

Wetlands and People Plan Peel-Yalgorup System



A CEPA Action Plan for Ramsar Site 482

We acknowledge the Noongar people as Traditional Custodians of this land and pay our respects to all Elders past and present



PHCC Working Together
Peel-Harvey Catchment Council



We acknowledge the Noongar people as Traditional Custodians
of this land and pay our respects to all Elders past and present

We also acknowledge all people who have worked—and
continue to work—to protect and care for the Peel-Yalgorup
System, a wetland of international importance

*'As amazing as the Peel-Yalgorup Ramsar Site is, it is astounding
that our community and political leaders know so little about it.'*

~ Anon, 2014 ~

Ramsar 482

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SUMMARY

This Wetlands and People Plan, a CEPA Action Plan for Ramsar Site 482 (this Plan) has been written to encourage government, community and industry to become more involved in the care and protection of the wetlands of the Peel-Harvey Catchment, in particular the Ramsar-listed Peel-Yalgorup System. It complements a growing number of reports and initiatives that show how special the wetlands are, and how serious their plight is becoming.

Preparation of this Plan has been guided by the Peel-Yalgorup Ramsar Site Management Plan, Ecological Character Description for the Peel-Yalgorup Ramsar Site, Ramsar Convention Wetland CEPA¹ Handbook (2010a), the outcomes of a specially convened Expert Panel and local knowledge.

In 2007, the Peel-Harvey Catchment Council in partnership with more than 27 stakeholders, commenced a participatory planning process for the Peel-Yalgorup System Ramsar Site, Wetlands of International Importance. The need for a Site Management Plan (PHCC 2009) was identified in response to the increasing threats to the ecological, social and cultural values of the wetlands, and as a result of growing evidence of impacts to the wetlands' ecological character. In accordance with Australia's international and national commitments to managing Ramsar-listed wetlands, the Management Plan sets out a framework for coordinated and collaborative management that:

- works towards protecting and/or restoring the ecological character of the Peel-Yalgorup System
- promotes the wise use of the wetlands in the System by fostering the roles and responsibilities of local stewards

The need for strategic awareness raising was highlighted as a key recommendation of the Management Plan. In particular, it recommends, as a high priority action, the preparation of "a communication, education and public awareness-raising (CEPA)" strategy to promote the international importance of the Peel-Yalgorup System Ramsar Site, and our commitments to the Ramsar Convention for wetland 'wise use' (PHCC, 2009, p 33).

The implementation of the Management Plan continues today under the guidance of the technical advisory group comprising representatives of the 27 stakeholder groups that have an interest in or influence over the ways in which the wetlands are managed.

The Peel-Yalgorup System wetlands cover 26,530 ha and include the Peel-Harvey Estuary, the freshwater Lakes Mealup and McLarty, and the lands and lakes of Yalgorup National

Park. Goegrup and Black Lakes have been identified for inclusion in the Site. The wetlands are a distinctive, natural feature of the Peel Region and are listed as Wetlands of International Importance under the international Ramsar Convention for their numerous outstanding natural values. They support large numbers of migratory and resident waterbirds, critically endangered thrombolites (living rocks), a variety of wetland types, diversity of fish species including large recreational and commercial fisheries, and much more. The wetlands are of critical importance to the Peel economy for their tourism and recreational value and are of special significance to local Noongar people.

The Peel-Yalgorup System wetlands face a number of threats, which if not better managed over the coming decades may lead to significant environmental degradation, as was experienced prior to the opening of the Dawesville Channel in 1994. This loss of environmental value may reduce community support and empathy for the wetlands. Key threats are: declining water quality; poorly managed recreation; and loss of surrounding native vegetation and wetlands. The wetlands are surrounded by large residential, commercial and rural areas, with significant additional urban and industrial development proposed for the coming decades.

¹ CEPA is Communication Education Participation and Awareness-raising



SUMMARY

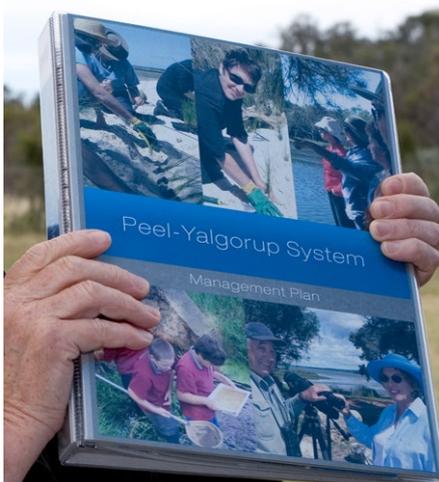
This Plan seeks to increase the level of engagement of the community, government and the private sector to achieve four (4) goals:



SUMMARY

Thirty-two actions are recommended in this Plan.

Some of the highest priority actions are provided here:



ACTION 1.1.3	Pursue opportunities to promote the Marine Stewardship Council's certification of the commercial and recreational fisheries, including through suppliers of recreational equipment (fishing and boating goods) and other commercial sectors
ACTION 1.2.4	Incorporate wetlands information into existing tourism maps, information and publications; or Publish a tourist-friendly map of the wetlands (paper and digital). Show where public facilities are available and link them to environmental attractions
ACTION 2.1.1	Produce a fact sheet/digital presence on the status of the Peel-Yalgorup Ramsar Site. ('Status' indicates the level of protection to the wetlands, related issues of land tenure and reserve purpose)
ACTION 2.1.2	Produce a fact sheet/digital presence summarising the condition of the wetland's ecological character and values
ACTION 3.1.1	Hold a biennial Peel-Yalgorup System Wetlands Forum
ACTION 3.1.2	Prepare a Discussion Paper for Government: Models for Governance and Participatory Management and Decision Making for the Peel-Yalgorup System wetlands
ACTION 3.2.2	Continue support of community bird monitoring programs. Use results to: feed into assessing the Peel-Yalgorup System against management triggers and LACs; managing the System; and to produce information materials
ACTION 3.2.3	Establish a new citizen science program for the wetlands, designed to attract students, parents and teachers to learn about the wetlands; or Consider adapting the successful Dolphin Watch program to the wetlands
ACTION 3.2.4	Promote the concept of a community advocacy program around the theme of 'Protecting the Peel-Yalgorup System wetlands'
ACTION 4.2.2	Create opportunities for cross-cultural exchange between Noongar and non-Noongar people
ACTION 4.2.5	Create or support opportunities for Noongar people to work on country in the wetlands



SUMMARY

Among the highest priority actions, the most urgent are Action 3.1.2 and Action 3.2.4.

Action 3.1.2 is to prepare a Discussion Paper to inform debate on how best to coordinate management and protection of the wetlands with the involvement of stakeholders. The intent of this action is to explore ways in which multiple interests can be brought into the decision-making process for such a large and diverse area of land and water, which is used for many public and private purposes and benefits. The Discussion Paper should be supported by the PHCC, PDC, Peel local governments and the Peel Chamber of Commerce & Industry.

Action 3.2.4 is to support a community advocacy program around the theme of 'Protecting the Peel-Yalgorup System wetlands'. This action was borne out of the work of an Expert Panel convened especially as part of this Plan's preparation. This advocacy program can take a number of directions, but should have the aim of raising the local community's awareness of the beauty

and fragility of the wetlands and of the services they provide the community, and therefore the need to protect the wetlands in perpetuity.

Bringing commerce, community and government sectors together

The overall theme of this Plan is the need for greater collaboration across stakeholders whose core interests may be different, but whose common interest is the health and wellbeing of the wetlands, including the Estuary. To this end, the involvement of the Peel Chamber of Commerce & Industry and the Mandurah and Peel Tourism Organisation and other groups that may not be traditionally involved in 'environmental' programs is strongly encouraged and welcomed.

These groups complement other organisations and stakeholders that need to continue to be involved—state and local government, Noongar groups, community groups, researchers, schools, commercial operators and industry.

To encourage all stakeholders with an interest in the wetlands to be more involved in the implementation of this Plan, it is important to remember that the ultimate aim of all Ramsar wetlands is their 'wise use' and conservation. Wise use is about social and economic outcomes which at the same time achieve conservation.

Wise use of wetlands cannot be achieved without the involvement and action of the communities that benefit from the wetlands, and the people, local and otherwise that make decisions that affect the wetlands.



THIS PLAN





A Wetlands and People Plan for the Peel-Yalgorup System

Introduction

People relate to the internationally important Peel-Yalgorup System (the wetlands) in a variety of ways—many positively, some negatively and, often most likely, ambivalently or ignorantly. While awareness of the wetlands, their importance and their plight is growing, increased awareness and engagement in their protection and management is a critical part of securing their future. People benefit from a connection to nature (Laird, 2014), and communities are more likely to support investment in their environments if they are aware and connected to them.

This Plan has been written to encourage government, community and industry to become more involved in the care and protection of the wetlands. It complements a growing number of reports and initiatives that show how special the wetlands are, and how serious their plight is becoming.

The Peel-Yalgorup System wetlands cover 26,530 ha and include the Peel-Harvey Estuary, the freshwater Lakes Mealup and McLarty, and the lands and lakes of Yalgorup National Park. Goegrup and Black Lakes have been identified for inclusion in the Site. The wetlands are a distinctive, natural feature of the Peel Region and are listed as Wetlands of International Importance under the international Ramsar Convention for their numerous outstanding natural values. They support large numbers of migratory and resident waterbirds, critically endangered thrombolites (living rocks), a variety of wetland types, diversity of fish species including large recreational and commercial fisheries, and much more. The wetlands are of critical importance to the Peel economy for their tourism and recreational value and are of special significance to local Noongar people.

The Peel-Yalgorup System wetlands face a number of threats, which if not better managed over the coming decades may lead to significant environmental degradation, as was experienced prior to the opening of the Dawesville Channel in 1994. This loss of environmental value may reduce community support and empathy for the wetlands. Key threats are: declining water quality; poorly managed recreation; and loss of surrounding native vegetation and wetlands. The wetlands are surrounded by large residential, commercial and rural areas, with significant additional urban and industrial development proposed for the coming decades.

Preparation of this Plan has been guided by the Peel-Yalgorup Ramsar Site Management Plan (2009), Ecological Character Description for the Peel-Yalgorup Ramsar Site (2005), Ramsar Convention Wetland CEPA Handbook, the outcomes of a specially convened Expert Panel and local knowledge.

This Plan includes recommended actions to be implemented over the next 10 years by government, community and industry, with a view to setting a brighter 100 year agenda for the Peel-Yalgorup wetlands. The overarching aim of this Plan is to increase community, political and industry support for better protection and wise use² of the Peel-Yalgorup wetlands. The actions focus on the communication, education, capacity development, participation and awareness-raising activities, involving various groups and sectors, that could occur with appropriate will and resources.

“...our most important and strategic natural asset, that being our coastal waterways”

~ Peel Development Commission ~

²Wise use is a concept defined under the Ramsar Convention, simply meaning the conservation and sustainable use of wetlands and all the services they provide, for the benefit of people and nature.



This Plan has four goals:

1. Wise use of the wetlands is actively encouraged and supported
2. Politicians and government are provided with the information and support to underpin better-informed decision making for wise use
3. Increased community sector stewardship and advocacy of the wetlands (active participation in decision making and management)
4. Increase the general community's capacity to protect the wetlands through social marketing, environmental education and Cultural events

What the Wetlands and People Plan means for natural resource managers

'The role of this CEPA plan is to guide the decision makers, educational institutions, NGOs, agencies and the wider community, in an interdisciplinary effort to imbed the Ecological Character Description (ECD) and Peel-Yalgorup Ramsar Site Management Plan recommendations, as well as state and Federal Acts, Regulations and Agreements e.g..... EPBC and Aboriginal Heritage Act, CAMBA, JAMBA, ROKAMBA, into organisation's policies, procedures and day to day actions that influence the health of the Peel-Yalgorup System Ramsar listed wetlands.

This will enable the decision makers in government, business and other sectors, along with the wider community, to contribute to the collaborative management of the Peel-Yalgorup Ramsar listed wetlands, their components and processes, and the monitoring of the System that provides information to determine whether the System is managed within the Limits of Acceptable Change.'

~ Thelma Crook - PHCC ~

The Ramsar-listed Peel-Yalgorup System

The Peel-Yalgorup System covers an area of 26 530 ha of internationally significant wetlands and bushland located within the local government areas of Mandurah, Murray, Waroona and Harvey within 70 to 130 km of the Perth CBD. The wetlands are of major environmental, social and economic importance to the Peel Region and are listed under the Ramsar Convention as *wetlands of international importance* for their environmental, cultural, social and economic significance. The Peel-Yalgorup Ramsar System meets seven of the nine criteria for listing as a Ramsar Wetland (Appendix 1).

Some of the Peel-Yalgorup System wetlands' environmental features include:

- provision of habitat for migratory waterbirds over-wintering here each year from Siberia, China, Japan and Korea (these species are protected under international conventions)
- regularly supporting at least 1% of the world's population of 14 species of waterbird
- thrombolites at Lake Clifton, which are 2000-year-old living rock-like structures, the same microbial species that first produced oxygen through photosynthesis about 3.5 billion years ago
- habitat and breeding grounds for 50 species of fish
- habitat for a wide diversity of species including crustacea, marine and terrestrial mammals and waterbirds
- the largest and most diverse estuarine complex in the south west of Australia; the Peel-Harvey Estuary
- good examples of saline lake and freshwater marsh ecosystems

These features provide benefits and services which are linked to or underpin the local environment, community and economy. Table 1 provides examples of some of the wetlands' benefits and services.



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The wetlands are of significant economic value to the Peel Region and Western Australian economies. The Estuary alone has been estimated to add approximately \$3.008 billion to the value of houses in its proximity and the value of boating in the region is \$634 million per annum (Economic Consulting Services, 2008). Commercial and recreational fisheries, and a strong tourism sector based on the Estuary and waterways, add to the wetlands' economic and social importance. The wetlands and waterways are one of the major recreational and cultural attractions for the 80 000 people that live in their proximity.

The Peel-Yalgorup System is a large and diverse area, made up of four subsystems (Figure 1):

- Peel-Harvey Estuary System
- Lands and lakes of the Yalgorup National Park
- Lakes Mealup and McLarty
- Goegrup and Black Lakes (proposed extensions to Site; included in ECD)

Australia is a signatory to the Ramsar Convention

The Convention on Wetlands, called 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.

Number of signatory countries: 169

Number of Ramsar Sites: 2,280

Total surface of designated sites worldwide: 220,453,845 ha.

<http://www.ramsar.org/>

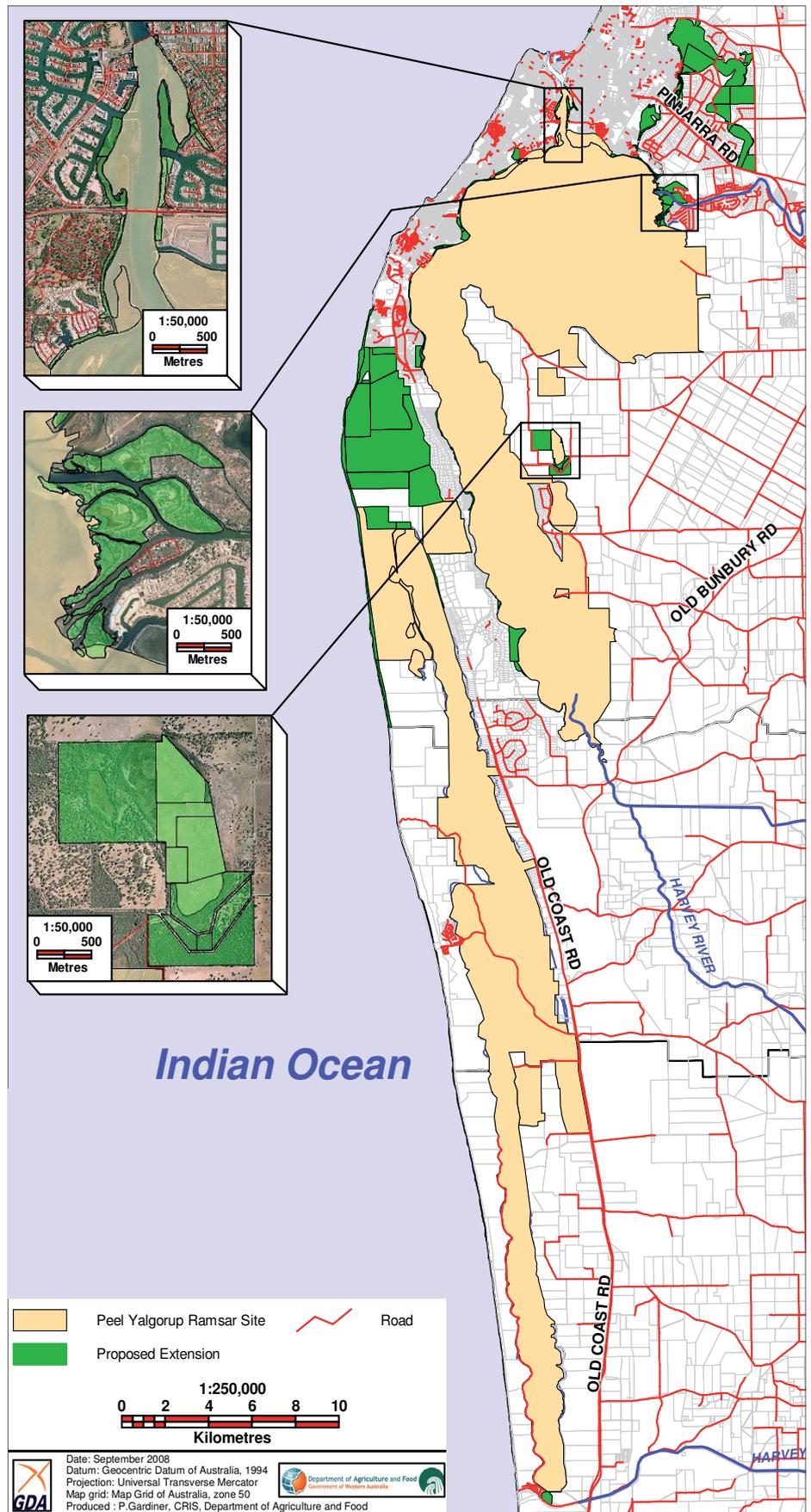


Figure 1: Peel-Yalgorup System Ramsar Site



Table 1: Selected benefits and services of the Peel-Yalgorup System wetlands and examples of their environmental, economic and social significance

BENEFIT/SERVICE AND GENERAL LOCATION	LINKS TO ENVIRONMENT, ECONOMY AND COMMUNITY		
	ENVIRONMENTAL SIGNIFICANCE	ECONOMIC SIGNIFICANCE	SOCIAL SIGNIFICANCE
Commercial fishing (Peel-Harvey Estuary)	Healthy estuary supports sustainable fisheries	Value of fish, crabs and prawns. (\$1 m/yr , 2007) Around 10 commercial fishing licences, with associated employment	Commercial fishing is part of regional fabric and history Fishtraps used by Noongar people for thousands of years
Recreational fishing (Peel-Harvey Estuary)	Healthy estuary supports sustainable fisheries	Recreational fishing is a significant component of recreational expenditure	Important cultural and social connections (e.g. crabbing, Crab Fest)
Pollution control (Peel-Harvey Estuary) (Note: This wetland service is limited, Estuary and lower rivers are currently stressed due to excessive nutrient loads)	Nutrient concentrations in the water and sediment sediment loads	Cost-effective means of ameliorating impacts of pollution (limited capacity)	Avoids or reduces impact of poor water quality
Ecological services—waterbird habitat (all Peel-Yalgorup System wetlands)	Waterbirds integral part of regional ecosystems and food webs Significant waterbird populations (e.g. 1% of world's populations of 14 waterbird species are regularly found at the wetlands)	Key tourist attraction (domestic and international tourism markets)	Enhanced amenity Recreational attractions Educational and research opportunities
Open waterways, waterbodies—amenity and flood control (all Peel-Yalgorup System wetlands)	Waterways and wetlands provide a range of habitats for wildlife, including nurseries for fish, waterbirds and mammals. Part of annual life cycle of species which fly from China, Japan and Korea	Waterways and waterbodies add approximately \$3.008 billion to the value of houses and \$634 million per annum in boating (Economic Consulting Services, 2008) Significant tourism value Flood mitigation	Waterways and waterbodies are a major recreational drawcard for the Peel Region
Bushland habitats surrounding wetlands (all Peel-Yalgorup System wetlands)	Habitat for many species of birds, reptiles, mammals, frogs	Flood mitigation Cooling and climate amelioration	Recreational amenity Cultural significance to Noongar people
Habitat for rare and threatened species (e.g. Thrombolites—Lake Clifton)	The wetlands provide habitat for common and not-so-common species	Protecting species and wildlife in their natural habitat is the most cost-effective form of conservation	Cultural values of the wetland and thrombolites to Noongar and non-Noongar people

The wetlands' plight

Many people who interact closely with the wetlands through their occupation, advocacy or interest appreciate both their beauty and fragility. This has been made evident through the photographic and advocacy work of David Rennie and friends.

Many older residents recall the near collapse of the estuary from algae blooms in the 1970s and 1980s prior to the building of the Dawesville Channel which was opened in 1994



This photo of a Yellow-billed Spoonbill (*Platalea flavipes*) was taken by renowned local photographer David Rennie, winner of the Australian Geographic ANZANG Nature Photographer of the Year award in 2013, and advocate for the wetlands

<http://www.ramsar.org/photographer-and-environmentalist-david-rennie-is-a-strong-ambassador-of-the-peel-yalgorup-ramsar>

THIS PLAN



The wetlands continue to suffer from a range of threats and need greater attention and protection to remain healthy and resilient. These threats include *inter alia* inadequate levels of formal protection, inappropriate development, poor water quality, poorly managed recreational use, declining rainfall and insufficient resources for management. The range and scale of these threats leads to the wetlands being dealt a ‘death by a thousand cuts’.

A comprehensive analysis of threats to the Peel-Yalgorup System was conducted as part of the development of the System’s Ecological Character Description (Hale & Butcher, 2007). Figure 2 provides a summary of major threats to the System and a basis for understanding what may be required of people and groups to better manage and protect the System in the future.

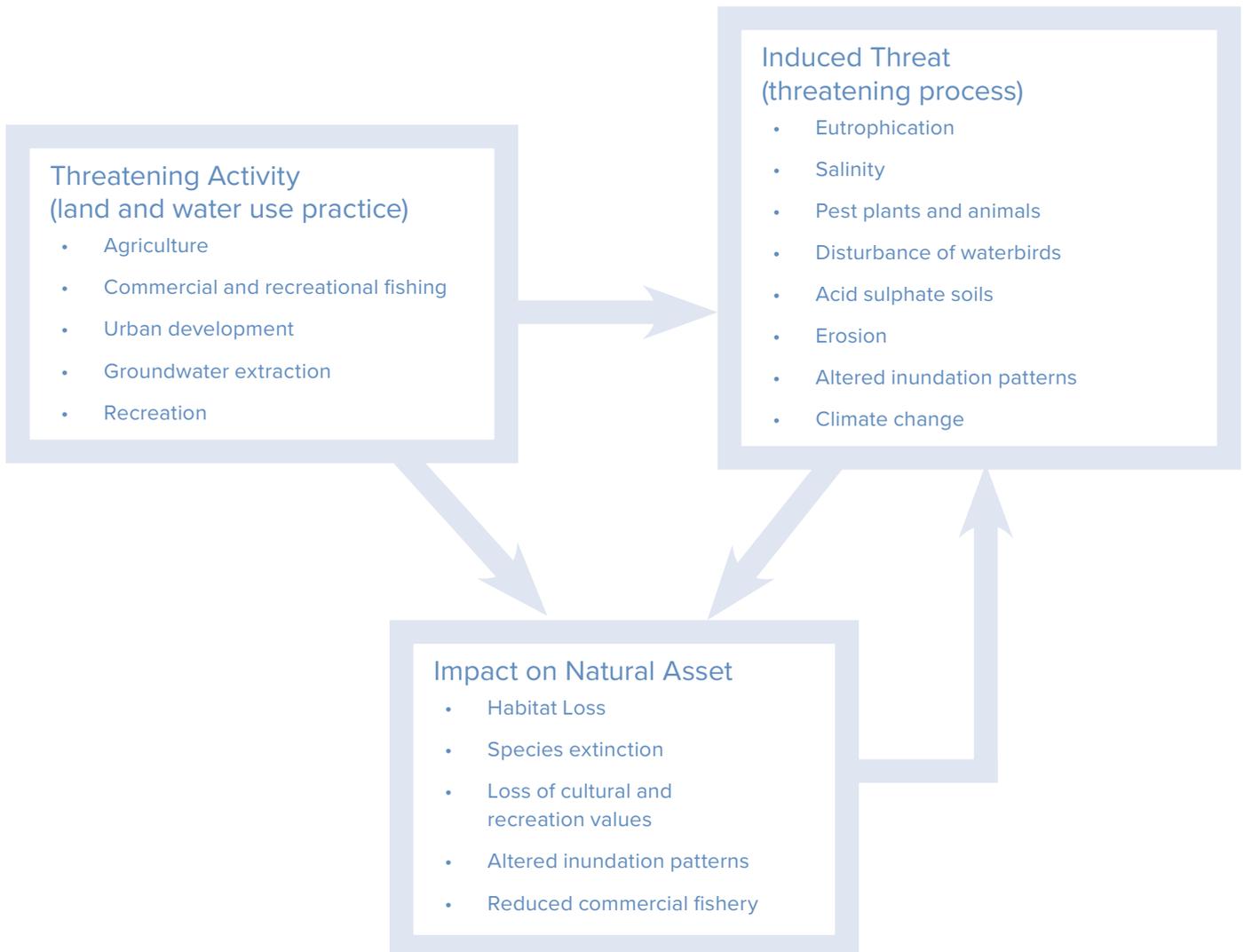


Figure 2: Threats to the ecological character of the Peel-Yalgorup System (modified from Hale & Butcher, 2007)



An understanding of these threats and how people and organisations are linked to these threats is an important part of the development of this Wetlands and People Plan. The range of stakeholders that in some small or large way have a role to play in the wetlands' future makes management and protection of the wetlands complicated and challenging.

Also, given that the Peel-Yalgorup System wetlands cover a huge area over multiple land tenure, ownership and management agencies, there is a significant challenge to ensure management is coordinated across the wetlands whilst able to be tailored to the needs of each local area and reserve. Current management is not officially coordinated and management resources are very limited and patchy (PHCC, 2012a).

A community driven Technical Advisory Group (TAG) was established for the Peel-Yalgorup System Ramsar Site in 2007 and encourages a collaborative approach across many of the government and non-government stakeholders responsible or interested in the wetlands' protection and management. The TAG was established through the PHCC's Ramsar Initiative. Support to the TAG continues only where PHCC funding allows.

The lack of formal coordination and management resources for the wetlands needs to be recognised when raising community and political awareness of, and increasing levels of engagement and participation in, the management of the wetlands.

For more information on the Peel-Yalgorup System wetlands, see:

- Peel-Yalgorup Ramsar Site Management Plan (PHCC, 2009), available at www.peel-harvey.org.au
- Australian Wetlands Database (Ramsar Wetlands), (Department of the Environment, 2015) available

at www.environment.gov.au/water/wetlands/australian-wetlands-database/australian-ramsar-wetlands.

For a comprehensive description of the Peel-Yalgorup's ecological values and character refer to the Site's ecological character description (Hale & Butcher, 2007).

Why increase levels of awareness, engagement and participation?

The ultimate aim of all initiatives in relation to Ramsar-listed wetlands is the conservation and 'wise use' of wetlands. Put simply, 'wise use' means the conservation and sustainable use of wetlands and all the *ecosystem services* they provide, for the benefit of people and nature. Wise use is about social and economic outcomes which at the same time achieve conservation.

Wise use of wetlands cannot be achieved without the involvement and action of the communities that benefit from the wetlands, and the other people that make decisions that affect the wetlands (e.g. politicians, land developers, other decision makers).

Anecdotal evidence suggests that this Plan has a lot of work to do in this regard. For example, comments at the Expert Panel convened to guide this Plan, included:

'The vast majority of the local community just expect someone else is looking after it (the wetlands)'

'If the water's blue in the Estuary then everything is okay, but if it's green then they know it's bad'

The latter comment suggests that the average community member uses simple truths to tell them if things are okay or not (green water is bad, blue is okay) and may not be aware or interested that problems in the Estuary and other wetlands often

appear well before the water goes green. Incidentally, an algal bloom and subsequent river closure and fish kills may be a good time to draw community attention to the problem, and explain possible solutions.

Acknowledging that community and government apathy and inaction are fundamental barriers to wetland protection, the Ramsar Convention's CEPA program³ has the vision of 'People taking action for the wise use of wetlands' (CEPA = Communication, education, capacity development, participation and awareness) (Ramsar Convention Secretariat, 2015).

Based on this vision, a fundamental assumption of this Plan is that:

- increased levels of awareness of the Peel-Yalgorup System wetlands' values and management needs, and
- increased levels of engagement and participation in the wetlands

can significantly contribute to the wetlands' protection as:

- Increased awareness fosters more sustainable behaviours and can change social norms (McKenzie-Mohr, 2011). Political influence is exerted where there is a sense of community consensus around an issue, or a direct campaign agenda with broad community support
- Direct engagement of politicians, including site visits, influences decision making and government investment (P Creevey, pers. comm)
- Increased awareness and personal links to the wetlands motivate people to become advocates for the wetlands (e.g. Len Howard, David Rennie)

³The Ramsar CEPA Program promotes the development of wetland CEPA actions plans. It covers communication, capacity building, education, participation and awareness.

Who is this Plan for?

This Plan has been published by the Peel-Harvey Catchment Council, a community based organisation, for the Peel-Harvey catchment community.

In this context, catchment 'community' means all individuals and groups who have a 'stake' in the catchment including all levels of government, businesses, industries, NGOs, Noongar people, land owners, residents, community groups and media. Where individuals and local community groups are the focus, the term 'local community' is used.

The actions recommended in this Plan have been designed to address key opportunities for communication, capacity building, education, participation, and awareness across various sectors of the community. This Plan recognises that the community is a broad collection of different groups and individuals, including many people who fulfil numerous roles. The diversity of the community is recognised through the targeting of some of the recommended actions to specific community sectors (Table 4).

Whilst the Peel-Harvey Catchment Council has taken the lead in recent years on initiatives related to the wetlands, it is hoped that various groups and organisations will step forward to implement this Plan's recommendations, as appropriate to their roles and responsibilities. Further consultation with the groups and organisations of the catchment community is required to build broad support for this Plan's implementation.

Policy and legal context

This Plan is linked to a range of policy and legislative documents, including the Ramsar Convention and the Environment Protection and Biodiversity Conservation (EPBC) Act (1999).

At an international and national level, CEPA action plans for Ramsar-listed wetlands are a direct recommendation of the Ramsar Convention and its CEPA program. Australia, as a signatory to the Convention, has a responsibility to prepare these plans at the national, state and local level, as deemed appropriate. Given the values, complexity and level of threat to the Peel-Yalgorup System wetlands, a local Wetlands and People Plan (CEPA Plan) was recognised as a priority by the Peel-Harvey Catchment Council.

To give effect to the listing of the Peel-Yalgorup System as a Ramsar Site under the Convention, the Australian Government lists the ecological character of all Ramsar Sites as a Matter of National Environmental Significance (MNES), specifically protected under the EPBC Act 1999. The Peel-Yalgorup System is included within the area of the Strategic Assessment of the Perth and Peel Regions which is currently being undertaken by the State Government under the EPBC Act. The development proposed under the strategic assessment will potentially have a significant bearing on future pressures on the wetlands and their protection and management.

At the regional scale, this Plan complements other documents that have been prepared for the Peel-Yalgorup System:

Peel-Yalgorup Ramsar Site Management Plan

- Peel-Harvey Catchment Council (2009) *Peel-Yalgorup Ramsar Site Management Plan*, Peel-Harvey Catchment Council, Mandurah

Ecological Character Description of the Peel-Yalgorup Ramsar Site

- Hale J and Butcher R (2007), *Ecological Character Description of the Peel-Yalgorup Ramsar Site*, Report to the Department of Environment and Conservation and the Peel-Harvey Catchment Council, Perth, Western Australia

Monitoring and Evaluation Guide for the Peel-Yalgorup Ramsar Site

- Hale J (2008, unpublished: incorporated in Peel-Yalgorup Ramsar Site Management Plan) *Monitoring and Evaluation Guide for the Peel-Yalgorup Ramsar Site*, A report to the Peel-Harvey Catchment Council and the Department of Environment and Conservation, Mandurah, Western Australia

This Plan has strong links to the Peel-Yalgorup Ramsar Site Management Plan. Preparation of this Plan is a recommendation of the Management Plan, and one of the Management Plan's three goals is a direct call for community engagement:

Goal 2: Community stakeholders will be engaged and supported in active environmental stewardship (PHCC, 2009)



Through its implementation, this Plan will help achieve the vision for the Peel-Yalgorup System, described in the Peel-Yalgorup System Ramsar Site Management Plan as:

'The Peel-Yalgorup System is internationally recognised as a major environmental asset and is highly valued for its ecological, social, cultural and economic benefits. The diverse wetlands and waterways are managed wisely as a place and space for all to play, learn and live in a sustainable way. We acknowledge our stewardship role in the conservation and protection of the land, water, flora and fauna for the long term.'

Scope of this Plan

This Wetlands and People Plan focuses on the communication, education, capacity development, participation and awareness-raising required in order to conserve and wisely use the Peel-Yalgorup System wetlands.

This agenda (conservation and wise use of a huge and diverse natural area) means that many stakeholders are involved in the wetlands' use, management and protection.

The Project Scope for the development of this Plan has been kept intentionally broad so as to ensure the wetlands are adequately conserved and wisely used into the long term. The only limitation to this scope is the treatment of catchment management activities in the wider catchment to the Peel-Yalgorup System, an area of 1,173,620 hectares.

This Plan does not cover general catchment management activities across the Catchment as these are addressed under other initiatives such as:

- Binjareb Boodja Landscapes 2025 (PHCC, 2015)
- Subcatchment Implementation Plans for Water Quality Improvement for selected subcatchments: Nambeelup, Dirk Brook-Punrak and Mayfield (PHCC, 2012b)
- Implementation of the Peel-Harvey Water Quality Improvement Plan (PHCC, 2013)

How this Plan was prepared

This Plan has been developed through an iterative process which included a literature review, and consultation and interviews with stakeholder representatives, including an expert panel. Information gathered from these sources was used throughout a project methodology developed by Andrew Del Marco with Kim Wilson and Thelma Crook of the PHCC (Appendix 2). This methodology was adapted during this Plan's development to take advantage of expert advice received during the project.

Given that this Plan focuses on 'how to communicate with and engage people', targeted consultation with representatives of groups and organisations that potentially can implement this Plan's recommendations was an important part of the process. A list of the people either directly interviewed as part of the project or involved in the Expert Panel is included in the Acknowledgements.

An Expert Panel was convened as part of the Project to draw on the knowledge and expertise of a variety of people, and to encourage cross-fertilisation of ideas on which to base this Plan. The participants included those across the fields of marketing,

politics, community engagement, media, and natural resource management. The Expert Panel met for a day session on 19 November 2014 and members were invited to provide comment on the draft Plan.

As part of the above information collection and analysis, particular effort was made to understand:

- recognition of principles of marketing, including community-based social marketing
- recognition of the values of the Peel-Yalgorup System
- current actions, behaviours and decisions which threaten those values, or conversely protect and enhance those values
- future required actions, behaviours and decisions to protect or manage the Peel-Yalgorup System's values
- previous aspects of CEPA identified in the Peel-Yalgorup Ecological Character Description (2007, Section 10)

Community consultation during the development of this Plan included meetings and interviews with peak community groups and other stakeholder representatives. Drafts of this report were circulated for comment to over 20 stakeholder representatives, including all members of the Expert Panel.

OBJECTIVES





OBJECTIVES

Objectives, stakeholders, and desired outcomes

Table 2 presents the proposed objectives of this Plan. The objectives have been drawn from the literature review, including Ramsar Convention programs and the Peel-Yalgorup

System Ramsar Site Management Plan, and reviewed with the Project Steering Group. A brief rationale or basis for each objective is included in Table 2.

Table 2: Objectives of the Peel-Yalgorup System Wetlands and People Plan.

GOALS AND OBJECTIVES		REFERENCE OR FURTHER EVIDENCE	
G1: Wise use of the wetlands is actively encouraged and supported			
1.1	Commercial sector users and advocates	Best-practice wise use and advocacy by the commercial sector is identified, supported and promoted	The commercial sector is a key agent for change and strong influencer of government policy. Many people relate to the wetlands through tourism, recreational fishing and other enterprises directly related to the wetlands. 'Respect the wetlands and they will help sustainable enterprises prosper.' Encouraged under the Ramsar Convention CEPA Program (Ramsar Convention Secretariat, 2010b)
1.2	Facilities and opportunities for wise use	New commercial and non-commercial opportunities are created to allow wise use of the Ramsar Site's attractions	Well-planned facilities can ensure recreational pressures are well managed and create passive environmental education opportunities
G2: Politicians and government are provided with the information and support to underpin better-informed decision making for wise use			
2.1	Support to politicians and government	Local, state and federal politicians and government decision makers are supported to understand the Peel-Yalgorup System's values, threats, protection and management needs. (Education → better decisions)	Politicians and government agencies make numerous key decisions which directly or indirectly affect the Peel-Yalgorup System wetlands, positively and negatively. These include decisions in relation to the extent and status of protected areas and the consideration of development proposals which have the potential to have an impact on the wetland's values Examples can be provided which highlight good and bad examples of government decision making, and the costs and benefits associated with each
2.2	Develop government's capacity	Develop government's capacity to engage in collaborative management and protection of the wetlands	Agency budgets and priorities are continually being stretched. Agencies need support and encouragement from the community to ensure the wetlands receive adequate attention

OBJECTIVES



GOALS AND OBJECTIVES		REFERENCE OR FURTHER EVIDENCE	
G3: Increased community sector stewardship and advocacy of the wetlands (active participation in decision making and management)			
3.1	Participatory management and decision making	The community, government and commercial sectors are able to participate in the common development, implementation and evaluation of strategies and actions for the wise use of the Peel-Yalgorup System. In This Plan, 'Collaboration' is proposed to drive actions under this and other objectives	<p>Encouraged under the Ramsar Convention, Wise Use of Wetlands Program (Ramsar Convention Secretariat, 2010a)</p> <p>Complements the recommendation of the Peel-Yalgorup Management Plan to operate a Peel-Yalgorup System Management Advisory Group (PHCC, 2009)</p> <p>Catchment management to protect the wetlands requires a strong collaborative approach</p>
3.2	Support to community stewards and advocates	Community stakeholders are engaged and supported in active environmental stewardship of the Ramsar System	<p>This is Goal 2 of the Peel-Yalgorup System Ramsar Site Management Plan. Much of the management, information collection, advocacy and protection of the wetlands is carried out by community volunteers</p> <p>Encouraged under the Ramsar Convention CEPA Program (Ramsar Convention Secretariat, 2010b)</p>
G4: Increase the general community's capacity to protect the wetlands through social marketing, environmental education and Cultural events			
4.1	Environmental education and general public awareness	The local and regional communities, including specific community sectors (e.g. schools) are provided opportunities and information to increase their understanding of the Peel-Yalgorup System's values	<p>Encouraged under the Ramsar Convention CEPA Program (Ramsar Convention Secretariat, 2010b)</p> <p>Raising community awareness of a number of wise use practices identified as part of the Peel-Yalgorup Ramsar Site Ecological Character Description (Hale & Butcher, 2007); e.g. boating, avoid disturbance to waterbirds</p> <p>Raise awareness of the next generation (schools and teachers)</p>
4.2	Share and promote stories	Opportunities are created to share stories of the wetlands across all sectors (e.g. champions, Noongar stories, European history)	Encouraged under the Ramsar Convention, CEPA Program (Ramsar Convention Secretariat, 2010b)
4.3	Give public recognition to those practicing 'wise use'	Organisations and individuals in all sectors are given recognition for their efforts to wisely use the wetlands	<p>Raises the profile of positive efforts and provides inspiration to others</p> <p>Private and non-government sectors use recognition as a marketing advantage</p>



Stakeholders and target groups

At its core, this Wetlands and People Plan is about communicating and involving different sectors of the community, government and business to achieve various protection and management outcomes for the Peel-Yalgorup System wetlands.

To do this, this part of this Plan identifies the ‘who, why and what’ to help direct the actions recommended in Actions:

- With ‘who’ is the communication or engagement to occur?
- ‘Why’ specifically are we communicating and engaging with this group or sector?
- ‘What’ is the message, behaviour change, action or decision that we are aiming to elicit? That is, what is the desired outcome from the communication or engagement?

There are a large number of groups, organisations and individuals that have a clear connection to the Ramsar System and its protection. These groups or individuals either:

- make decisions which directly affect the wetlands
- work in the wetlands or have a business or lifestyle which directly benefits from the wetlands
- manage and care for the wetlands
- advocate for the wetlands
- use the wetlands for recreation or other purposes
- have a cultural connection to the wetlands

For the purpose of the Wetlands and People Plan, these groups are referred to as stakeholders or target groups. The term ‘stakeholders’ is used in this Plan to mean a group or person who has a direct interest or investment in the Peel-Yalgorup System wetlands (e.g. a government agency that makes

decisions which directly affect the wetlands; a fishing or tourism business that directly uses the wetlands; a recreational fisher or crabber). The term ‘target group’ is used to describe any group of people or sector that may only have an indirect interest in the Peel-Yalgorup System wetlands, and may influence stakeholders (e.g. local media, residents of Mandurah, Murray, Waroona or Harvey and residents whose homes overlook the wetlands).

Identification of stakeholders and target groups of the Wetlands and People Plan has occurred and is summarised in Table 3. For the purposes of simplification and developing actions, stakeholders and target groups are categorised into one of the following:

1. Government and politicians (local, state and federal, and advisory boards)
2. Commercial interests
3. Custodians, managers and advocates of the wetlands (including Traditional Owners, government and non-government, community groups, researchers, professional and citizen scientists, artists)
4. Community—site users (e.g. passive and active recreation, local and non-local)
5. Community—broad electorate
6. Media

Groups 1 to 4 generally include stakeholders, whilst groups 5 and 6 form target groups.

It is important to note that the Group 4 (Community—site users) is made up of local and non-local community members that visit the wetlands to recreate. The proportion of non-local community members is not known, but considered to be quite large and is important to consider when implementing this Plan’s actions, especially actions under Goal 1.

Table 3: Stakeholders and target groups

WHO - STAKEHOLDERS	WHY - COMMUNICATE/ENGAGE	WHAT - EXAMPLES OF DESIRED OUTCOME OF COMMUNICATION OR ENGAGEMENT
Government and Politicians		
Federal politicians	<ul style="list-style-type: none"> Increase understanding of wetland's ecological, economic and social values Demonstrate links between the wetlands and EPBC Act 1999 and obligations under the Ramsar Convention 	<ul style="list-style-type: none"> Recognition of the Wetlands and People Plan Endorsement of Black and Goegrup lakes extensions to the Ramsar Site Politicians back decisions which protect the wetlands Consideration of funding projects to implement the Management Plan and other Peel-Yalgorup plans
State politicians	<ul style="list-style-type: none"> Increase understanding of wetlands' ecological, economic and social values Demonstrate links to land use planning and impacts on the wetlands Greater legislative protection for the Ramsar Site 	<ul style="list-style-type: none"> Support for funding for land acquisitions for Peel Regional Park Additional support and funding for ongoing management of the wetlands Additional support and funding for catchment management initiatives
Federal and state agencies—environmental (e.g. Department of the Environment, Department of Parks and Wildlife)	<ul style="list-style-type: none"> Provide support and information to Departments Encourage agencies to share information with catchment community Expertise in wetland management 	<ul style="list-style-type: none"> Agencies use the latest information held by the Catchment community to make decisions Joint wetlands projects are created between Departments and the catchment community Make changes to legislation to consider Ramsar values
Federal and state agencies—non-environmental (e.g. Department of Planning, Department of Transport)	<ul style="list-style-type: none"> Increase recognition of the wetlands' international significance Raise awareness of how Department's decisions can protect or harm the wetlands ecological character 	<ul style="list-style-type: none"> Agencies make a public commitment to recognise the wetlands' values in decisions, policies and legislation Agencies publicly recognise and protect the wetlands' values in policies, decisions and legislation
Local government Councillors and senior staff	<ul style="list-style-type: none"> Local governments manage numerous parts of the wetlands Local governments influence land use planning and development in proximity to the wetlands Local governments need support and encouragement to protect the wetlands where tough decisions may need to be made 	<ul style="list-style-type: none"> Local governments make a public commitment to recognise and protect the wetlands' values through their decisions, budgets and policies Local governments demonstrate how they are protecting the wetlands' values
Commercial Interests		
Tourism operators, including providers of accommodation, Visitor Centres, and the Mandurah and Peel Tourism Organisation	<ul style="list-style-type: none"> Tourism sector may need assistance to more widely promote the wetlands' features beyond the immediate 'touristic experience' Tourism operators attract many people who may not otherwise be interested in environmental issues Significant opportunity for passive environmental education and recreation 	<ul style="list-style-type: none"> Tourists have increased awareness of the wetlands' environmental values and what they can do to protect the wetlands Wetlands are used as part of the Mandurah-Peel brand (MAPTO) Increased recognition of the wetlands' international significance (e.g. through the story of the feathered international travellers) Commercial operators become stronger advocates for the wetlands' protection Increased nature based tourism, including international visitors



OBJECTIVES

WHO - STAKEHOLDERS	WHY - COMMUNICATE/ENGAGE	WHAT - EXAMPLES OF DESIRED OUTCOME OF COMMUNICATION OR ENGAGEMENT
Commercial fishers	<ul style="list-style-type: none"> Strong links between sustainable seafood and wise use of the wetlands Local commercial operators have received certification of the Peel Harvey Estuarine Fishery: Recreational and Commercial blue swimmer crab and Commercial sea mullet by the Marine Stewardship Council Operators and sales staff come into daily contact with fishers and boating community who use the wetlands 	<ul style="list-style-type: none"> Accreditation of fishery can be used as a selling point for the wetlands and tourism Commercial operators become stronger advocates for the wetlands' protection to maintain MSC certification Operators and sales staff can encourage customers to use equipment responsibly and understand the rules and sound practices to protect the wetlands (e.g. fishing for the future, obey the boating speed zones, don't disturb waterbirds while you are fishing and crabbing, etc.)
Custodians, managers, advocates		
Traditional Owners	<ul style="list-style-type: none"> Strong cultural connections, significant stories to tell and share Significant knowledge related to land and wetland management 	<ul style="list-style-type: none"> Traditional Owners are involved in decisions about site management, and active management Recognition and reconciliation between Noongar and non-Noongar people Noongar cultural significance of sites is used in interpretation signage Noongar people are decision makers in how the wetlands are managed
State and local government land management units	<ul style="list-style-type: none"> These groups manage large parts of the wetlands and surrounding lands They have expertise in wetland management 	<ul style="list-style-type: none"> Government management of land is coordinated with management of other parts of the wetlands Consistent branding and signage is used throughout the wetlands Opportunities for collaborative projects are seized
Community groups (advocacy and on-ground management)	<ul style="list-style-type: none"> These groups are often the wetlands' eyes and ears on the ground Instigate and undertake significant on-ground works 	<ul style="list-style-type: none"> Groups are better supported to implement their plans and awareness campaigns Volunteer experiences are enhanced and volunteers feel valued
Community groups (citizen science— e.g. Mandurah Bird Observers)	<ul style="list-style-type: none"> These groups undertake important studies and surveys that monitor the health of the wetlands 	<ul style="list-style-type: none"> Groups are better supported to implement their plans and awareness campaigns Volunteer experiences are enhanced and volunteers feel valued
Researchers and scientists	<ul style="list-style-type: none"> Provide critical information to underpin management, education and awareness-raising 	<ul style="list-style-type: none"> Potential wetland research projects are identified and promoted to research bodies
Artists, including community artists	<ul style="list-style-type: none"> Art can spread the wetlands' message to new audiences who may not otherwise be interested 	<ul style="list-style-type: none"> Existing and new art projects are used to spread the wetlands' conservation and wise use message to other stakeholders and target groups

OBJECTIVES

WHO - STAKEHOLDERS	WHY - COMMUNICATE/ENGAGE	WHAT - EXAMPLES OF DESIRED OUTCOME OF COMMUNICATION OR ENGAGEMENT
Community users of the wetlands		
Recreational fishers and crabbers (including representative bodies such as RecfishWest) Powered boats and skis users	<ul style="list-style-type: none"> • Often come into regular and close contact with the wetlands and wildlife • Have the potential to protect or harm the wetlands through their practices • Can be advocates for sustainable use practices 	<ul style="list-style-type: none"> • Users are given clear and adequate information to ensure they can enjoy the wetlands responsibly. (Note: Information should be in addition to existing fishing regulations and speed limits) • Advocate for appropriate use of sanctuary zones • Recreational fishers become stronger advocates for the wetlands' protection to maintain MSC certification
Non-powered boats (canoes and kayaks)	<ul style="list-style-type: none"> • Come into regular and close contact with the wetlands and wildlife. • Have the potential to protect or harm the wetlands through their practices • Are often after a 'close to nature' experience, and can be advocates for conservation 	<ul style="list-style-type: none"> • Existing canoe trails are more widely promoted and linked to the wetlands' environmental features and wildlife
Other uses of foreshore reserves (e.g. dog walkers, etc.)	<ul style="list-style-type: none"> • Come into regular and close contact with the wetlands and wildlife • Have the potential to protect or harm the wetlands through their practices 	<ul style="list-style-type: none"> • Information and/or signage is provided at key areas to ensure reserve users are aware of their responsibilities to protect wildlife and the environment (keep dogs on a lead, stay to the paths, etc.)
Community – young people and the electorate		
Local schools and tertiary institutions	<ul style="list-style-type: none"> • Educate tomorrow's decision makers • Link curriculum to the wetlands • Foster links between local communities and the wetlands 	<ul style="list-style-type: none"> • Local school teachers are supported to use the wetlands as part of their curriculum • Local schools are encouraged to get involved in local restoration projects or citizen science projects • Tertiary institutions are encouraged to undertake studies in the wetlands
Residents adjacent to the wetlands	<ul style="list-style-type: none"> • Practices and land management directly or indirectly impacts on the wetlands 	<ul style="list-style-type: none"> • Local residents understand the critical actions they can do to protect their local wetlands and bushland • Local residents become stewards for their local reserve, etc
Peel Region event attendees (e.g. Mandurah Crab Fest, Pinjarra Festival, Waroona Agricultural Show, Harvey Harvest Festival)	<ul style="list-style-type: none"> • Significant crowds, including many visitors, attend these events. They provide an opportunity to raise the awareness of people who are more likely to interact with the wetlands and are part of the electorate, or visitors to the area 	<ul style="list-style-type: none"> • Simple messages on the wetlands' importance are made available at key community events • Event organisers promote the wise use message
Media		
	<ul style="list-style-type: none"> • Local and state media influence the community's views of the wetlands through their reporting of events and news • Wetlands have traditionally been regarded as places of pests and disease (e.g. swamps) • There is a great opportunity to sell the wetlands as interesting places where people can fish, crab, learn about Traditional Culture and connect to nature 	<ul style="list-style-type: none"> • Through reporting news and events, media demonstrate that they understand the environmental, economic and social values of the wetlands

ACTIONS





These actions have been developed from the research, literature review, expert panel discussion and interviews conducted for the project. They are summarised in Table 4, where the first organisation mentioned in the 'lead stakeholder' column has 'proposed' responsibility for initiating, leading or convening the action.

Actions to achieve encouraging wise use

Goal 1 Wise use of the wetlands is actively encouraged and supported

Wise use is a concept that is supported through all of the Actions of this Plan, but especially those under Goal 1.

Goal 1 focuses on the commercial sector and the facilities and opportunities that would allow further wise use.

Wise use of wetlands is defined as 'the maintenance of their ecological character, achieved through the implementation of ecosystem approaches, within the context of sustainable development' (Ramsar Convention Secretariat, 2010a).

The concept of wise use of wetlands is relatively well developed in the international literature and under the Ramsar Convention, with examples often being provided from developing nations where the wetland is central to human life and can play a role in poverty alleviation.

In developing nations, wise use can mean managing the wetland so that it sustains people's food supplies and economic independence and the health and diversity of the wetland's ecosystems. In developed nations, such as Australia, the practice of wise use should be no different: we should be managing the wetlands so that they can maintain their economic and social values without diminishing ecosystem health and biodiversity.

In the Peel-Yalgorup System wetlands context, direct use of the wetlands includes:

- on-water tourism, such as cruises, boat hire and house boats
- off-water tourism such as accommodation, reception facilities and restaurants
- commercial fishing and crabbing
- recreational fishing and crabbing

- on-water recreation including boating, jet skis and canoes, kite surfing, waterskiing
- off-water recreation such as bushwalking, cycling, dog walking
- nature study, including birdwatching
- education, including school visits and university study
- cultural use, including by Noongar people
- research

All of these uses should meet the definition of wise use, or be aiming to achieve wise use. Some examples of wise use practices for the above user groups include:

- On-water tourism:
 - Commercial operators and their customers protect the habitat of fauna and flora
 - No-go areas are identified and policed to protect sensitive species such as migratory waterbirds
 - Users of boat hire services are given practical advice of what constitutes 'wise use'
- Commercial fishing and crabbing:
 - Fishery management is based on sustainable yields, seasonal variations and protection of fish stocks
 - Catch limits are established and checked
- Nature study, including birdwatching:
 - Bird hides are located so as to avoid sensitive habitats while maximising opportunities for use and community education
 - Promotional materials direct people to areas which can sustain a reasonable level of use

"From Recfishwest's perspective, MSC accreditation is not about promoting Mandurah's sustainability, it's about protecting Mandurah's sustainability, and protecting the fishery we have here on the doorstep of Mandurah which is so highly valued by the whole community. With this we can ensure we understand the stock status of fish in the estuary, that we have a good habitat and water quality. The certification will really increase the sense of stewardship for not only the fishers who are out there every day, but really everyone in the community."

~ Andrew Rowland,
CEO, Recfishwest ~



Support wise use by the commercial sector

In terms of tourism, the current campaign to promote the Peel Region to tourists and day-visitors, Anytime Adventures, provides a sound launching pad to increase the nature based tourism potential of the wetlands. It promotes the region's water, bush, wildlife and beach experiences including the Estuary, Lake Clifton and waterways. Opportunities exist to incorporate 'wise use' messages into the *Anytime Adventures* campaign. For example, the campaign could include '5 simple steps' to protect the environment for those who look up details of any of the natural attractions that appear on the website. The 5 steps could be tailored to the type of natural attraction, or even the specific natural area. To find out more about Anytime Adventures, go to www.visitpeel.com.au/

Action 1.1.1—establish tourism and recreational carrying capacity—is a direct recommendation of the Peel-Yalgorup System Ramsar Site Management Plan (PHCC 2009). Such a project is critical to wise use of the wetlands. This would contribute useful information to the Strategic Assessment of the Perth and Peel Regions and other future planning initiatives. The project needs to have buy-in from the agencies that would have responsibility to implement its findings and the organisations that represent tourism and recreational interests.

Action 1.1.2 aims to lift the nature based tourism potential of the wetlands to another level. The action is to consider the development and promotion of a number of iconic nature based tourism sites in and around the wetlands. The project should assess current sites and facilities, and seek to integrate these into a larger network of sites that can show off the wetland's most significant environmental and cultural assets. The intent of this action is to design and develop a world-class

network of natural attractions. Inclusion of any site must not increase the overall risk to the protection of its natural assets. Sites could include the Lake Clifton thrombolites, Creery Wetlands area, Len Howard Conservation Park, and Black and Goegrup lakes cultural trail.

Action 1.1.3—promote fisheries' sustainability along with genuine and effective eco-labelling—is an exciting development for Peel-Harvey commercial and recreational fisheries.

The Western Australian Peel-Harvey Estuarine Fishery was awarded certification by the Marine Stewardship Council (MSC) on 23 June 2016. The MSC is an international organisation that certifies and promotes sustainable fisheries. The Peel-Harvey fishery is the first in the world to have both commercial and recreational fisheries certified as sustainable.

"The MSC accreditation has demonstrated that we all need to act as stewards of the estuary and the fishery. The next step is to formally establish the human-carrying capacity of the estuary with respect to all aspects of tourism and recreation. In order to better understand the level of use from recreational fishing a low cost licence that would include shore-based fishers would be a good start. This will also help in the estimates of the total catch for both crab and fin fish species in order to establish future catch sharing arrangements between the commercial and recreational fishers."

~ Damien Bell, President, Mandurah Licensed Fisherman's Association~

This Action can be implemented using the sustainability certification:

- as a 'hook' to engage with suppliers of recreational equipment (fishing tackle and boats) and their customers. The message might be to suppliers and customers 'Your fish, our Estuary'

- to encourage other commercial sectors to see what they can do to make their operations more sustainable and exemplify wise use

Facilities and opportunities for wise use

Actions 1.2.1, 1.2.2 and 1.2.3 are related to the branding and image of the wetlands.

Action 1.2.1—creation of a Peel-Yalgorup brand—aims at creating a 'brand' of commercial and environmental value which conveys the wetlands' international importance and significance. The brand can be of value to commercial operators, such as providers of accommodation, to set their products apart from others in the south west of Australia.

The brand could be linked to the importance of the wetlands to migratory waterbirds or any other feature. To be eligible to use the brand, operators would need to meet a set of criteria which ensures that they practice good stewardship of the wetlands.

The project should be managed by regional bodies with a direct economic and tourism focus (PDC and MAPTO), and involve other regional organisations such as PHCC.

Actions 1.2.2 and 1.2.3 relate to creating a physical or visual sense of arrival into the Peel-Yalgorup System wetlands, and distinguishing the Ramsar Site from other parts of the Peel Region. The Signage Plan (**Action 1.2.2**) could utilise the wetlands' brand created in Action **4.2.1** and address the needs of all major land managers (DPaW, local government, others) as well as setting standards for interpretive signage throughout the wetlands.

Action 1.2.3 is linked to signage but also includes the use of other infrastructure, such as street architecture or road surface effects, at the boundaries of key locations around the wetlands.

Action 1.2.4—wetlands information for tourists—is designed to simply and clearly display the major environmental features and passive recreational facilities around the wetlands. Currently, available maps are focused on showing a cross-section of attractions to tourists, with no focus on eco-experiences. This information should be able to be incorporated into existing maps and web-based information sites.

Action 1.2.5—assess potential for a Wetlands Discovery Centre—is regarded as key to the full development of the Peel-Yalgorup System wetlands as a destination for international and national eco-tourists. Wetland centres are popular through the world and can have a strong commercial and environmental education focus. The Hunter Wetlands Centre, two hours from Sydney, may provide an example of such a centre. A Peel-Yalgorup System Wetlands Discovery Centre may be integrated with a Peel Waterways Institute, or be a stand-alone venture.

Action 1.2.6—feasibility study into key enterprise opportunities—brings together various ideas around the future commercial potential of parts of the wetlands, including:

- identification of areas that may be suitable for top-end nature based tourism locations
- opportunities for outreach programs for overseas volunteers, combined with low-cost accommodation
- identification of sites on the boundaries of the wetlands which may have some commercial potential, such as for accommodation

A key aim of the feasibility study is to assess new enterprises (and potential locations) which can create revenue streams for both the enterprises and for managing the wetlands. Wise use is about social and economic outcomes which at the same time achieve conservation of the wetlands

Actions to achieve better decision making

Goal 2 Politicians and government are provided with the information and support to underpin better-informed decision making for wise use

Ensuring that this Wetlands and People Plan engages political and government stakeholders is a key priority for the community (Thelma Crook, pers. comm.) and one of the most challenging parts of this Plan.

State and federal commitment towards protection of the Peel-Yalgorup System wetlands and their catchment has generally been patchy, and does not match the expectations set by government policy and legislation.



'As one of a number of catchment managers in the region, we are continuously cleaning up the results of bad decisions or inaction by governments.'

~ Participant, Peel-Yalgorup Expert Panel Meeting, 19 November 2014, Mandurah ~

This may change with a renewed focus on the Peel-Yalgorup System as part of the Strategic Assessment of the Perth and Peel Regions. This project commenced in 2011, and released its draft reports in December 2015 for public comment which closed 1 April 2016. The Strategic Assessment of the Perth and Peel Regions has the potential to implement a number of significant measures to restore and protect the wetlands while at the same time facilitating development in parts of the wetlands' catchment.

Apart from direct lobbying, government and politicians are strongly influenced by access to good information and a clear and unified voice from the community. They can also be influenced by advisors and government officers who understand the values, threats and management needs of the wetlands, and can address these issues through their professional roles and responsibilities.

Opportunities and risks of a Ramsar Recognition Campaign

There is some risk that a Ramsar Recognition Campaign (RRC) may not get off the ground due to lack of funding and a reluctance from government to participate. The Water Campaign® and Cities for Climate Protection Campaign® showed that non-government organisations can work constructively with local governments to achieve both organisations' strategic goals.

In the case of a Ramsar Recognition Campaign, the strategic goals are protection of the environment and support for wise use and sustainable development.

Information to politicians and government

Action 2.1.1 is a fact sheet/digital presence designed to provide concise, publicly available information to political and government stakeholders that clearly set out the status of the wetlands and the key government commitments that are yet to be implemented. The action could identify the 'top ten' commitments to protect the Peel-Yalgorup System wetlands. These include:

- gazettal of the Peel Regional Park
- formal inclusion of Black and Goegrup lakes in the Ramsar Site
- legislative and binding protection for the Peel-Yalgorup System wetlands
- coordinated and adequately funded management of the wetlands

This action complements **Action 1.2.4** ('Protecting the Peel-Yalgorup Wetlands' *advocacy program*) but is 'information-focused' rather than 'campaign-focused'. It would be important to implement **Action 3.1.1** before the release of the Strategic Assessment of the Perth and Peel Regions documentation due in late 2015.

These are the stated goals of almost all local and state governments.

Where organisations (government or non-government) differ is in how these goals are achieved, and the resultant on-ground outcome.

From the community's perspective a RRC should ensure that government organisations are aware and understanding of the legislation and policy which applies to protect the wetlands. From government's perspective the RRC can help clarify to staff and the community the ways in which the policy is applied to the wetlands, and possibly identify gaps in legislation and policy that should be addressed.

Action 2.1.2 complements **Action 2.1.1** and is focused on briefing politicians and senior government officers on the condition of the wetlands, including the Estuary.

Developing government's capacity to act

Action 2.2.1—short course for government officers and peak bodies—has been recommended to address the perceived or actual low level of awareness of the wetlands' international status, the associated management issues and the challenge of catchment management. The course should be designed for non-environmental professional officers of government and peak organisations (e.g. planners, engineers) and could be made a part of the Ramsar Recognition Campaign that is recommended in **Action 2.2.2**.

The course could cover:

- Wetland values—environmental, economic and social
- Understanding of the relevant legislation and policy, including Ramsar Convention, EPBC Act
- An introduction to wetland system ecology and catchment management



- Practical sessions to identify how participants' roles have an impact on the wetlands and catchment
- Case studies—good examples and not-so-good examples

As an alternative to the Course, an induction-type module could be prepared for new staff highlighting their agencies' statutory responsibilities in regard to the Peel-Yalgorup System wetlands. Other ideas linked to this action include using champions as guest speakers at the many local and state government conferences attended by officers.

The concept of a Ramsar Recognition Campaign (**Action 2.2.2**) is based on the successful Water Campaign® that was delivered in the Peel-Harvey Catchment to encourage organisations, in a non-threatening way, to become more water efficient. A similar approach applied to wetlands and catchment management could mean that each participating local government and state government agency works through a series of milestones that demonstrate their commitment to protection of the wetlands and sustainable development. Involvement in the Campaign would be voluntary, and each organisation would set its own challenges and implementation actions based around a framework of recommended actions. Development of the campaign may be a high cost exercise, reduced by partnering with one or more other Natural Resource Management organisations that have significant water quality management issues or Ramsar sites with a broad range of values to protect.

Actions to achieve stewardship and advocacy

Goal 3 Increased community sector stewardship and advocacy of the wetlands (active participation in decision making and management)

This goal is directly underpinned by recommendations of the Peel-Yalgorup System Management Plan and the principles of the Ramsar Convention. These encourage the community to be actively involved in decision making and management of the wetlands (Ramsar Convention Secretariat, 2010a).

Participatory management and decision making

Actions 3.1.1, Wetlands Forum, **3.1.2**, Participatory Governance and Management Models Discussion Paper and **3.1.3**, establish Wetlands Collaboration Group, are designed to increase the community's capacity to be informed and involved in the wetlands' management at a high level.

The Biennial Wetlands Forum (**Action 3.1.1**) is an initiative which would bring together government, community and commercial sectors in a semi-formal environment to discuss the wetlands, key management actions, issues and possible collaborative projects. It may also encourage stakeholders' interest and involvement in the Wetlands Collaboration Group (**Action 3.1.3**). The Forum may also be planned to coincide with another community event focused on the wetlands, such as the Wetlands Festival suggested in **Action 4.1.5**.

Actions 3.1.2 (Discussion Paper) and **3.1.3** (Wetlands Collaboration Group) can and should occur simultaneously. Both actions aim to establish a management coordination structure for the wetlands, in which representatives of all major stakeholder groups are involved and consulted in decision-making processes affecting the wetlands.

The Discussion Paper should assess options of governance models that enshrine formal collaboration between government, industry and the community to protect and manage the wetlands for the long-term.

A Discussion Paper is recommended as there are likely to be various opinions and options for how such a governance structure should be formed, how stakeholders are represented, and the powers of such a body. There are currently no examples of governance structures in Western Australia covering large and diverse areas, where a collaborative approach is required to support decision making and management. Traditional government approaches to natural area management are often very fragmented, and this is pronounced in such a large area under multiple ownership, tenure and protection status.

In the Peel-Harvey Catchment, there are various bodies that manage, make decisions affecting and/or provide advice about components of the wetlands, but this is often limited to specific legislative responsibilities, government policy or community organisations' charters. Examples of such bodies include the Peel-Harvey Estuary Management Committee, Peel-Yalgorup Technical Advisory Group (TAG), Peel-Harvey Catchment Council, or agencies such as the Departments of Transport, Fisheries, Water, Planning, Parks and Wildlife and the Local Governments of Harvey, Mandurah, Murray and Waroona.

The new, formal governance model would need to recognise:

- the complexity of tenure and land use of the Peel-Yalgorup System wetlands, including that large parts are included in Regional Open Space in the Peel Regional Scheme, Yalgorup National Park and the proposed Peel Regional Park



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- the public and private uses of the wetlands, including commercial fishing
- the level of stakeholder involvement in decision making for the wetlands that is appropriate, practical, and which honours the spirit of the Ramsar Convention
- any necessary changes to legislation to enable the governance model to be implemented

The Discussion Paper could prove useful in influencing government’s implementation of Strategic Assessment of the Perth and Peel Regions in regard to the protection and management of the Peel-Harvey Estuary and Peel-Yalgorup System wetlands. Consultation with relevant government agencies would be important.

Action 3.1.2 Prepare a discussion paper—is aimed at the Peel Development Commission and Peel-Harvey Catchment Council, and should be supported by the Peel Regional Leaders Forum and/or Peel Chamber of Commerce & Industry.

PHEMC

The Peel-Harvey Estuary Management Committee (PHEMC) was established in 2014 by the Western Australian Government to coordinate governance to oversee management and scientific endeavours within the catchment and estuarine systems (Western Australian Liberal Party, 2013). PHEMC has a particular mandate to bring about better coordination of government decision making relating to the Peel-Harvey Estuary. PHEMC is not designed as a committee with direct representation from the community or industry, and is focused on the Estuary and not all Peel-Yalgorup System wetlands. The Peel-Harvey Catchment Council is a member of the committee.

Action 3.1.3 — formation of a Wetlands & People Collaboration Group—is recommended to provide an informal forum for all stakeholders (the catchment community) to discuss issues of concern related to the wetlands.

Since 2007, the Peel-Harvey Catchment Council has informally played the role of coordinator of some management components for the Peel-Yalgorup System wetlands. For example, the PHCC in 2007 established and continues to convene a Ramsar Technical Advisory Group (TAG) for the wetlands. The initial role of the TAG was to provide technical guidance for the development of the wetlands’ Ecological Character Description (2007) and in turn the Site Management Plan (2009). The TAG continues to bring together 27 stakeholder organisations and has evolved to a collaborative management role where the group shares management and monitoring information, assesses the health of the wetlands against the identified management triggers and Limits of Acceptable Change, and discusses opportunities for collaborative projects. Thus, the TAG became a forum to guide the implementation of the Management Plan and monitoring and evaluation. From December 2013 to 2016, the TAG’s focus was to address the Strategic Assessment of the Perth and Peel Regions. PHCC as the Regional NRM body now facilitates annual meetings of the Ramsar TAG. The 15th meeting of the TAG was held in March 2017.

By way of a suggestion, initial responsibility for convening the Collaboration has been allocated to the PHCC and PDC, but this has not been put to these organisations. In addition, there needs to be discussion of how membership of the Collaboration shall be selected to consider the full catchment community, the Group’s modus-operandi, and ‘charter’.

The Collaboration Group has been envisaged as an informal collective of stakeholders that respect each other’s points of view and value collaborative arrangements. The Collaboration will be as valuable as the consensus that it can build around the wetlands. The Ramsar TAG could discuss the formation of the Wetlands & People Collaboration Group as a potential sub-group of the TAG or the value of a separate group given the more informal focus and potentially much broader membership of the Collaboration Group.

The Collaboration would make a particular effort to involve stakeholders who may not ordinarily be involved such as teachers, schoolchildren or youth. Other key members would include Noongar people, local governments and commercial operators, some of whom are already engaged through the TAG. An effective Wetlands Collaboration Group can provide leadership to government who may also be looking at better or different ways of managing the wetlands in light of the outcomes of Strategic Assessment of the Perth and Peel Regions.

Only one comment was received from stakeholders that do not support a Collaboration group or any new committee, on the basis that sufficient groups and organisations already exist.

‘The community and business sectors are sometimes frustrated that the decisions of individual government agencies or boards often do not adequately recognise or protect the values of the wetlands. This is evident with the recent approval of private jetties over crown property on the Murray River and the proposal to create unrestricted speed areas in Sticks Channel.’

~ Participant, Peel-Yalgorup Expert Panel Meeting, 19 November 2014, Mandurah ~



Support to community stewards, citizen scientists and advocates

Five actions are recommended around the objective of providing support to community stewards, citizen scientists and advocates.

Action 3.2.1—review community support—is directed at the community-based organisations that are involved in managing and advocating for the wetlands. These organisations vary in size and function and are often supported by the PHCC, other NGOs and/or the four local governments in which the wetlands are located. The action involves some level of review of how these groups may be better supported, or work more collaboratively, in the future to continuously improve the quality of volunteer experiences and the capacity of volunteerism on the whole.

Actions 3.2.2 and **3.2.3** relate to citizen science projects where the community gathers data about wildlife and the natural environment and feeds it into a central database for public use. In addition to continuing support for the Shorebirds Monitoring Project, **Action 1.2.3** recommends that a new citizen science program be developed for enthusiasts, students, parents and teachers to increase interest and knowledge of the wetlands. This action is related to **Action 2.1.4** (new educational resources), but is not limited to schools and teachers.

The citizen science program must aim to be appealing to the ‘average citizen’, easily accessed and digitally connected. The program could either be based on one or more common and not-so-common wildlife species using the wetlands, or be a ‘Dolphin Watch’ type initiative. The overall aims of

Action 3.2.3 are to involve and enthuse the community in the local environment and the wetlands. When developing this program, refer to the Wetlands Monitoring and Evaluation Guide (Hale, 2008) which *recommended 12*

programs for participatory ecosystem monitoring.

‘My one overall comment would be to generate pride in the community about our estuary and the dolphins are a great way to get people on board. Hence the sooner we have a Dolphin Watch for the estuary and the rivers the better! I think a campaign around them would have great impact too.’

~ Professor Lyn Beazley, Chief Scientist of Western Australia from 2006 to 2013 ~

Action 3.2.4—‘Protecting the Peel-Yalgorup System wetlands’ advocacy program—is an idea discussed at the Expert Panel meeting, born out of concerns that the long-awaited Peel Regional Park (first proposed by the State Government in 1989) has still not been implemented. It is noted that the Park and associated Peel Harvey Riparian Zone Restoration Project and Access to the Estuary strategy are now being actively developed as a commitment under the Strategic Assessment of the Perth and Peel Regions. Similarly, progressing the proposed extensions to the Peel-Yalgorup System Ramsar Site to include Goegrup and Black Lakes, first submitted in 2009, are also now part of the Strategic Assessment and associated conservation commitments. Ongoing delays to implementing key initiatives such as these lead to frustration within the community.

The advocacy program will ideally be driven by a community-based group, with support from the PHCC and other peak regional groups. The program should be conducted in a way to galvanise wide support across business, Aboriginal, local government and community organisations.

Action 3.2.5—identify future research projects—is recommended to build further scientific and research capacity around the Peel-Yalgorup System wetlands and is a step towards the

future creation of a Peel Waterways Institute and/or Wetlands Discovery Centre. This action can be achieved in a variety of ways, and should include discussions with those already conducting research in the Peel-Harvey Catchment. The PHCC Science Advisor may help undertake this action, subject to resources.

Peel Regional Park

The proposed Peel Regional Park comprises the Peel Inlet, Harvey Estuary and the lower parts of the associated rivers (Murray, Serpentine and Harvey) together with 6375 hectares of land surrounding these waterways. It has the potential to be a great community asset on par with Kings Park and Bold Park. The key obstacle to creation of the Park in the past was the inability for the Establishment Plan to be gazetted. Subsequent challenges will be finding sufficient funds to manage the lands and wetlands within the Park.

Actions to achieve social marketing and environmental education

Goal 4 Increase the general community’s capacity to protect the wetlands through social marketing, environmental education and Cultural events.

Objectives and actions under Goal 4 are designed to change people’s attitudes and perception of the wetlands, change their behaviours, and hopefully convince people to make the wetlands a higher political priority.



General public awareness and environmental education

Action 4.1.1 is the development of a new social marketing behaviour change campaign revolving around the wetlands. The aim of the campaign is to change social norms in the community that will lead to an improvement in the health of the wetlands.

‘People don’t act because they ‘know more’—knowledge and awareness on their own won’t create a shift.’

~ Participant, Peel-Yalgorup Expert Panel Meeting, 19 November 2014, Mandurah ~

Social norms are the behaviours or cues within a society or group, or the informal understandings that govern an individual’s behaviour in society (Scott & Marshall, 2009). For example, putting rubbish in a bin may be a social norm in some societies, and not in others.

In addition to conventional marketing or public awareness campaign approaches, there is a growing recognition of the use of social marketing approaches including community-based social marketing to change social norms (e.g. McKenzie-Mohr, 2011). Social marketing ‘uses the benefits of doing social good to secure and maintain customer engagement’ (Wikipedia, 2014) and integrates research, best practice, theory, audience and partnership insight, to inform the delivery of social change programs that are effective, equitable and sustainable (International Social Marketing Association et al., 2013). In some regards, the recent ‘Home River Ocean Campaign’ run across communities in the south west of Australia is an example of a social marketing campaign, designed to get homeowners to fertilise gardens in more eco-sensitive ways.

In the Peel-Yalgorup System wetlands’ context, the social marketing campaign

(**Action 4.1.1**) could have a number of components to target behaviours in different community audiences (e.g. homeowners, the boating community, dog owners, mums and dads with small children, retirees). One of the themes that the campaign could use is ‘Love Peel, love our wetlands’. This theme is suggested as it became evident at the Expert Panel that many people decided to move to the region because of the fantastic natural environment—waterways, beaches and bushland. It also has the potential to unify the local and regional communities.

Developing strategies for a social marketing campaign (McKenzie-Mohr, 2011)

Commitment—from good intention to action (to influence an individual’s self-perception as a good community citizen)

Social diffusion—the neighbour effect—seeing people in your social network doing something different

Social norms—building community support

Prompts—reminding people of positive action. This also adds value to the previous, in reiterating positive changes in social norms

Incentives—enhancing motivation to act

Convenience—making it easy to act

The campaign should draw from the theory and practice of community-based social marketing, such as McKenzie-Mohr (2011). It should be professionally designed and delivered by a marketing or public relations firm and the project should be led by local governments (Peel Regional Leaders Forum) with the support of other peak regional organisations.

Actions 4.1.2, 4.1.3 and **4.1.4** relate to environmental education of schoolchildren and the opportunities this creates for schools, teachers and

the wetlands’ managers. There are a number of educational resources available specifically on the Peel-Yalgorup System wetlands and these could be better promoted. Two examples of existing educational resource kits are:

- *Mandurah Sapphire: life on the estuary fringe, a resource for teachers* (Bamford et al., 2004)
- *Mandurah and its unique marine world—Education cruise 1 workbook* (Mandurah Cruises, 2014)

Actions 4.1.2 and **4.1.3** are to identify and promote these and other educational resources. Key to this will be establishing relationships with local teachers who have a passion and desire to use the wetlands in their teaching. This action includes a survey of local schools to find out what they use and what knowledge they have of existing educational resources.

The *Mandurah and its unique marine world* resources are commercially owned by Mandurah Cruises, and discussions with this firm will be required before any promotion is undertaken.

Action 4.1.4 is to assess the specific need and potential to create new educational resources focused on the wetlands. This action includes canvassing teachers within the Peel Region to establish their specific needs for new materials, and if appropriate gain their support for such an initiative.

Given that the wetlands cover a wide spectrum of issues, including environment and society, there may be potential to develop materials to meet needs under a number of curricula, including Science and Social Science curricula. For example, a key focus of the National Science Curriculum is ‘sustainability’, a concept which sits comfortably with the Ramsar concept of ‘wise use of wetlands’.



There are both opportunities and risks related to **Actions 4.1.2 to 4.1.4**. State government resources for the development of curriculum materials and to support science teacher networks have been significantly reduced, and so there is likely to be a need to create such materials, but a challenge to find funding for such development. The private sector may be open to funding such an initiative, and has done so in the past.

Action 4.1.5—Festival to celebrate the wetlands—is a direct suggestion from the Expert Panel and is supported by the success of local community/ arts events that have focused on the wetlands in recent years. For example, in 2012 PHCC partnered with the City of Mandurah in their successful ‘Breath of Life’ community arts project as part of the annual Stretch Festival, and in 2014, David Rennie and Friends, supported by the PHCC, held an evening of song, storytelling, poetry and photography revolving around the Peel-Yalgorup System Ramsar site. Using cultural and artistic events to impart an environmental message can be effective if it is well planned, targeted and executed. There is the potential for the City of Mandurah and Peel-Harvey Catchment Council to partner to implement this action.

Telling stories, sharing culture, enriching culture

Actions 4.2.1, 4.2.2 and **4.2.3** relate to the involvement of Noongar people and the telling of stories from both Noongar and European backgrounds.

The production of an Interpretative Manual (**Action 4.2.1**) and cross-cultural training/exchanges (**Action 4.2.2**) are designed to increase wadjelas’ (non-Noongars’) understanding of local Noongar culture, beliefs, values and experiences. Activities under these actions need to be respectful of cultural sensitivities and open to the opportunities that may be created.

Action 4.2.3 supports the Goegrup and Black Lake Action Plan and is a direct recommendation of that plan (Ecoscape & O’Connor, 2006) and Phase 5 of the Peel Cultural Landscape Project (Cuthbert, Cuthbert & Dortch, 2007). It should be a priority for implementation.

Documenting and promoting the stories of people who have a strong connection to the wetlands and are regarded as community champions is **Action 4.2.4**. These stories may provide content for the Social Marketing Campaign (**Action 2.1.1**), interpretative signage and other actions. Storytelling is recognised as an effective means of imparting important messages as most people love a good story. There is also a growing recognition of the importance of storytelling in education (e.g. UNESCO, 2010; Atherton, 2009).

Action 4.2.5—supporting Noongar people to work on country—is a practical measure which is gaining momentum around Australia and Western Australia, and is supported by Ramsar’s objectives to involve Noongar people in management of their traditional lands.

Recognising wise use

Action 4.3.1—Wise Use Awards—is a suggestion to recognise the efforts of organisations and individuals that have demonstrated a commitment to wise use of the wetlands.

The wise use awards could be designed in conjunction with the Ramsar Secretariat, and be delivered as a stand-alone awards program or be included as new categories in existing awards programs. (e.g. local government awards, UDIA awards, etc.)

Table 4: Proposed actions of the Peel-Yalgorup System Wetlands and People Plan

The first organisation mentioned in the 'lead stakeholder' column has 'proposed' responsibility for initiating, leading or convening the action.

Wise use of the wetlands is actively encouraged, promoted and supported **GOAL 1**

ACTION	LEAD STAKEHOLDERS (EST. COST)	STAKEHOLDERS/TARGET GROUP	PROJECT AIM AND NOTES
Objective 1.1			
Best-Practice Wise Use and Advocacy by the Commercial Sector is Identified, Supported and Promoted			
1.1.1 Establish tourism and recreational carrying capacity of the Peel Waterways	PDC, MAPTO, CoM, SoM, Tourism WA (via MAPTO), DoT, DPaW, DoW \$50 000	Government and politicians Commercial interests	<p>Note:</p> <ul style="list-style-type: none"> Early in the project development phase, determine what have been/are the barriers to this action, given that it has been proposed a number of times before. Ensure barriers are no longer relevant or are addressed This is an action of the Peel-Yalgorup System Ramsar Site Management Plan Important to get buy-in from the agencies that would have responsibility to implement findings. Could be useful to Strategic Assessment of the Perth and Peel Regions team if timing allows
1.1.2 Consider the development and promotion of a number of iconic nature based tourism sites in and around the wetlands to create a nature based tourism wetlands network	MAPTO, Peel CCI, PDC, LGs, commercial fishers, DoF, WAFIC, DPaW \$30 000 (initial investigation and proposals) Cost of site development not included.	Commercial interests	<p>Aim:</p> <ul style="list-style-type: none"> Develop a number of eco-sites (non-fee paying) to boost the credibility of the wetlands as an internationally significant wetlands site <p>Note:</p> <ul style="list-style-type: none"> Eco-sites are considered to be areas where the predominant feature is the natural area and natural features; the built landscape is secondary and sympathetic to the natural area The project may include: <ul style="list-style-type: none"> Identification of key sites (about 6 – 8 sites) – e.g. thrombolites, bird hide, river delta, etc. Some of the sites may already be existing (Creery Wetlands Boardwalk) Determine desired visitor experience Develop projects to implement works The sites may have a key feature or provide improved access to parts of the wetlands (e.g. bird hide, interpretative walk, and boardwalk) Consider including 'donation boxes' to encourage contributions for site upkeep
1.1.3 Pursue opportunities to promote the Marine Stewardship Council's certification of the commercial and recreational fisheries, including through suppliers of recreational equipment (fishing and boating goods) and other commercial sectors	PHCC, WA Fishing Industry Council, DoF, Recfish West Cost: Nil	All stakeholders	<p>Aim:</p> <ul style="list-style-type: none"> All fishers recognise they have a role as stewards to sustain the fishery Demonstrate to all stakeholders, especially commercial operators, that sustainable practices can facilitate business and development. <p>Note:</p> <ul style="list-style-type: none"> Marine Stewardship Council Certification of the Peel Harvey Estuarine Fishery: Recreational and Commercial blue swimmer crab and Commercial sea mullet awarded 23 June 2016 Possibly engage with sellers of fishing and boating goods to get them to sell the 'look after the estuary and it will continue to provide us with fish and clean water' concept Investigate opportunities to recognise the Smooth Marron Project: Marron...more than just a meal

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ACTION	LEAD STAKEHOLDERS (EST. COST)	STAKEHOLDERS/TARGET GROUP	PROJECT AIM AND NOTES
Objective 1.2 Commercial and non-commercial opportunities are created to allow wise use of the Ramsar Site's attractions			
1.2.1 Consider creating a 'Peel-Yalgorup' brand that is of both commercial and environmental value	PDC, MAPTO \$10 000	Commercial interests Custodians, managers and advocates	<p>Aim:</p> <ul style="list-style-type: none"> Increase recognition of the wetlands and their international significance status <p>Note:</p> <ul style="list-style-type: none"> The brand can be used by commercial operators who conform to a 'Ramsar' standard or operation or development. The brand needs to be something that people can relate to and which talks of opportunity Possibly link branding to other initiatives (such as MSC certification, wildlife species such as smooth marron)
1.2.2 Develop and implement a Signage Plan for the wetlands, developed in partnership with the stakeholders that already have widespread signage across the Ramsar Site	MAPTO, DPaW, DoF, DoT, LGs, PHCC \$20 000	Custodians, managers and advocates	<p>Aim:</p> <ul style="list-style-type: none"> Increase on-ground recognition and awareness of the wetlands and their international significance <p>Note:</p> <ul style="list-style-type: none"> This action is strongly linked to Action 1.2.1 Ensure the Signage styles/logo Plan can be used by anyone responsibly marketing the Ramsar Site Incorporate names and descriptions in local Noongar language Reinforce signage messaging as new signage is commissioned, re-focusing onto pre-established Ramsar linkages or messages Get buy-in from LGs, DoT and DoF, DoW Link to applications on digital devices and websites
1.2.3 Introduce distinctive and innovative concepts at the boundaries of the wetlands or Parks (e.g. change in speed limit, colour of road, street architecture)	PDC, MAPTO \$10 000 (design and plan concepts) Implementation not budgeted	Commercial interests Custodians, managers and advocates	<p>Aim:</p> <ul style="list-style-type: none"> Increase 'status' of the wetlands and a sense of arrival into the Ramsar Wetlands
1.2.4 Incorporate wetlands information into existing tourism maps, information and publications; or Publish a tourist-friendly map of the wetlands (paper and digital). Show where public facilities are available and link them to environmental attractions	MAPTO and PHCC \$15 000	Community—site users	<p>Aim:</p> <ul style="list-style-type: none"> Provide tourists with easy access to information about the wetlands <p>Note:</p> <ul style="list-style-type: none"> Possibly undertake some primary research into visitors to establish what they know of the wetlands, how they discovered this information, if it meets their needs or what else they wish to know The information or mappable-information may be able to be integrated with other existing materials/resources used by tourists The map could encourage bush walking, canoeing, cycling and nature play activities Strong links to public health and Nature Play Separate dog exercise areas from birds and birdwatching areas





1.2.5 Assess potential to integrate a 'Wetlands Discovery' area into the 'Peel Waterways Institute'	PDC, MAPTO, PHCC, Peel CCI \$25 000 Stage 1 feasibility study	Commercial interests Custodians, managers and advocates	Aim: • Create a focal point for wetland education that has a commercial basis Note: • A Wetlands Discovery Centre could be modelled on centres such as the Hunter Wetlands Centre ('Conserve Discover Educate'), which includes commercial facilities (Reception centre, corporate training facilities and café) • International efforts (under the auspices of the Ramsar Convention) continually promote the use of wetland education centres as a key CEPA resource
1.2.6 Carry out a feasibility study into key enterprise opportunities	PDC, MAPTO, PHCC, Peel CCI \$25 000 Stage 1 feasibility study and preliminary site assessments	Government and politicians, Commercial interests Custodians, managers and advocates	Aim: • Encourage new enterprises which can create 'wise use' revenue streams for both the enterprises and for managing the wetlands • Key opportunities include: - identification of top-end nature based tourism in prime locations for future use - outreach programs for overseas volunteers, combined with low-cost (back-backer) accommodation - opportunities for businesses on the boundaries of the wetlands

Politicians and government are provided with the information and support to underpin better-informed decision making for wise use

GOAL 2

ACTION	LEAD STAKEHOLDERS (EST. COST)	STAKEHOLDERS/TARGET GROUP	PROJECT AIM AND NOTES
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Objective 2.1 Local, state and federal politicians and government decision makers are supported to understand the Peel-Yalgorup System's values, threats, protection and management needs (Education -> better decisions)

2.1.1 Produce a fact sheet/digital presence on the status of the Peel-Yalgorup Ramsar Site. (Status' indicates the level of protection to the wetlands, related issues of land tenure and reserve purpose)	PHCC, PDC \$7500	Government and politicians	Aim: • Increase awareness of the formal/informal protection status of the Ramsar Site. (e.g. Peel Regional Park proposal, Yalgorup NP, Black and Goegrup) Note: • The Status Report could include a video piece/presentation by a local champion • Showcase values in different parts of the Site (all 4 Ramsar Site subsystems) • Possibly include 'Achievements to date' and 'Next major steps' information • The content could also be formatted as a 'Fact sheet' • Ensure it highlights all the values of the wetlands which matter to politicians, business sector and investors • Costs include title searches, mapping • Consider economic value of ecosystem services
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ACTION	LEAD STAKEHOLDERS (EST. COST)	STAKEHOLDERS/TARGET GROUP	PROJECT AIM AND NOTES
2.1.2 Produce a fact sheet/digital presence summarising the condition of the wetland's ecological character and values	PHCC, PDC \$7500	Government and politicians	<p>Aim:</p> <ul style="list-style-type: none"> Increase awareness of government and politicians of the components of the wetlands that are in good condition and those that need management attention Include an overview of the reasons behind changes in the wetlands' condition <p>Note:</p> <ul style="list-style-type: none"> This action does not replace implementation of the Wetlands' Management Plan recommendations for monitoring and evaluation or detailed study to assess possible changes to the wetland's ecological character Showcase values in different parts of the Site (all 4 Ramsar Site subsystems) Possibly include 'Achievements to date' and 'Next major steps' information Ensure it highlights all the values of the wetlands which matter to politicians, business sector and investors

Objective 2.2

Develop government's capacity to engage in collaborative management and protection of the wetlands

2.2.1 Consider development of a short training program for government officers related to the wetlands and catchment management	PHCC \$20,000	Government and politicians	<p>Aim:</p> <ul style="list-style-type: none"> Help participants develop the top 10 practical measures which they can use in their jobs or positions <p>Note:</p> <ul style="list-style-type: none"> This action can be the precursor to the 'Ramsar Recognition Campaign' below
2.2.2 Consider development of a 'Ramsar Recognition Campaign' style program for local and state government to assist them implement actions towards protection of the wetlands and/or implementing the wetlands Management Plan	PHCC \$50,000 to develop and pilot project, shared across NRM organisations	Government and politicians	<p>Aim:</p> <ul style="list-style-type: none"> Integrate Ramsar Wetland considerations into organisational culture <p>Note:</p> <ul style="list-style-type: none"> The program could have the following steps: <ul style="list-style-type: none"> identify the relevant actions for each State Government agency and Local Government (DoP, DoT, DoF, DoW, DPaW, CoM, SoM, SoH, SoW). (Done in conjunction with the agencies and LGs) identify the top five actions and get commitment to implement plan, implement, celebrate, and review next steps This Action has links to Actions 3.1, 3.2 and 3.3. of the Peel-Yalgorup System Management Plan

Increased community sector stewardship and advocacy of the wetlands (active participation in decision making and management)

GOAL 3

ACTION	LEAD STAKEHOLDERS (EST. COST)	STAKEHOLDERS/TARGET GROUP	PROJECT AIM AND NOTES
Objective 3.1			

The community, government and commercial sectors are able to participate in the common development, implementation and evaluation of strategies and actions for the wise use of the Peel-Yalgorup System. In this Plan, a 'Collaboration' is proposed to drive actions under this and other objectives





ACTIONS

<p>3.1.1 Hold a biennial Peel-Yalgorup System Wetlands Forum</p>	<p>PHCC, DPaW \$10,000 every two years</p>	<p>All stakeholders</p>	<p>Aim:</p> <ul style="list-style-type: none"> To communicate and raise awareness of wetland management issues amongst all stakeholders To report to the community on key wetland initiatives and the condition of the wetlands <p>Note:</p> <ul style="list-style-type: none"> A Forum could be held in tandem with another community event focused on the Peel-Yalgorup System wetlands, such as the Festival proposed in Action 4.1.5 Forum is to be inclusive and ensure government, community and commercial stakeholders are valued Note significant dates (Crab Fest—Mar, Stretch Festival—May, Pinjarra Festival—Jun, World Wetlands Day—2 Feb)
<p>3.1.2 Prepare a Discussion Paper for Government: Models for Governance, Participatory Management and Decision Making for the Peel-Yalgorup System wetlands</p>	<p>PDC, PHCC \$10,000</p>	<p>Government and politicians</p>	<p>Aim:</p> <ul style="list-style-type: none"> To promote to government a new way of managing a large and diverse area of land and water in partnership with commercial and community sectors <p>Note:</p> <ul style="list-style-type: none"> The Discussion Paper should be prepared in consultation with the teams undertaking the Strategic Assessment of the Perth and Peel Regions' process The models should be compatible with the principles of collaborative management, and any legislative arrangements to protect the Peel Regional Park (and all of the Peel-Yalgorup System wetlands) In particular, the models should clarify: <ul style="list-style-type: none"> how Traditional Owners, Local Governments, Ramsar TAG, FoR Peel, PPG, FRAGYLE, commercial and community interests will be represented in the structure how existing statutory processes (e.g. development, fisheries, boating) will fit into the new structure
<p>3.1.3 Establish a Peel-Yalgorup System Collaboration Group</p>	<p>PHCC, PHEMC \$20,000 pa</p>	<p>All stakeholders</p>	<p>Aim:</p> <ul style="list-style-type: none"> An informal forum of all stakeholders from the catchment community to discuss issues of concern related to the wetlands To encourage collaborative projects To advocate for the wetlands <p>Note:</p> <ul style="list-style-type: none"> The PYS Ramsar TAG meets regularly to bring together stakeholders to discuss and resolve management issues and determine if the Peel-Yalgorup System is being managed within the Limits of Acceptable Change (LAC) The Collaboration should include stakeholder representatives from government, community and industry Indicatively, three meetings may be convened each year, to encourage regular interactions and communication across Collaboration members The Collaboration Group should be established under an existing regional-scale organisation that can bring together government, community and commercial interests (e.g. PDC, PHCC or RDA Peel) The Collaboration Group should provide its advice to PHEMC (or similar), regional organisations and the general public Members of the group should be selected based on expertise, demonstrated commitment to wise use of natural resources, and an ability to consider the needs of a diversity of stakeholders

ACTIONS

ACTION	LEAD STAKEHOLDERS (EST. COST)	STAKEHOLDERS/TARGET GROUP	PROJECT AIM AND NOTES
Objective 3.2	Community stakeholders are engaged and supported in active environmental stewardship of the Ramsar System		
3.2.1 Review and evaluate existing support to community groups and local governments managing the wetlands with a view to continuously improve the quality of volunteer experiences and on-ground outcomes	PHCC, SoM and CoM, SoW and SoH \$5000	Custodians, managers and advocates	<p>Aim:</p> <ul style="list-style-type: none"> Identify how existing resources can be better allocated to continuously improve volunteer experiences and on-ground outcomes Identify an effective and efficient way to manage offers from volunteers <p>Note:</p> <ul style="list-style-type: none"> This has links to Action 9.4 of the Peel-Yalgorup System Management Plan. Provide capacity building support to local volunteer community groups Project may be carried out with in-kind or direct support of the CoM, SoM and PHCC
3.2.2 Continue support of community bird monitoring programs. Use results to feed into assessing the Peel-Yalgorup System against management triggers and LACs; managing the System; and to produce information materials	PHCC, Birdlife \$15 000	Custodians, managers and advocates	<p>Aim:</p> <ul style="list-style-type: none"> Continue this very important program given it provides important continuous record of waterbird diversity and abundance <p>Note:</p> <ul style="list-style-type: none"> This has links to Action 9.4 of the Peel-Yalgorup System Management Plan: Provide capacity building support to local volunteer community groups It enables delivery of waterbird monitoring programs ABC &D of the Peel-Yalgorup System Ramsar Site Monitoring Guide (Hale, 2008)
3.2.3 Establish a new citizen science program for the wetlands, designed to attract students, parents and teachers to learn about the wetlands or consider adapting the successful Dolphin Watch program to the wetlands	PHCC, in partnership with DPaW and other non-government organisations Cost in order of \$50 000 to \$100 000 to establish and pilot project	Custodians, managers and advocates	<p>Aim:</p> <ul style="list-style-type: none"> Use citizen science approach to engage community and gather important data for management Get more people involved in observing and conserving the wetlands <p>Note:</p> <ul style="list-style-type: none"> Dolphin Watch is a citizen science program in the Swan Canning Estuary Refer to the Wetlands Monitoring and Evaluation Guide; it recommended 12 programs for participatory ecosystem monitoring Should be supported by peer-reviewed scientific studies/literature/journal articles One suggestion is to select a number of species that provide good indicators of wetlands health (e.g. cobbler, bream, bandicoots and rakali or native water rat)
3.2.4 Promote the concept of a community advocacy program around the theme of 'Protecting the Peel-Yalgorup System wetlands'	Community-based group, PHCC \$10 000	Community-broad electorate	<p>Aim:</p> <ul style="list-style-type: none"> Raise community awareness of the proposed Peel Regional Park and the Black and Goegrup lakes extensions to the Peel-Yalgorup System Ramsar Site Raise community awareness of the proposed conservation commitments within the Strategic Assessment of the Perth and Peel Regions <p>Note:</p> <ul style="list-style-type: none"> Use traditional and social media Could use community champions to exert pressure on politicians and decision makers. (If Jenny Champion thinks it's worth protecting, then so should I)





<p>3.2.5 Develop a list of research projects which will increase understanding of the wetlands and management solutions</p>	<p>PHCC with DoW, Universities, etc.</p>	<p>Custodians, managers and advocates</p>	<p>Aim:</p> <ul style="list-style-type: none"> Increase the amount, and coordination, of practical and theoretical research focused on the wetlands <p>Note:</p> <ul style="list-style-type: none"> This action complements recommendations of the Science Strategy for the Peel-Harvey Estuary (Rogers, Hall & Valesini, 2010) Action may already form part of Science Advisor's role Look at engaging in the world renowned Earthwatch program with Alcoa to identify a key monitoring program that will deliver long-term scientific monitoring of the wetlands
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Increase the general community's capacity to protect the wetlands through social marketing, environmental education and Cultural events

GOAL 4

ACTION	LEAD STAKEHOLDERS (EST. COST)	STAKEHOLDERS/TARGET GROUP	PROJECT AIM AND NOTES
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Objective 4.1 The local and regional communities, including specific community sectors (e.g. schools) are provided opportunities and information to increase their understanding of the Site's values

<p>4.1.1 Deliver an enviro-social marketing campaign/behaviour change campaign on the theme of 'Love Peel, love our wetlands' or similar ideas.</p>	<p>CoM, SoM, PHCC,MAPTO and PDC \$50 000 over 3 years (development, delivery and review)</p>	<p>Community - broad electorate.</p>	<p>Aim:</p> <ul style="list-style-type: none"> Raise levels of awareness in the community of the wetlands' values, protection needs and simple things they can do to protect wetlands <p>Note:</p> <ul style="list-style-type: none"> Target audience is the local public and electorate 'Love Peel, love our wetlands' is a working title only Link 'pride in where you live' to the 'state of the wetlands and waterways' Use social marketing theory and practice to change social norms Some of the messages may be: <ul style="list-style-type: none"> Put your litter in a bin <i>Pick up paper to save a Pelican!</i> Responsible jet skiing and boating Keep waterbirds safe—keep your pets on a lead Responsible fishing Watch out for breeding shorebirds Nutrient-wise waterwise gardening Could incorporate stories by community champions This campaign could complement Action 9.3 of the Peel-Yalgorup System Management Plan: 'Prepare a Report Card to the Local Community...'
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ACTIONS

ACTION	LEAD STAKEHOLDERS (EST. COST)	STAKEHOLDERS/TARGET GROUP	PROJECT AIM AND NOTES
<p>4.1.2 Review, list and publicise the educational resources already available on the wetlands. Consult with local schools.</p> <p>Place links or resources on the PHCC website</p>	<p>PHCC \$2000</p>	<p>Custodians, managers and advocates</p> <p>Community-broad electorate (teachers and parents)</p>	<p>Aim:</p> <ul style="list-style-type: none"> Survey local schools to find out what they use and what knowledge they have of existing educational resources Raise awareness and increase usage of existing educational materials Build trust and connections with local teachers and schools <p>Note:</p> <ul style="list-style-type: none"> This project would be suited to a short-term work experience project Some excellent environmental education resources already exist: <ul style="list-style-type: none"> Mandurah Samphire: life on the estuary fringe Mandurah Cruises' educational resources
<p>4.1.3 Promote availability of educational resources amongst local regional schools and teachers with the aim of increasing usage</p>	<p>PHCC and DoE \$5000</p>	<p>As above</p>	<p>Aim:</p> <ul style="list-style-type: none"> Raise awareness and increase usage of existing educational materials Build trust and connections with local teachers and schools <p>Note:</p> <ul style="list-style-type: none"> This project would be suited to a short-term work experience project Some excellent environmental education resources already exist: <ul style="list-style-type: none"> Mandurah Samphire: life on the estuary fringe Mandurah Cruises' educational resources
<p>4.1.4 Investigate potential to create a new educational resource aimed at raising awareness of key values and issues</p>	<p>PHCC \$5000 (initial investigation) \$30,000 (preparation of education materials)</p>	<p>Custodians, managers and advocates</p> <p>Community-broad electorate (teachers and parents)</p>	<p>Aim:</p> <ul style="list-style-type: none"> Create resources which directly meet the requirements of the Australian Curriculum. The Science curriculum has 'sustainability' as a key focus. The concept of 'wise use of wetlands' is a practical application of sustainability Build a comprehensive set of educational resources for the wetlands, across age groups—if needed, or consolidate existing and new resources into a comprehensive set <p>Note:</p> <ul style="list-style-type: none"> New materials should be created for use on a tablet, as well as hard copy versions. APPs are the new slate! This may be overlap/link to a new citizen science program (Action 3.2.3) Consider holding competitions for school children, linked to the materials
<p>4.1.5 Assess feasibility of holding an annual/biennial arts-based Wetlands Festival to celebrate the wetlands</p>	<p>CoM, SoM, local community \$5000 (Festival costs not budgeted)</p>	<p>Community-broad electorate</p>	<p>Aim:</p> <ul style="list-style-type: none"> Use art and entertainment to raise community awareness of the wetlands' values and plight <p>Note</p> <ul style="list-style-type: none"> Use learnings from Lake Clifton Recovery Project Evaluation (PHCC, 2015, in prep) and the City of Mandurah Stretch Festival (Breath of Life) Consider the advantages and disadvantages of holding a Wetlands Festival as part of the Stretch Arts Festival or similar Consider holding an awards ceremony linked to the festival to recognise Ramsar orientated action



Objective 4.2 Opportunities are created to share stories of the wetlands across all sectors (e.g. champions, Noongar stories, European history)

<p>4.2.1 Work with Noongar custodians to develop an Interpretative Manual (or similar), highlighting the cultural significance of the wetlands</p>	<p>SWALSC, PHCC \$40 000</p>	<p>Custodians, managers and advocates</p>	<p>Aim:</p> <ul style="list-style-type: none"> Encourage the use of Noongar language, cultural values and stories in interpretative materials, signage and educational resources <p>Note:</p> <ul style="list-style-type: none"> This action is not yet confirmed with Noongar people The City of Mandurah may be commencing a similar project This Action has links to 2.2 of the Peel-Yalgorup System Management Plan: 'Seek funding for the production of a management plan for Noongar and European Heritage in the Peel region...')
<p>4.2.2 Create opportunities for cross-cultural exchange between Noongar and non-Noongar people</p>	<p>Not assigned</p>	<p>Noongar people, DPaW, PHCC, LGS</p>	<p>Aim</p> <ul style="list-style-type: none"> Noongar and non-Noongar people have a better understanding of their culture, beliefs, values and experiences <p>Note:</p> <ul style="list-style-type: none"> Cross-cultural exchange could include short or long sessions, field trips, participation in cultural activities
<p>4.2.3 Support Noongar people to progress and develop cultural trails as proposed in reports such as Goegrup and Black Lake Action Plan and Phase 5 of the Peel Cultural Landscape Project</p>	<p>PDC, MAPTO, PHCC, DPaW \$100 000 initial project start-up funds; additional funds required for trail establishment</p>	<p>Custodians, managers and advocates</p>	<p>Aim:</p> <ul style="list-style-type: none"> Develop self-guided trails enhanced by interpretative signage Cultural trails may have recreational, touristic and awareness-raising values <p>Note:</p> <ul style="list-style-type: none"> Early in the project development phase, determine what have been/are the barriers to this action, given that it was first proposed nearly 10 years ago. Ensure barriers are no longer relevant or are addressed Many of the recommendations of the Goegrup and Black Lake Action Plan help with interpretation, education and capacity development Goegrup and Black Lake Action Plan (Ecoscape & O'Connor, 2006) and Phase 5 of the Peel Cultural Landscape Project (Cuthbert, Cuthbert & Dortch, 2007)
<p>4.2.4 Document and promote the stories of people who were or are local champions for the wetlands (all cultures and social backgrounds)</p>	<p>CoM, SoM, PHCC \$20 000</p>	<p>Community-broad electorate</p>	<p>Aim:</p> <ul style="list-style-type: none"> Use of champions is one way of changing behaviours and is also of direct cultural benefit <p>Note:</p> <ul style="list-style-type: none"> The stories of local champions can be used as part of social marketing and environmental education programs Recollections could include: <ul style="list-style-type: none"> history of the wetlands lime kilns at lake Clifton Sticks Channel fish canning plant Noongar cultural events/stories

ACTIONS

ACTION	LEAD STAKEHOLDERS (EST. COST)	STAKEHOLDERS/TARGET GROUP	PROJECT AIM AND NOTES
4.2.5 Create or support opportunities for Noongar people to work on country in the wetlands	Not assigned	Noongar people, DPaW, PHCC, LGs	<p>Aim:</p> <ul style="list-style-type: none"> To have more Noongar people working on natural area management (e.g. weed management, planting, rubbish picks) <p>Note:</p> <ul style="list-style-type: none"> The project could be part of other initiatives in the Peel-Harvey Catchment
Objective 4.3			
Organisations and individuals in all sectors are given recognition for their efforts to wisely use the wetlands			
4.3.1 Consider holding a Wise Use Awards, or create an award under an existing awards program	Not assigned	All stakeholder categories, but especially private sector	<p>Aim:</p> <ul style="list-style-type: none"> Give recognition to businesses, community members and government who have demonstrated a strong commitment to wise use of the wetlands <p>Note:</p> <ul style="list-style-type: none"> Everyone likes receiving recognition and awards create participation, striving, goodwill for the donor, and publicity for the cause

APPENDICES





Peel-Yalgorup Ramsar Criteria Scorecard

For a wetland to be accepted on the Ramsar List, the features of a wetland ecosystem must satisfy at least one of the Ramsar Convention's nine criteria.

The Peel-Yalgorup System Ramsar Site meets seven of the nine criteria for listing as Ramsar Wetland (Table 5 - highlighted in orange). Hale and Butcher's 2007 ecological character description assessment of the Peel-Yalgorup System determined that the System meets six of the nine Criteria for Listing Internationally Important Wetlands (see Draft RIS, in Hale & Butcher, 2007).

Since the preparation of the Ecological Character Description, the wetlands have also met Ramsar Criteria 2: A wetland should be considered internationally important if it supports vulnerable, endangered, or critically endangered species or threatened ecological communities.

This is due to:

- the IUCN red list has upgraded the conservation status of the Fairy Tern (*Sterna nereis*) to vulnerable. This change highlights the impact of growing threats to the Fairy Tern population and emphasises the need to protect high conservation value habitats. The Peel-Yalgorup System provides important habitat for the Fairy Tern, having more than 1% of the global population recorded at the site
- the listing of the thrombolite (microbialite) community of a coastal brackish lake (Lake Clifton) as critically endangered under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)

Table 5: Ramsar criteria for identifying internationally important wetlands

<p>CRITERION 1: A wetland should be considered internationally important if it contains a representative, rare, or unique example of a natural or near-natural wetland type found within the appropriate biogeographic region.</p>	<p>The System includes the largest and most diverse estuarine complex in south-western Australia.</p> <p>The coastal saline lakes and the freshwater marshes included in the System are particularly good examples of each wetland type.</p>
<p>CRITERION 2: A wetland should be considered internationally important if it supports vulnerable, endangered, or critically endangered species or threatened ecological communities.</p>	<p>The Fairy Tern (<i>Sterna nereis</i>) has recently been listed on the IUCN red list as a vulnerable (C1) species.</p> <p>The Lake Clifton thrombolite community is currently being assessed for listing as a threatened ecological community under the Environment Protection and Biodiversity Conservation Act 1999, with a decision due in October 2009. If the community is accepted onto the Australian Government's list, the thrombolite (microbial) community of coastal brackish lakes (Lake Clifton) should be considered as satisfying Criterion 2.</p>
<p>CRITERION 3: A wetland should be considered internationally important if it supports populations of plant and/or animal species important for maintaining the biological diversity of a particular biogeographic region.</p>	<p>The System is one of only two locations in south-western Australia, and one of very few in the world, where living thrombolites occur in inland waters.</p>
<p>CRITERION 4: A wetland should be considered internationally important if it supports plant and/or animal species at a critical stage in their life cycles, or provides refuge during adverse conditions.</p>	<p>Annual use by large numbers of migratory birds. Drought refuge for large numbers of waterbirds (seasonally and in sporadic, large-scale events). Regionally and nationally significant numbers of breeding Cormorants, small communities of breeding Pelicans; and for bioregionally important populations of breeding Hooded Plover; breeding populations of fish, crabs and prawns; and moulting populations of Australian Shelduck and Musk Duck (during which the birds are flightless for a short period).</p>



APPENDIX 1

<p>CRITERION 5: A wetland should be considered internationally important if it regularly supports 20 000 or more waterbirds.</p>	<p>The System annually supports more than 20 000 waterbirds. The System is the most important area for waterbirds in south-western Australia and regularly supports more than 20 000 waterbirds. In 1977, over 150 000 waterbirds were recorded in the System.</p>
<p>CRITERION 6: A wetland should be considered internationally important if it regularly supports 1% of the individuals in a population of one species or subspecies of waterbird.</p>	<p>Fourteen (14) species meet this criterion:</p> <ul style="list-style-type: none"> Red-necked Avocet <i>Recurvirostra novaehollandiae</i> Red-necked Stint <i>Calidris ruficollis</i> Red-capped Plover <i>Charadrius ruficapillus</i> Hooded Plover <i>Thinornis rubricollis</i> Black-winged Stilt <i>Himantopus himantopus</i> Banded Stilt <i>Cladorhynchus leucocephalus</i> Curlew Sandpiper <i>Calidris ferruginea</i> Sharp-tailed Sandpiper <i>Calidris acuminata</i> Fairy Tern <i>Sterna nereis</i> Musk Duck <i>Biziura lobata</i> Grey Teal <i>Anas gracilis</i> Australasian Shoveler <i>Anas rhynchotis</i> Australian Shelduck <i>Tadorna tadornoides</i> Eurasian Coot <i>Fulica atra</i>
<p>CRITERION 7: A wetland should be considered internationally important if it 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 thereby contributes to global biodiversity.</p>	<p>The status of the Peel-Yalgorup System according to this criterion is unknown.</p>
<p>CRITERION 8: A wetland should be considered internationally important if it is an important source of food for fishes, spawning ground, nursery and/or migration path on which fish stocks, either within the wetland or elsewhere, depend.</p>	<p>Fifty (50) species of fish rely on the Peel-Yalgorup System for nursery, feeding and breeding grounds. The migratory route of the Pouched Lamprey (<i>Geotria australis</i>) includes the Peel-Harvey Estuary, a component of the System.</p>
<p>CRITERION 9: A wetland should be considered internationally important if it regularly supports 1% of the individuals in a population of one species or subspecies of wetland dependent non-avian animal species.</p>	<p>The status of the Peel-Yalgorup System with reference to this criterion is unknown.</p>

Framework developed to guide Plan development

1. Clarify project purpose and scope

- a. Confirm/clarify the purpose and scope of CEPA Plan. Should be linked to the Ramsar criteria met by site and values of Site
- b. Review the methodology and clarify deliverables/milestones
- c. What are the outputs and desired outcomes of the project?



2. Summarise Ramsar values, threats and recommendations

- a. Summarise the values of the Peel-Yalgorup System Ramsar Site, the threats to those values and list the recommendations of the Ramsar Site Management Plan (Management Plan)
- b. Consider, in general terms, the changed behaviours sought from stakeholders mentioned in the Management Plan



3. Target audience analysis

- a. List the groups that the CEPA Plan is designed to target (see preliminary list in Table 13 of Management Plan)
- b. What changed behaviours are being sought from these groups and what key messages could encourage such changes



4. Determine priority target audiences

- a. Determine who are the key 3-6 audience groups who are the first, important priority (FIP) groups for the CEPA Plan to target (3-6 is suggested as an Expert Panel is not likely to have sufficient time to go through all 24 audience groups)
- b. The first important priorities could be identified through a risk analysis process



5. Check and confirm

- a. Confirm and refine the changed behaviours that are desired in the 3-6 key target audience groups
- b. What actions, decisions or changes in policy are sought from these groups (desired changed behaviours)
- c. Constitute the Expert Panel in consideration of the 3-6 key target audiences and the desired changed behaviours



6. Hold Expert Panel

- a. Gather 6-8 independent experts to determine the CEPA Plan strategies for the 3-6 key target audience groups
- b. Expert Panel may provide recommendations for other target audiences
- c. Ensure working meeting is well prepared and facilitated



7. Write-up

- a. Consultant writes up communication, education participation and awareness-raising strategies for the 3-6 key target audiences based on Expert Panel recommendations
- b. Consultant, with the assistance of PHCC staff, writes strategies for the other target audiences





8. Ramsar TAG provides comment

- a. Provide opportunity for the TAG to provide formal and informal comment on the draft CEPA strategies



9. Develop draft Action Plan

- a. Develop the draft Action Plan (implementation plan). It will provide sufficient detail of the actions applicable to key target audiences to facilitate project development and funding applications. Core enabler projects should be made clear.
- b. Draft Action Plan may be provided to the TAG for comment.
- c. Finalise the draft CEPA Plan.



10. Present the draft CEPA Plan to the Senior Officers Group

- a. The Senior Officers Group reports to the State Steering Committee (SSC) for the Strategic Assessment of the Perth-Peel Regions) and the Peel-Harvey Estuarine Management Committee (PHEMC)
- b. The aim is for the SOG to recommend the endorsement of the CEPA Plan by the SSC.
- c. Following endorsement, organisations can apply for funding to implement the CEPA

GLOSSARY



TERM	DEFINITION	SOURCE
Awareness	brings the issues relating to wetlands to the attention of individuals and key groups who have the power to influence outcomes. Awareness is an agenda-setting and advocacy exercise that helps people to know what and why this is an important issue, the aspirations for the targets, and what is being and can be done to achieve these.	Ramsar Convention Secretariat (2010) <i>Wetland CEPA: The Convention's Programme on communication, education, participation and awareness (CEPA) 2009–2015</i> . Ramsar handbooks for the wise use of wetlands, 4th edition, vol. 6.
Capacity development	includes a range of processes by which individuals, organisations and institutions develop abilities for effective implementation of wise use of wetlands. Abilities include inter alia facilities, funding and resources, infrastructure and enabling environments.	Ramsar Convention Secretariat (2010) <i>Wetland CEPA: The Convention's Programme on communication, education, participation and awareness (CEPA) 2009–2015</i> . Ramsar handbooks for the wise use of wetlands, 4th edition, vol. 6.
Communication	is a two-way exchange of information leading to mutual and enhanced understanding. It can be used to gain the involvement of 'actors' and stakeholders and is a means to encourage cooperation of groups in society by listening to them first and clarifying why and how decisions are made. In an instrumental approach, communication is used with other instruments to support wetland conservation, to address economic constraints, and to motivate action.	Ramsar Convention Secretariat (2010) <i>Wetland CEPA: The Convention's Programme on communication, education, participation and awareness (CEPA) 2009–2015</i> . Ramsar handbooks for the wise use of wetlands, 4th edition, vol. 6.
Ecological character	the combination of the ecosystem components, processes and benefits/services that characterise the wetlands at a given point in time	Ramsar Convention Secretariat (2010) <i>Handbook 1: Wise use of wetlands</i> , 4th edition, vol 1, Ramsar Convention Secretariat, Gland, Switzerland.
Ecosystem services	the benefits that people receive from ecosystems. Examples include fish resources, water purification, recreational amenity and flood mitigation. Ecosystem services are limited within inherent capacities of the ecosystem and can be disrupted or impaired by human-induced and environmental factors.	Ramsar Convention Secretariat (2010) <i>Handbook 1: Wise use of wetlands</i> , 4th edition, vol 1, Ramsar Convention Secretariat, Gland, Switzerland.
Education	is a process that can inform, motivate and empower people to support wetland conservation, not only by fostering changes in the way that individuals, institutions, business and governments operate, but also by inducing lifestyle changes. It may take place in both formal and informal settings. Education in the broadest sense is a lifelong process.	Ramsar Convention Secretariat (2010) <i>Wetland CEPA: The Convention's Programme on communication, education, participation and awareness (CEPA) 2009–2015</i> , Ramsar handbooks for the wise use of wetlands, 4th edition, vol. 6.
Participation	is the active involvement of 'stakeholders' in the common development, implementation and evaluation of strategies and actions for the wise use of wetlands. Levels and kinds of participation can be highly variable, depending upon both the specific context and the decisions of the individuals and institutions leading the process.	Ramsar Convention Secretariat (2010) <i>Wetland CEPA: The Convention's Programme on communication, education, participation and awareness (CEPA) 2009–2015</i> , Ramsar handbooks for the wise use of wetlands, 4th edition, vol. 6.
Social norms	are the behaviours or cues within a society or group, or the informal understandings that govern an individual's behaviour in society.	(Scott & Marshall, 2009) <i>A Dictionary of Sociology</i> , Oxford University Press.
Sustainable development	is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.	Oxford University Press (1987) World Commission on Environment and Development's (the Brundtland Commission) report, <i>Our common future</i> , Oxford.
Sustainable use	is use of a natural resource that meets the needs of the present without compromising the ability of future generations to meet their own needs.	Inferred by author from definition of sustainable development)
Wetlands	include a wide variety of habitats such as marshes, peatlands, floodplains, rivers and lakes, and coastal areas such as saltmarshes, mangroves, and seagrass beds, but also coral reefs and other marine areas no deeper than six metres at low tide, as well as human-made wetlands such as waste-water treatment ponds and reservoirs.	Ramsar Convention Secretariat (2010) <i>Wetland CEPA: The Convention's Programme on communication, education, participation and awareness (CEPA) 2009–2015</i> . Ramsar handbooks for the wise use of wetlands, 4th edition, vol. 6. Ramsar Convention Secretariat, Gland, Switzerland.

TERM	DEFINITION	SOURCE
Wise use	<p>is a concept defined under the Ramsar Convention as 'the maintenance of (the wetlands') ecological character, achieved through the implementation of ecosystem approaches, within the context of sustainable development'.</p> <p>More simply, wise use means the conservation and sustainable use of wetlands and all the services they provide, for the benefit of people and nature.</p>	Ramsar Convention Secretariat (2010) <i>Handbook 1: Wise use of wetlands</i> , 4th edition, vol 1, Ramsar Convention Secretariat, Gland, Switzerland.

Acronyms

CAMBA	China-Australia Migratory Bird Agreement	LG	Local Government
CEPA	Communication Education Participation and Awareness	MAPTO	Mandurah and Peel Tourism Organisation
COM	City of Mandurah	MSC	Marine Stewardship Council
DOE	Department of Education	NGO	Non-Government Organisation
DOF	Department of Fisheries	PDC	Peel Development Commission
DOP	Department of Planning	PHCC	Peel-Harvey Catchment Council
DOT	Department of Transport	PHEMC	Peel-Harvey Estuary Management Committee
DPAW	Department of Parks and Wildlife	ROKAMBA	Republic of Korea-Australia Migratory Bird Agreement
ECD	Ecological Character Description	SOH	Shire of Harvey
EPBC ACT	Environment Protection and Biodiversity Conservation Act (1999) Cth	SOM	Shire of Murray
IUCN	International Union for the Conservation of Nature	SOW	Shire of Waroona
JAMBA	Japan-Australia Migratory Bird Agreement	SWALSC	South West Aboriginal Land and Sea Council
LAC	Limits of Acceptable Change	TAG	Technical Advisory Group

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