Environment and Heritage (DEH). The Act provides clear and specific guidelines for the management of Commonwealth Ramsar wetlands. It requires that activity which might affect any Ramsar wetlands in Australia be reported to DEH.

The CALM Act makes DEC responsible for the management of national parks, nature reserves, marine parks, forest estate and indigenous flora and fauna in WA. DEC is the designated manager of all lands vested in the Conservation Commission. The CALM Act does not specifically recognise Ramsar Wetlands and require any activity in their regard. Notwithstanding this, the Act requires that DEC creates management plans (plans which recognise threats and identify strategies and actions) for lands under their control. Where management plans are not in place, the CALM Act allows for 'necessary operations'. However, these are not planned, risk-based activities.

Under the CALM Act, the Commission is responsible for management plans produced by DEC. It is also responsible for monitoring the preparation of management plans and auditing their implementation. However, the Commission and DEC are unclear as to the respective responsibilities for the prioritisation and finalisation of management plans. We also note that the Commission has limited capacity and no clear arrangement with DEC to provide functional support. The need for a memorandum of understanding between the Commission and DEC that clearly outlines the roles of each party and the specific assistance required by the Commission to perform its role was identified in a 2003 Ministerial review.

DEC can only produce dedicated Management Plans for lands which are vested in the Commission. As of June 2006 the Commission has not had the opportunity to audit any Ramsar site management plans. Appropriate management plans were only approved in 2005. Their key reporting and audit dates have not been reached. The Commission cannot undertake its audit function until plans have been finalised and approved by the Minister

The *Environmental Protection Act 1986* recognises Ramsar wetlands as one category of environmentally sensitive area. These areas are accorded increased protection. Under the Act, the Environmental Protection Authority assesses proposals which might adversely affect Ramsar wetlands and makes recommendations to the responsible Minister. Outcomes are also reported to the DEH.

The 2002 Bilateral Agreement between the Commonwealth and State to administer the Natural Heritage Fund makes two direct references to Ramsar wetlands. Under the Agreement, the State commits to the preparation and implementation of management plans consistent with the EPBC Act. The State also commits to identifying new wetlands for nomination.

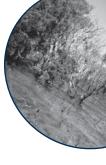
WA's Wetlands Conservation Policy (1997) affirms the State's commitment to international agreements relating to the conservation of wetlands and migratory birds and nominates DEC as the lead agency for their management. The policy provides 70 actions necessary to achieve the conservation objectives. These include the preparation and implementation of management plans for wetland reserves.

A discussion paper proposing a new State Biodiversity Conservation Act was released in 2002 for public comment. The intent of the new Act is described as to allow '...State implementation of relevant parts of the Commonwealth's EPBC Act'. This would strengthen the State's commitment to biodiversity and to international conventions. DEC advised that it is '...fully engaged in progressing the introduction of increased powers under the proposed new *Biodiversity Conservation Act*'. This proposed legislation was approved for drafting in late 2005.



**Thomsons Lake Ramsar wetland** 

Source: Jenny Davis



## **Management of Ramsar Wetlands**

#### There is a lack of clear direction

The State does not have clear direction for the management of its 12 Ramsar wetlands, though the Wetlands Conservation Policy does provide broad objectives and actions to conserve the thousands of wetlands in the State.

Without clear and explicit direction, activities affecting Ramsar sites are unfocused. Such direction will become more important when DEC has to deal with the proposed eight new Ramsar sites that are considered to be generally facing greater management complexity than the existing 12 sites. Clear direction would allow all participants involved with Ramsar sites to understand what is required and expected of them in monitoring, managing and reporting on Ramsar wetlands.

Clear direction for Ramsar sites should include:

- explicit objectives for the overall management of Ramsar wetlands
- clear prioritisation and timelines for the preparation of management plans. We note that a 2004 DEC discussion paper proposes targets for the preparation of management plans for Ramsar sites into the future
- systematic plans for monitoring and scientific activities.

We noted that the State Wetlands Coordinating Committee is currently reviewing the Wetlands Conservation Policy. This provides an opportunity for DEC and the other Committee representatives<sup>1</sup> to begin to develop clear direction for Ramsar wetlands as well as other issues such as respective responsibilities of stakeholders.

We also noted that responsibility for management of the Ramsar sites within DEC rests with a number of divisions. In the absence of clear and explicit management direction there is a likelihood of significant differences in activity and control across the 12 sites. The Regional Parks Unit manages one Ramsar site wholly, and is responsible for one part of another. Three Ramsar sites are managed within the Natural Diversity Recovery Catchment program (NDRC). Individual Regions manage four Ramsar sites wholly, and part of one site.

These include representatives from DEC, the Department for Planning and Infrastructure, the Department of Agriculture and Food, local government, community wetland organisations and independent scientists.



We found that land tenure was central to the level of management of Ramsar wetlands. Eight Ramsar sites and part of a ninth are vested in the Commission. Sites not vested in the Commission cannot be managed effectively by DEC.

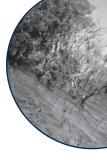
As previously mentioned, DEC only has authority and control over lands vested in the Commission. Ramsar sites not vested in the Conservation Commission are managed through community processes which DEC supports. However, there is no agency with final responsibility for the protection and management of these sites.

DEC advised that the key risk to wetlands and other conservation areas comes from inappropriate land use. It considers that the key factor in protecting these sites rests in reserving the land. Once reserved, limitations are placed on use of the land. DEC also considers that nomination to the Ramsar Convention in itself provides an increased level of protection for sites by increasing public awareness of the qualities of specific sites.

DEC advised that it will be seeking increased powers under the proposed *Biodiversity Conservation Act*. These new powers would allow DEC to take a leading role in protecting sites not vested in the Commission.

The Ramsar sites not vested in the Commission are:

- the Lake Kununurra/Lake Argyle Ramsar site in the Kimberley. The land is predominantly vested in the Water Corporation, whose business is the supply of water
- the Roebuck Bay Ramsar site in the Kimberley consists of unallocated Crown Land. The listed management authority for this site is the Department for Planning and Infrastructure
- the Eighty Mile Beach Ramsar site in the Kimberley consists mainly of land under pastoral lease
- parts of the Peel-Yalgorup system are vested in the Commission and controlled by DEC. The other parts are variously unallocated Crown Land, freehold land and local government reserves.



#### No Management Plans for six sites

We found that the State has not met its obligations under the 2002 Commonwealth-State Bilateral Agreement<sup>2</sup> to provide management plans for all Ramsar sites in WA. One site has a dedicated management plan which has been ratified by the Convention. Five others have some dedicated planning for their management. Six of the 12 Ramsar wetlands have no plans for their management (see Table 1).

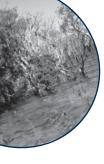
Without specific management plans, Ramsar sites are at risk of becoming degraded and therefore losing the attributes that make them places of international importance. Without management plans DEC is limited in the activity it can undertake to protect and conserve the values associated with the wetlands.

However, DEC is currently seeking \$1.1 million from the Natural Resource Management program (a joint Commonwealth/State funding arrangement – refer page 19 for details) to prepare dedicated management plans for all sites that lack them. DEC has advised that the remaining plans will not be prepared in current circumstances unless external funding is provided.

None of the three sites which are not vested in the Commission has any form of management plans. Limited Commonwealth funding was recently provided to begin the process of creating a community based management plan for the Roebuck Bay and the Peel-Yalgorup sites. DEC is contributing to the process but neither it nor the Commission is responsible for the outcome.

Management Plans describe the threats and pressures, recommend strategies and set measures for future assessment. They are also an important support for funding applications and a basis for allocating resources. We note that DEC considers that such plans '... provide the basis for joint management and investment arrangements.' We also note that the Ramsar Convention expects that each Ramsar site will have a specific management plan.

<sup>&</sup>lt;sup>2</sup> The 2002 Agreement superseded a 1997 agreement which also required the preparation of management plans for all Ramsar sites.

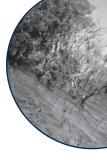


Ramsar Site (date of nomination)	Dedicated management plan	Other plans that encompass or benefit the wetland	Vesting of land
Lake Gore (2000)	No	No	Commission
Ord River Floodplain (1990)	No	No	Commission
Eighty Mile Beach (1990)	No	No	Pastoral leases
Peel-Yalgorup System (1990)	No	Partial (Yalgorup National Park Management Plan 1995; Lake McLarty Draft Management Plan 2005)	Commission, Unallocated Crown Land (UCL), local government reserve, freehold
Vasse-Wonnerup system (1990)	No	Yes (Busselton Wetlands Conservation Strategy 2005)	Commission
Forrestdale/Thomsons Lakes (1990)	Yes (2005)	Yes (Beeliar Regional Park Draft Management Plan 2001)	Commission
Becher Point (2000)	No	Yes (Rockingham Lakes Regional Park draft management plan 2003)	Commission
Muir-Byenup system (2000)	No	No	Commission
Lake Toolibin (1990)	No	Yes (Lake Toolibin Recovery Plan 1994)	Commission
Lake Warden System (1990)	No	Yes (Lake Warden Catchment Recovery Plan in production)	Commission
Lakes Kununurra and Argyle (1990)	No	No	Water Corporation
Roebuck Bay (1990)	No	No	UCL

#### **Table 1: Management Plan status**

Six Ramsar sites have some level of dedicated planning in place, one of which has been ratified by the Convention. Six at present have no planning in place for their management.

Source: DEC, compiled by OAG



# Prioritisation for development of Ramsar Management Plans can be improved

DEC developed and implemented a planning tool in 2001 for prioritising the preparation of management plans. In subsequent years the priorities that were identified with the use of the tool have been adjusted without use of the tool. Without regular use of the tool, DEC's planning decisions will not be based on current and complete information. DEC should use the planning tool every three to five years to provide a comprehensive picture for its production of plans.

DEC is responsible for hundreds of parks and reserves covering 18.9 million hectares of land for which 49 approved management plans have been prepared covering 18.4 per cent or 3.5 million hectares of this land. This represents a technical non-compliance with the *CALMAct*. However, we recognise that DEC in concert with the Conservation Commission has a sizeable task in developing management plans for lands in its control.

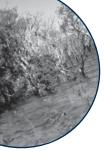
The planning tool is aligned to corporate objectives. It scores and assigns weightings to specific attributes. It is designed to be completed by regional managers for assessment at the corporate level. The system was introduced in 2001, but was only used in that year.

#### Management Plan preparation takes too long

The process for producing Management Plans takes too long. For example, the preparation of the Rockingham Lakes plan which incorporates Becher Point commenced in 1999 and is still not finalised. Forrestdale Lake and Thomsons Lake plans took three years to finalise. The delays impact on the implementation of management activity and their effectiveness is diminished by outdated information.

DEC's planning manual outlines a two year process for preparing and finalising Management Plans. All DEC Management Plans are released for public comment for three months. Public submissions are then analysed and amendment made to the Draft Plan. The Commission advised that it is concerned with these delays.

DEC advised that the two year target 'is the ideal' and that there are significant local issues that need resolution prior to a plan being finalised. The objective in all cases is to produce a plan that is widely supported. This view is understandable and commendable. However this should not be allowed to permanently stall the finalisation of a plan or its key conservation activities.



We found that management plans are not always completed even after the Department has invested considerable resources in their preparation. For example, DEC has invested considerable effort into research and reporting that should have resulted in a management plan for the Ord Floodplain Ramsar site. In 1996-97 DEC received Commonwealth funding to produce a management plan. In 2002 the Commonwealth reported to the Ramsar Convention that this plan was expected for completion before 2004. As of July 2006 there was still no plan, and it was not listed for production. DEC has not provided an explanation for this situation.

#### There is no dedicated funding for protecting Ramsar sites

There is no dedicated funding either by the Commonwealth or State for Ramsar wetlands or wetlands in general. Funding that benefits Ramsar wetlands is generally focused on other issues such as salinity in agriculture catchments. Three Ramsar wetlands have benefited from significant funding in this way.

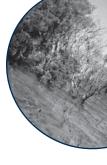
One exception has been the Forrestdale/Thomsons Lakes Ramsar site where a dedicated management plan exists. The plan has enabled a strong funding case to be made by identifying specific threats, actions needed and timeliness targets. The other exception is the Peel-Yalgorup site which receives considerable funding because it encompasses the Yalgorup National Park. Audit analysis suggests that without a dedicated plan, Ramsar wetlands could expect approximately \$40 000 per annum from the Department (see Table 2). Such funding is only sufficient to deliver minimal oversight and reactive activities.

#### Where funding is provided there has been good management practice

At all sites we visited we found committed and skilled staff. We also noted work of high quality and national acclaim at three sites that have received significant funding through the Natural Diversity Recovery Catchment program (NDRC). These sites are Lake Toolibin near Narrogin, the Lake Warden Catchment in Esperance, and the Muir-Byenup<sup>3</sup> system near Manjimup. The NDRC is part of the State's Salinity Response Strategy, and is a separately funded activity within DEC.

The NDRC is designed to recover and protect significant natural areas from salinity. The program has an annual budget of approximately \$2.6m. NDRC management plans are called 'Recovery Plans' and are not audited by the Commission. DEC's work on Lake Toolibin, which has had a Recovery Plan in place since 1994, received the inaugural National Salinity Prize from the Commonwealth Government in 2002.

<sup>&</sup>lt;sup>3</sup> The Muir Byenup Ramsar site is encompassed by the Muir Unicup NDRC catchment.



A Recovery Plan for the Lake Warden catchment is in the process of being drafted. This plan does not deal with the Lake Warden Ramsar site, but with the catchment upstream from the Ramsar wetland. Planning and the activity for this site has entailed strong stakeholder involvement including DEC, other government agencies and the community.

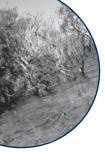
The Muir Unicup NDRC does not yet have a Recovery Plan, but there is considerable management activity occurring. We were informed that DEC expects a Recovery Plan for Muir Unicup to be produced in 2006-07. (See Appendix 2 for selected activity at Ramsar sites.)

#### Ramsar is not a priority under current funding arrangements

We noted that the present funding arrangement makes it difficult for DEC to attract funds for Ramsar management. Commonwealth funds for conservation and other activities are delivered through the Natural Heritage Trust (NHT). This consists of matched moneys from the States. The key mechanism for delivering funds is the Natural Resource Management system. This involves regional non-government bodies (NRMs) which distribute NHT funds according to accredited strategies. Organisations wanting to access these funds must apply to the NRMs, which then select projects. DEC has sought and obtained funding as a member of a stakeholder organisation for purposes which benefit one Ramsar site. Prior to the 2002 NHT Bilateral Agreement the Commonwealth provided significant funds to State Government agencies under the dedicated National Wetlands Program.

DEC considers that NRM strategies '...do not provide adequately for the development of accredited Ramsar sites...[and] little or no funding has been allocated.' As previously noted, the Department has recently sought approximately \$1 million from NRM moneys controlled at a State level to create management plans for all Ramsar sites.

In April 2006 the South Coast Regional Initiative Planning Team NRM approved \$2 million over three years in funding for work affecting the Lake Warden system. This funding was granted to a community and stakeholder organisation which includes officers from DEC and other government agencies. The funding is based on activities affecting the catchment rather than the Lake Warden system itself. However, the planned approach is based on conserving and restoring the ecological character of the Ramsar system.



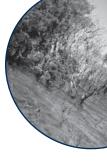
Ramsar Site	2005 expenditure	'Normal' expenditure*	Key funding source
Lake Gore	40 000 <sup>1</sup>	40 000 <sup>1</sup>	South Coast Region
Ord Floodplain	40 000 <sup>1</sup>	40 000 <sup>1</sup>	Kimberley Region
Eighty Mile Beach	40 000 <sup>1</sup>	40 000 <sup>1</sup>	Kimberley Region
Peel-Yalgorup System	250 000	250 000 <sup>4</sup>	Yalgorup National Park Plan
Vasse-Wonnerup system	35 900	35 900	Southwest Region
Forrestdale/Thomsons Lakes	295 000	140 000 <sup>1</sup>	Swan Region/ Regional Parks Unit
Becher Point	27 500	27 500	Regional Parks Unit
Muir-Byenup system	263 000	246 700 <sup>2</sup>	Recovery Catchment
Lake Toolibin	524 400	497 600 <sup>1</sup>	Recovery Catchment
Lake Warden System	662 700 <sup>3</sup>	238 100 <sup>2</sup>	Recovery Catchment/ NRM
Lakes Kununurra and Argyle	40 000 <sup>1</sup>	40 000 <sup>1</sup>	Kimberley Region
Roebuck Bay	40 000 <sup>1</sup>	40 000 <sup>1</sup>	Kimberley Region

#### Table 2: DEC expenditure at Ramsar sites

All figures in dollars. There is a wide range of expenditure across WA Ramsar sites. This is linked to their inclusion in an outside program (especially NDRC) or having a management plan.

- \* 'Normal' expenditure is the amount Audit determined to be regular expenditure over previous years. Specific explanations for each category are provided in following footnotes.
- 1 OAG estimate of expenditure based on advice from DEC
- 2 average of 1996-2004 NDRC expenditure
- 3 DEC plus NRM funds
- 4 the majority of funds for the Peel-Yalgorup system are expended on the Yalgorup National Park within the Ramsar site, which has its own management plan.

Source: DEC and OAG



### **Monitoring and Reporting**

# Inconsistent monitoring of Ramsar wetlands means DEC cannot provide an overview of their 'health'

We found that DEC has not been conducting coordinated monitoring of Ramsar sites. Monitoring at Ramsar sites is conducted on a program or regionally coordinated basis. As a result, there is no uniformity to the design or type of monitoring activity undertaken. Consequently DEC does not have an overview of the condition of Ramsar (and other) wetlands.

At present there is no agreed national methodology or indicators for the assessment of wetlands, although DEC is involved in national attempts to achieve agreement.

Without effective, coordinated and widespread monitoring, DEC cannot provide adequate information on the status of biodiversity and the health of the Ramsar wetlands in WA to the Commonwealth or the Ramsar Convention. We note the State Wetlands Coordinating Committee has raised concerns that specific monitoring programs need to be developed for Ramsar sites to meet the State's obligations and expectations.

While there has not been coordinated activity in monitoring on Ramsar sites, there has been considerable monitoring activity. For example:

- the Toolibin Recovery Plan (enacted 1994) established regular monitoring, with a focus on water and vegetation, with an expected expenditure of \$600 000 over the decade until 2003
- NDRC funds of \$533 000 went to monitoring the Lake Warden catchment, and \$595 000 for the Lake Muir catchment over a similar period
- the Water Corporation conducts regular water monitoring at Thomsons Lake
- DEC has a wetlands monitoring program in the Southwest of the State. This involves 30 wetlands which are monitored annually. Five of these are Ramsar wetlands.



We found that there is no standardised reporting of activity on Ramsar sites to DEC management. There is regular and routine reporting of expenditure and activity for the three Ramsar sites which are part of the NDRC program. These sites receive funding in accordance with the State Salinity Strategy which has specific reporting obligations. Where sites are managed through general operational divisions of DEC, detailed reporting of activity can only be gained where there is a dedicated management plan. Currently only one site has a management plan. Where no plans exist DEC can only provide estimates of expenditure.

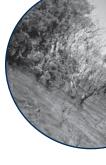
DEC is establishing an online State wetlands database on behalf of the Wetlands Coordination Committee. The project is part of a national effort to harmonise wetland information, and create a national inventory of wetlands. The project has been funded by the Commonwealth under the Natural Heritage Trust. The database will incorporate many datasets of research material across wetlands in WA as well as mapping information, tenure, and other information.

#### **External Reporting**

DEC has not reported to the Commonwealth on the known worsening in ecological character of Ramsar wetlands since 1999. DEC advised that it will recommence reporting to the Commonwealth once clear methodologies for measuring changes in ecological character have been developed. DEC is currently working with the Commonwealth and other States to develop these.

Although there is no agreed methodology for the assessment of ecological character we would nevertheless expect DEC to report on important changes that it has observed. For example, we observed clear evidence of the worsening of the ecological character in two Ramsar sites.

Australia's triennial report to the Ramsar Convention requires that changes in the ecological character of wetlands be reported. In providing information for the 2005 report, DEC did not advise the Commonwealth that continuing excessive water levels at the Lake Warden Ramsar site were destroying vegetation, and that this was reducing the usefulness of the site for wader birds – one of the key factors leading to its nomination as a Ramsar wetland. Similarly, there has been significant loss of vegetation at Lake Toolibin which has not been reported. If the Commonwealth and the Convention are not informed of such changes, the value of the Convention is diminished.



### Nominations of Wetlands for the Ramsar Convention

#### The State is committed to future nominations of wetlands

DEC on behalf of the State is currently preparing nominations for a further eight wetlands across WA. There is no timetable for the final nomination of these sites.

We found that DEC has a solid basis for its nomination of new sites, even though it does not possess a complete inventory of all wetlands in the State, many of which are small and in private hands. Nominations are generally drawn from the WA sites listed in the Directory of Australia's Wetlands of Importance.

DEC informed us that the Commonwealth has not provided clear guidance on the documentation required for new nominations. However, DEC understands that it is expected to provide Ramsar Information Sheets, descriptions of the ecological character and draft management plans for each of its new nominations. Only one management plan and one description of ecological character have so far been produced for the new sites, funding for which was provided by the Commonwealth, the State and industry.



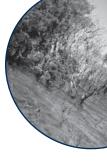
Part of the Ord Floodplain Ramsar wetland

Source: OAG

## **Appendix 1: Criteria for nomination to the Ramsar Convention**

The Ramsar Convention has nine criteria for listing wetlands as internationally important. The criteria have changed over time but currently state that a wetland should be considered internationally important if it:

- contains a representative, rare or unique example of a natural or near-natural wetland type
- supports vulnerable, endangered or critically endangered species or threatened ecological communities
- supports populations of plant and/or animal species important for maintaining the biodiversity of a particular region
- supports plant and/or animal species at a critical stage of their life cycles, or provides refuge during adverse conditions
- regularly supports 20 000 or more waterbirds
- regularly supports one per cent of the individuals in a population of one species or subspecies of waterbird
- supports a significant proportion of indigenous fish subspecies, species or families, life-history stages, species interactions and/or populations that are representative of wetland benefits and/or values and therefore contributes to global biological diversity
- is an important source of food for fishes, spawning ground, nursery and/or migration path on which fish stocks either within the wetlands or elsewhere, depend; or
- regularly supports one per cent of the individuals in a population of one species or subspecies of wetland-dependent non-avian animal species.



# **Appendix 2: Management activities at some Ramsar** sites

We observed a range of activity undertaken on various Ramsar sites. The following is a sample only:

#### Lake Toolibin

- significant engineering over many years to divert saline water from the lake
- significant drainage efforts to rehabilitate surrounding flats
- purchase of neighbouring properties to expand conservation estate
- revegetation of private lands within the catchment to ameliorate groundwater and runoff issues
- extensive research and monitoring activities.

Lake Warden Catchment existing and future activities include:

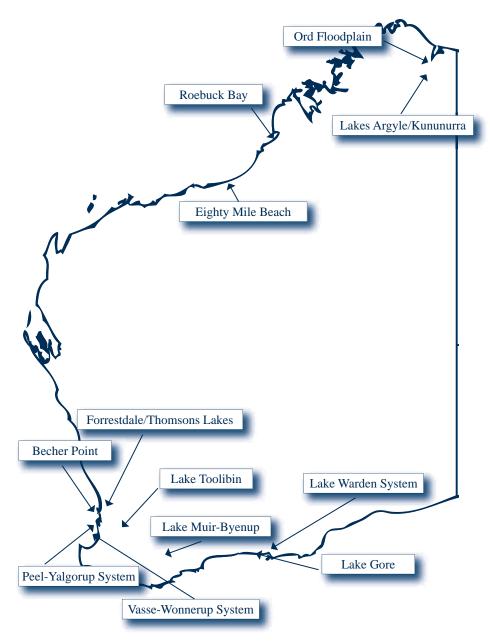
- possible engineering to dewater the Lake Warden system
- revegetation of private land in the catchment to ameliorate groundwater and runoff issues
- major geophysical surveying of catchment to establish baseline understanding of the system
- management involving community and other stakeholders including private farmers, local government, DEC, and Department of Agriculture and Food
- acquiring \$2 million over three years from regional NRM organisation.

Since the approval of the management plans for **Forrestdale Lake and Thomsons Lake** there has been an increase in activity on those sites. Some activities undertaken include:

- weed mapping
- weed control
- control of pest animals, including major reduction in population of kangaroos as required by management plan.







WA's Ramsar wetlands are situated in many parts of the State including the Perth metropolitan area, agricultural land, forest regions and the Kimberley region.

Source: OAG

# **Previous Reports of the Auditor General**

2005	
Public Sector Performance Report – Software Licensing – Regulation of Incorporated Associations and Charities – The Use of Consultants – Management of Leave Liability – Environmental Assurance on Agricultural Research Stations	4 May 2005
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Audit Results Report on University and TAFE Colleges and other audits completed since 1 November 2004	25 May 2005
Regulation of Heavy Vehicles	29 June 2005
Protection of Critical Infrastructure Control Systems	24 August 2005
Administration of Protection of Old Growth Forest Policy Funding Programs	24 August 2005
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<ul> <li>Second Public Sector Performance Report</li> <li>Production, Transport and Disposal of Controlled Waste</li> <li>Regulation of Child Care Services</li> <li>The Personnel and Payroll Processing Function at the Department of Education and Training</li> <li>Follow-up Performance Examination</li> <li>Life Matters: Management of Deliberate Self-Harm in Young People</li> </ul>	19 October 2005
<ul> <li>Third Public Sector Performance Report</li> <li>Unauthorised Driving - Unlicensed Drivers and Unregistered Vehicles in Western Australia</li> <li>Management of the Light Vehicle Fleet</li> <li>Redundancy and Redeployment</li> <li>Follow-up Performance Examination Level Pegging: Managing Mineral Titles in Western Australia</li> </ul>	16 November 2005
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### 2006

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# The above reports can be accessed on the Office of the Auditor General's website at www.audit.wa.gov.au/

On request these reports may be made available in an alternative format for those with visual impairment.