MINUTES OF Peel-Yalgorup System
Ramsar Technical Advisory Group (TAG)
Annual Meeting (#15)

Held on Thursday 16 March 2017
at Marine Operations Centre, 107 Breakwater Parade, Mandurah, 10 am to 1pm

The Chairman, Jan Star AM, opened the meeting at 10.05am, acknowledging Elder Harry Nannup and welcoming all attendees, including Linda Reid by phone.

Uncle Harry welcomed attendees to Noongar Country providing a little background to his life in the catchment and emphasising how keen they are to work with and support catchment management and wetland activities, saying, "My people will stand by you".

1. Attendance

Present:

Members:

Adam Turnbull	Department of Parks and Wildlife (DPaW), Wetlands Branch - for Mike Coote
Bob Paterson	Mandurah Bird Observers Group/Birdlife WA
Bob Pond	Department of Water (DoW), Waterways Health
Brett Brenchley	City of Mandurah (CoM) (10 to ~11.45a.m.)
Elder Harry Nannup	Traditional Custodian (10 to 10.30am)
Heidi Bucktin	Department of Parks and Wildlife, Project Officer NRM
Jane O'Malley	Peel-Harvey Catchment Council (PHCC), CEO (10.15am)
Jan Star	PHCC, Deputy Chair, Ramsar TAG Chair
Karl Brennan	Department of Parks and Wildlife, Acting Nature Conservation Coordinator
Kim Wilson	PHCC, Program Manager
Linda Reid	Wetlands Section Commonwealth Environmental Water Office, Assistant Director (by phone until 11.30am)
Matt Verdouw	Department of Parks and Wildlife
Megan Sheehan	Department of Parks and Wildlife
Nancy Fardin	Lake Clifton Herron Landcare Group (LCHLG)
Rebecca Cassells	for Natalie Lees, City of Mandurah
Sharon Meredith	PHCC, Wetlands & People Project Officer
Steve Fisher	PHCC, Science Advisor
Tom Lerner	Shire of Murray (SoM), Senior Environmental Planner

Guests:

Frances D'Souza	Department of Water
Rhonda Butcher	Water's Edge, Principal Consultant - IECA
Jacinta Thompson	Department of Water (from 10:10am)
Fiona Valesini	Centre for Fish, Fisheries & Aquatic Ecosystems Research, Murdoch Uni, Snr Res' Fellow
Andrew DelMarco	PHCC (from 12.10pm)
Tim Storer	Department of Water

Apologies:

David Arkwright	Peel Development Commission (PDC)
Paddi Creevey	PHCC
Bill Russell	Birds Australia
Thelma Crook	PHCC, R2R/Natural Assets Program Manager
Mike Coote	DPaW, Wetlands Branch
Brett Dunn	DoW (currently at PDC)
Brett Fitzgerald	DPaWs
Eryn Jackson	CoM

Ian Curley	Shire of Waroona, CEO
Jenny Rose	Lake Clifton Herron Landcare Group (LCHLG)
Mark Briant	Dept of Transport
Nic Dunlop	Conservation Council WA (CCWA), Environmental Science & Policy Coordinator
Nadine Heinen	Mandurah and Peel Tourism Organisation (MAPTO), Marketing Manager
Rob Summers	Department of Agriculture and Food
Shaun Meredith	Department of Fisheries (DoF)
Tim Nicholas	DoF
Peter Wilmot	Lake Mealup Preservation Society (LMPS)
Francis Smit	Landcare SJ
Alan Wright	DPaW
Jo Garvey	PHCC, Natural Assets Coordinator
Joel Batten	Alcoa of Australia, Environmental Advisor, Willowdale Mine Alcoa;
Simon Hall	Shire of Harvey (SoH), Manager of Planning Services
Sam Pickering	SoH, Environmental Officer
Bill Rutherford	Ornithological Technical Services, Ornithologist
Neil Blake	Regional Officer – Environment, WA-NT-SA Team, Biodiversity Conservation Division Department of the Environment and Energy (DoEE)
Neil Riches	Environment, WA-NT-SA Team, (DoEE)
Scott Haine	Department of Planning (DoP)
John Pride	DoP
Andrew Roland	Recfishwest, CEO
Jenny Rose	LCHLG
Megan Sheehan	DPaW
Francis Smit	Landcare SJ, Coordinator
Bruce Tatham	Commercial Fisher

Note all meeting papers are available via the Ramsar TAG page on the PHCC website: http://www.peel-harvey.org.au/?page_id=1113

2. Declarations of Interest

Nil.

3. Confirmation of Minutes

Kim Wilson explained that the last two meetings, along with a lot of work by many members over the time period, have been devoted to the Strategic Assessment of the Perth Peel Region (SAPPR) under the EPBC Act as it has significant implications and opportunities for the Peel-Yalgorup System (PYS) Ramsar 482 Site.

Meeting papers as follows were tabled for information only:

- TAG #12 23/05/2013 Minutes
- TAG #13 05/12/2013 Perth and Peel Strategic Assessment Introduction
- TAG #14 03/03/2016 Perth and Peel Strategic Assessment Workshop – meeting summary

4. Business Arising from Previous Minutes

It was noted that Appendices 1, 2, 3 & 4 had been circulated prior to the meeting and were tabled for information only

a) Appendix 1: Business arising & Actions from TAG #12 Minutes as at 02/12/2013
b) Appendix 2: TAG #14 Meeting Summary
c) Appendix 3: PHCC SAPPR submission 13/05/2016
d) Appendix 4: Attachment to PHCC SAPPR submission 13/05/2016

It was noted that a detailed SAPPR update on-hold with Department of Premier and Cabinet (DPC) due to caretaker mode of Government and future advice pending the change of Government at the State election on 11/3/2017.

5. Draft Ramsar TAG Communications Sheet: Appendix 5

Kim Wilson tabled the Ramsar TAG Communications Sheet which was circulated prior to the meeting. Members were supportive of the document; there was no feedback from Members with regard to adjustments. Members were invited to take part in the photo shoot at the conclusion of the meeting which would become the banner shot of the Sheet.

Sheet to be finalised, circulated to members for their use to promote the Ramsar Site 482 and the role of the Ramsar TAG.

The Chair asked if there were any objections or if all were in agreeance.
All agreed.

6. TAG Membership: Appendix 6

Kim Wilson tabled the Stakeholder membership list that was previously circulated. It was agreed each organisation would formally nominate a representative and a proxy. Other representatives from Stakeholder organisations are welcome to attend as guest observers and to contribute to discussions. However, should a vote be required only the nominated representative (or proxy) will be able to vote. The nominated representative will be the organisation's primary point of contact for the Ramsar TAG correspondence.

The Chair asked if there were any objections or if all were in agreeance.
All agreed.

7. Correspondence

The PHCC, as Australian Wetland Network (AWN) members, received advice on 22/2/2017 from the AWN that the Australian Government was seeking input from NGOs into the National Ramsar Implementation Plan (Appendix 7) and the Communication, Capacity building, Education and Public Awareness (CEPA) Plan (Appendix 8). The advice email, including the Draft Plans, was forwarded to TAG members on 1/3/2017 for their consideration by their organisations to respond to the request for input by 20 March, 2017.

The draft documents, Appendix 7, National Ramsar Implementation Plan and Appendix 8, Draft **CEPA National Action Plan 2016-2018** (Communication, Capacity building Education and Public Awareness) were tabled.

National Ramsar Implementation Plan
In 2015 the Ramsar Conference of Contracting Parties (CoP) agreed to Ramsar Strategic Plan to cover the period 2018 to 2024 (three triennia). The Department of the Environment and Energy is seeking input in regard to:

- major existing or new national community/NGO/research initiatives that will contribute to outcomes to be achieved for the current (1st) triennium (2016-2018).
- actions that are national in scope or nationally significant, and that will be achieved in the 1st Triennium.

CEPA Plan 2016 – 2018
The Ramsar Convention encourages Parties to develop CEPA National Action Plans. The Department of the Environment and Energy is seeking input on major national initiatives that will contribute to outcomes to be achieved for the current triennium (2016-2018).

PHCC has almost finalised the draft PYS Wetlands and People Plan (CEPA Action Plan) ready for publication.. It is understood this is the first such Plan specific to a Ramsar Site in Australia.

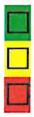
PHCC will be providing a response to each of the Plans directly to Jenny Tomkins, Assistant Director, Wetlands Section, Commonwealth Environmental Water Office, Australian Government, Department of the Environment and Energy.

8. Monitoring reports against Limits of Acceptable Change (Trigger Values) - Monitoring & Evaluation Guide: App9

Kim explained that the summary table, Appendix 9, LAC Table: Monitoring reports against Limits of Acceptable Change, had been distributed to partners prior to the meeting requesting they review and update where possible. Due to time constraints Kim explained that we will not go item by item through the table but some of the LACs would be addressed in items 11 to 16 later in the Agenda, and that we would move straight into item 9.

Note: the following legend applies for these Minutes with respect to the LACs being:

Met
Borderline
Outside Acceptable Range for LAC



9. Changes to the Rolling Review Process – Linda Reid (by phone)

The Chair introduced Linda Reid, Assistant Director, Wetlands Section, Wetlands, Policy and Projects Branch, Commonwealth Environmental Water Office, Australian Government, Department of the Environment and Energy.

Linda explained that the Ramsar Site Rolling Review process captured a huge amount of information in an Excel Spreadsheet but it wasn't proving particularly useful for on-ground application. The process has been simplified through Australia's National Ramsar Committee, the Wetlands and Aquatic Ecosystems Sub-Committee, which meets twice per year with each State providing a status report for their Ramsar sites, using their State's reporting process. Victoria is still using the Rolling Review process. Mike Coote (DPaW) and Tim Storer (DoW) are WA's representatives on the Committee.

The Integrated Ecological Condition Assessment framework methodology, being developed as part of the National Aquatic Ecosystem Toolkit, will be useful for the PYS.

The Chairman thanked Linda for the update and perfect segue into the next item.

10. Integrated Ecological Condition Assessment (IECA) – Peel-Yalgorup Case Study – Rhonda Butcher

The Chairman welcomed Rhonda Butcher the Principal Consultant with Water's Edge Consulting, Victoria. The Peel-Yalgorup System was nominated by Mike Coote and Tim Storer, who sit on the national Technical Steering Committee for the development of the IECA, as a case-study for the final development phase of the IECA framework. Water's edge have been contracted to undertake the Case Study.

The IECA is the 5th (and final) Module of National Aquatic Ecosystem Toolkit.

Rhonda explained that the IECA is a National framework to assess condition and threats/stressors impacting priority values at aquatic ecosystems at multiple scales (e.g. asset, landscape, catchment), and to the key ecosystem functions that they provide. It Integrates risk assessment to demonstrate how management interventions, threats and stressors impact condition, and if maintenance or improvements in condition are related to management interventions.

The IECA Framework is comprised of an eight-step process, which is preceded by a planning and groundwork phase. Key values are assessed against 5 themes, including ecosystem services. It is slightly different to the Ecological Character Description (ECD) framework. The goal is to have a national standard terminology.

Timeframe from here:

- Draft manual to be reviewed by Department of the Environment and Energy's Project Technical Steering Committee (PTSC) late April
- Final manual and handover beginning of June
- Series of jurisdictional meetings presenting the final manual

Rhonda's presentation (without photos) is available here:
http://www.peel-harvey.org.au/wp-content/uploads/IECA_PYS15TAG_Butcher_-160317_wo-pics.pdf

NB: the other four models are:

1. Guidance Paper
2. Interim Australian National Aquatic Ecosystem Classification Framework
3. Guideline for Identifying High Ecological Value Aquatic Ecosystems (HEVAE)
4. Aquatic Ecosystem Delineation and Description Guidelines

(Ref: http://www.environment.gov.au/resource/aquatic-ecosystems-toolkit-module-1-guidance-paper);

Bob Pond suggested we have a strong case to argue for resources to revise the LACs in accordance with the new definitions, and develop an addendum to the ECD, and to update the Management Plan in accordance with the revised LACs, works undertaken and related outcomes over the past decade, changes over this time which includes the recovery of Lake Mealup and new listings under the EPBC Act e.g. Thrombolites and Salt Marshes.

11. Shorebird 2020 Report – 2013 – 2017 – Thelma Crook

Thelma was absent due to illness so Kim presented Thelma's presentation on her behalf. The presentation was circulated with the Agenda papers and is available here:
http://www.peel-harvey.org.au/wp-content/uploads/TAG15_11_Waterbirds.pdf

The annual Shorebirds 2020 count was conducted over the weekend of February 5th and 6th with the main count on the 6th. A Shorebird Identification training workshop was held by PHCC on January 30 & 31 to recruit new volunteers. The results from this year's count are still being analysed. This report to the TAG compares the count results from 2012 to 2016 against the set Limits of Acceptable Change (LACs) for the System.

a) Waterbirds A: Red-Necked Stints & Sharpies

Hypothesis: The PYS will support more than 1% of the Flyway populations at a min of 3 years out of 5.

For the period 2008 to 2016:

- Red-necked Stint exceeded 1% threshold all years except 2008.
- Sharp-tailed Sandpipers only exceeded 1% threshold in 2009, 2010 and 2014 i.e. 3 out of 9 years

b) Waterbirds B: Cormorants- Ornithological Technical Services' report July 2016 (App. 11)

Measure the breeding status of the Little Black and Little Pied Cormorants at Len Howard Reserve to assess maintenance of PYS ecological character to inform limits of acceptable change for breeding waterbirds.
The July report compares findings with the 2010 monitoring report – colours indicates trends as LACs not set..

- Number of nests had significantly declined
- Number of active nests showed a slight increase
- Number of Little Black eggs had increased
- Number of Little Pied eggs had declined from a low base level.

c) Waterbirds C: Hooded Plovers 2012 to 2016

Hypothesis:

- The PYS supports more than 60 Hooded Plovers 3 years out of 5.
- PYS supports successful breeding of Hooded Plovers 3 years out of 5
  Bill Russell was thanked for providing nesting data for the Hooded Plovers, which indicates the LAC is met.
- The 1% threshold for Hooded Plover was exceeded in all years for the period 2001 to 2016 except for 2014 and 2015. Thus the Lac is met but caution is noted due to the two recent years in which it wasn't met.

Shorebird 2020 Count Trends Over Time

Criteria 5 for Ramsar Listing: A wetland should be considered internationally important if it regularly supports 20,000 or more waterbirds.

- The 20,000 threshold was exceeded every year between 2008 and 2016 with over 90,000 counted in 2013 and the lowest being ~28,000 to ~30,000 in 2008, 2009, 2011 and 2016: met ☐
- In 2015 40 different shorebird species were recorded. In all other years for the period 2008 to 2016, 50 or more species were recorded with the highest being 62 in 2013. met ☐

d) Proposed update report card - resources dependent

The PHCC is hoping to secure resources to update the Waterbird Report Card, which was produced in 2012 for the period 2008 to 2012, for the period 2013 to 2017.

The importance of collaboration between Birdlife, DPaW, PHCC and many others and the commitment of volunteers (including Officers who volunteer their time) to the success of the count each year was acknowledged. Additional item discussed – Lake Pollard Swan data:

Bill Russell has provided his count data for Swans at Lake Pollard in YNP. The data shows the number of swans at the lake has crashed in recent years. Mike Coote out of session has suggested it *may* be related to increasing salinity at the lake and there decreased feed availability/loss of suitable habitat for the swans.

12. Water Quality A & Phytoplankton: Peel-Harvey Estuary – Frances D'Souza

Frances D'Souza presented Water Quality results which are available here: http://www.peel-harvey.org.au/wp-content/uploads/WQ_Updated_LAC_Graphs_2012-16FDv2.pdf

It was noted that nutrient concentrations were not monitored between Sep 2013 and June 2016, and that some monitoring sites were located outside of the Ramsar site boundaries but within the estuarine portions of the Murray and Serpentine Rivers that drain into the estuary. (Note: monitoring does not take place within the estuarine portion of the Harvey River.) Water quality parameters were compared against both the LACs and trigger values from the ANZECC and ARMCANZ (2000) Guidelines (i.e. the ANZECC Guidelines) where available. In summary:

- Median Total Phosphorus (2012 to 2016)
  - The Peel-Harvey Estuary met the LAC for both surface and bottom waters ☐
  - Serpentine River surface and bottom waters exceeded the LAC (same as the ANZECC guideline). ☐
  - Murray River surface and bottom waters exceeded the LAC only in Autumn. Bottom waters exceeded the LAC in Summer and Winter. ☐

- Median filterable reactive phosphorus (2012-16)
  - Serpentine River exceeded the LAC and the ANZECC guideline for both surface and bottom samples in Spring ☐ and exceeded ANZECC for Surface in Spring and ANZECC and the LAC for Bottom waters in Spring.

- Median total nitrogen (2012-16)
  - There is no LAC for total nitrogen, however, Serpentine exceeded the ANZECC guideline for surface and bottom samples in all periods.

- Median ammonia / ammonium (2012-16)
  - The LAC is set at a lower concentration than ANZECC trigger value. Nearly all results for the two rivers and Peel-Harvey Estuary, over the period exceed the LAC. ☐
  - The Serpentine River waters exceed ANZECC Guidelines in all seasons except Autumn.

- Median total oxidised nitrogen (2012-16)
  - The LAC is exceeded in top and bottom waters of both rivers and the estuary for all seasons. ☐

- The LAC is set lower than the ANZECC Guideline so only the surface waters from the Murray (in winter) and Serpentine (in winter and spring) and the bottom waters from the Serpentine (in winter and spring) exceeded the ANZECC Guideline value.

- Median chlorophyll 'a' (2012-16)
  - The waters of the Peel-Harvey estuary within the boundaries of the PYS Ramsar site do not exceed the LAC or ANZECC Guideline values
  - The concentration of chlorophyll a exceeds the LAC only in the Serpentine River waters (in integrated samples only) during Autumn
  - Note that integrated samples are collected from the whole depth profile while surface samples are collected from the upper 0.5 m of the water column.

- Dissolved oxygen (2012-2016)
  - The median concentrations met the LAC for the surface waters of the estuary and rivers.
  - The waters near the bottom of these waterways also met the LACs with the exception of the Murray River .

- pH (2012-2016)
  - The median pH for the surface and bottom waters of the estuary and rivers met the LAC .

- Salinity
  - The LAC for the Peel-Inlet and Harvey Estuary was met in 2014 and 2016 but not in 2012, 2013 or 2015.
  - The salinity at the mouth of the Harvey River exceeded the LAC each year 2012-2016 inclusive .

The Chairman thanked Frances for her work compiling and presenting the data.

Kim noted that there is a large Agenda load for the TAG to consider at its annual meeting in trying to address both management updates and the assessment against the LACs. It has been proposed to establish a new LAC subcommittee to compile and analyse the available monitoring data against the LACs and to report the state of the PYS to the TAG.

There was general support by the meeting for the development of this Sub-Committee.
All agreed.

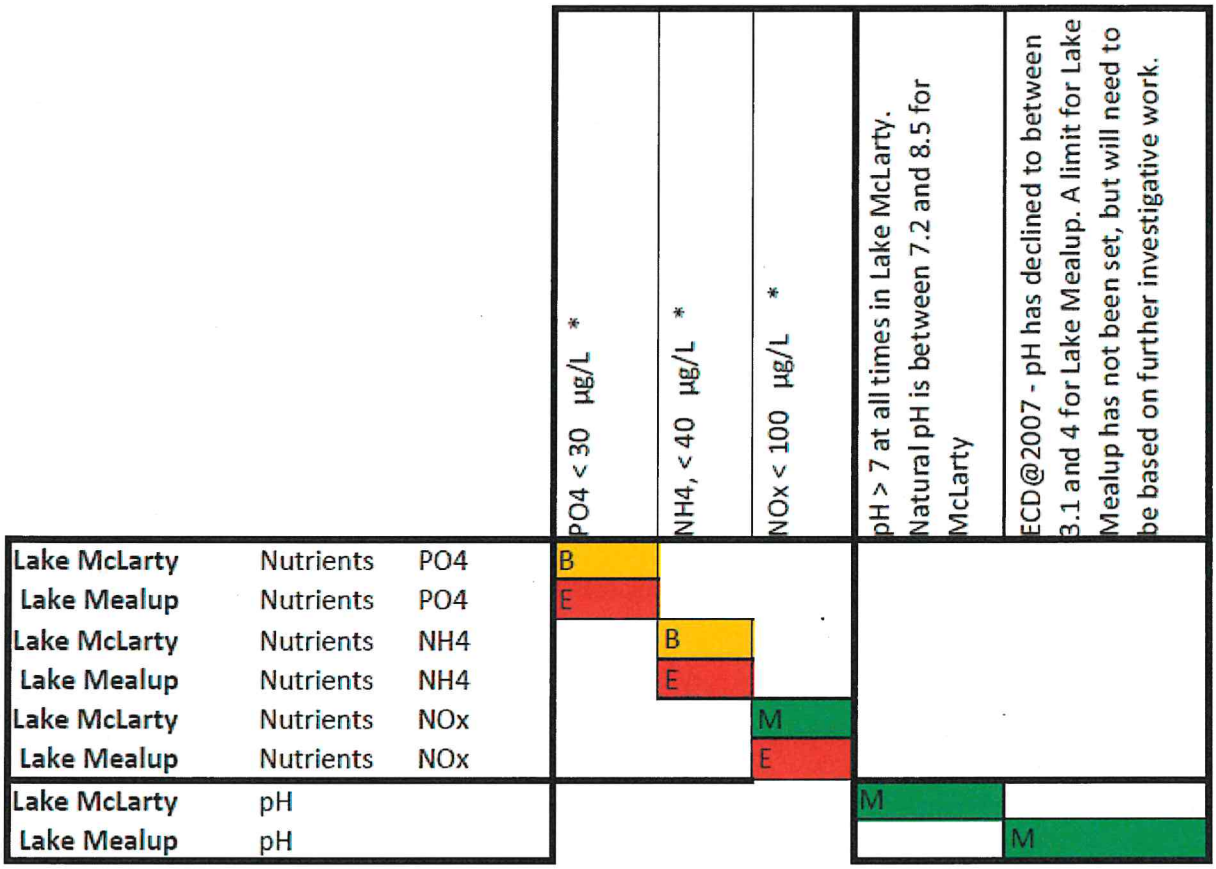
13. Water Quality B: Yalgorup Lakes – Karl Brennan - item addressed at 18.3

14. Water Quality C: Lakes Mealup & McLarty - Heidi Bucktin includes item 18.1 Lake Mealup update

Heidi provided a background synopsis of the past decade of collaboration and activity at Lake Mealup through the Lake Mealup Recovery Program and its adaptive management approach, including the control of Typha and the installation of two adjustable height weirs to manipulate water levels in the lake and minimise exposure of acid sulfate soils (ASS) to the atmosphere. This has led to the recovery of water quality from pH<3, and the removal of Typha which covered 80% of lakes' surfaces, at both Lake Mealup and Little Mealup lake. Outcomes of the recovery actions included the project as a finalist in the River Prize in 2015 (https://www.dpaw.wa.gov.au/news/item/1855-national-recognition-for-lake-mealup-recovery). Decline had been noticed since 1994. Improved water quality and quantity has seen the return of waterbirds, frogs and invertebrates. Ongoing adaptive management and monitoring is vital.

Heidi's presentation is here:
http://www.peel-harvey.org.au/wp-content/uploads/TAG15_14_LakeMealupRecovery.pdf

Heidi also reported the following from the water quality monitoring at Lake Mealup and Lake McLarty. All other LAC parameters are data deficient.



* LACs for nutrients are applied only when lake levels exceed 500 mm.
Full raw data record is available here:
http://www.peel-harvey.org.au/wp-content/uploads/PYS_LACtable_TAG15_F.xlsx

15. Littoral & Fringing Vegetation Assessment - proposed - Jo Garvey

As Jo Garvey was an apology, Kim explained that undertaking the Littoral and Fringing Vegetation Assessment as per the PYS's Monitoring and Evaluation Guide is a PHCC priority for this year. Some funds to cover the cost have been identified through the National Landcare Program (NLP) funded Natural Assets project that Jo coordinates. The methodology is being considered against available resources. The last assessment was undertaken in 2010. However, not all 18 transects were assessed and it would be ideal to get all transects monitored against the digital extent modelling to provide a full baseline for future monitoring.

It should be noted that the estuarine portion of the PYS contains Subtropical and Temperate Coastal Saltmarsh that was listed as a *Vulnerable* Threatened Ecological Community in August 2013.

The Chairman, having checked with Dr Valesini, called for the break to be taken at this point from 11.45 to 12 noon.

16. ARC Linkage Project –Balancing estuarine and societal health in a changing environment - Dr Fiona Valesini

The Chairman introduced Dr Fiona Valesini, Senior Research Fellow, Centre for Fish, Fisheries & Aquatic Ecosystems Research, Murdoch University, who explained that the Overarching Goal of the ARC Linkage project is to develop a Decision Support system to facilitate sustainable development in the Peel-Harvey region. It will be an estuary-

response model framework for exploring & optimising trade-offs between catchment development and estuary health and ecosystem services.

The project includes work on nutrient 'source-to-fate' isotope tracing, fish and invertebrates health indices. The project has direct relationship to some of the PYS's LACs and may assist with LACs being set for fish and invertebrates as these are currently not set as they are data deficient.

The project has direct relationships to other projects including:

- Regional Estuaries Initiative (DoW, PHCC)
- Transform Peel - Peel Waterways Initiative (Peel Development Corporation)
- Peel Waterways Institute (Stage 1, PDC, PHCC, Peel Regional Leaders Forum)
- Dolphin population assessment (Murdoch University)

It will also likely be able to help inform some of the conditions placed against the Peel Fishery's MSC accreditation with respect to benthic organisms and the unknown, if any, impacts of compaction from scoop netting (see also 18.6).

The Chairman thanked Fiona for her presentation which is available here:
http://www.peel-harvey.org.au/wp-content/uploads/TAG15_16_ARCLinkage_FV.pdf

17. Review progress Against Strategies & Actions - Table 11 Update — Kim Wilson

Kim explained that Appendix 10, Review of activity against PYS Management Plan's Strategies & Actions (Table 11) Update, was distributed prior to the meeting. This is a brief summary update complied by Kim of the known actions in the past four years, since the last formal, non-SAPPR TAG meeting in August 2012.

The Table is updated each TAG meeting in a rolling pattern where the progress from the prior and current TAG meetings are reported. This provides a summary of the actions being undertaken by Stakeholders against the recommended Strategies and Actions within the Peel-Yalgorup System Ramsar Site Management Plan (Table 11: Goals, Strategies and Actions, pages 31 to 33; PHCC 2009). Thus, past Table 11 editions for TAG Agenda Items presented at previous TAG meetings provide a history of actions over time.

Some items from Table 11 will be expanded on in the following presentations. All feedback re adjustments/additions is welcome.

18 Officer reports:

18.1 Lake Mealup update – Heidi Bucktin

This was addressed at item 14

18.2 Lake McLarty – Action Plan Andrew Del Marco

Andrew tabled the draft Lake McLarty Action Plan and explained he has been working with the Friends of Lake McLarty (FOLM) and DPaW to develop the agreed Action Plan which will guide all three groups (PHCC, FoLM, DPaW) for future project planning and implementation.

18.3 Lake Clifton Thrombolite Recovery Group - Karl Brennan

Karl thanked the PHCC for their role in the past six months of re-activating the Lake Clifton Thrombolite Recovery Group. Karl outlined there have been changes to the hydrology of the lake which are of concern as fresh water seepages, a freshwater lens and hyposaline conditions are all important for supporting the Thrombolite community. One inhibiting factor is the lack of data on the lake against the LACs and a lack of understanding of the linkages between groundwater within the Lake Clifton Catchment and the lake itself.

None of us want to lose the Thrombolites on our watch.

Data in regard to the salinity of the lake is probably the most "comprehensive" data set for any of the parameters. Jim Lane has been collecting two samples per year since 1985. Mike Whitehead has been taking samples and logging salinity as part of his research at the Lake for the past few years and Bill Russell took measurements at two sites on the eastern shore of the Lake on a monthly basis from August 2008 to August 2014. Karl thanked Bill for making his data available to the LCTRG and the Ramsar TAG.

Steve Fisher has complied comments with respect to the available data in the PYS_LACtable.

Full raw data record and Steve's comments are available here:
http://www.peel-harvey.org.au/wp-content/uploads/TAG15_Draft_McLarty_Actions_Table_vers_1.4_ADM.pdf

18.4 On-ground works including Austin Bay & Roberts Bay DPaW –PHCC/NLP funded – Alan Wright & Matt Verdouw

Karl and Matt outlined the scale of the two sites, their importance as part of the Ramsar site and also "home" to a range of TECs and threatened pants species, the threats posed from weeds, pigs, dieback and people (mainly 4WD and motorbikes) and the planned works at the two sites. The works are funded through the PHCC's NLP funded Natural Assets project.

- Austin Bay = PHCC $62,566 (cash) + P&W $87,408 (in-kind) = $149,974
- Robert Bay = PHCC $21,585 (cash) + P&W $32,165 (in-kind) = $53,750

Full details via the presentation is available here:
http://www.peel-harvey.org.au/wp-content/uploads/TAG15_18.4_Austin-Roberts-Bay_KB.pdf

18.5 Peel-Harvey Regional Estuary Initiative – Bob Pond

Bob explained that the ~$20Million State-wide REI Project will invest ~$6M in the Peel-Harvey over 4 years. A suite of on-ground drainage interventions aimed at improving water quality in the estuary will be delivered by DoW in partnership with PHCC and DAFWA. The Peel Main Drain is one area on which works will be focussed including investigating water quality improvements obtained by redirecting and treating drainage water through the wetlands that reflect the original course of the Serpentine River channel. Building on the old Jason Mackay managed "Dirk Brook Project" activities undertaken in Punrak Drain early last decade; nutrient attenuation trials will be potentially undertaken in Karnup and Keralup drains. DoW is currently trialling the efficiency and practicality of treating the Gull Road Drain and Punrak Drain using clays and soil amendments to reduce nutrient concentrations (i.e. nutrient attenuation through additives) in the drainage waters for scale up in other subcatchments e.g. Nambeelup Brook.

Some small scale nutrient and water management intervention projects led by PHCC will be carried out mostly in the Mayfield catchment, building on from the Jenkins Weir project completed under the FNS2 project. The soil and nutrient mapping (Fertilise the Farm) project working with farmers will also continue, led by DAFWA and supported by PHCC.

18.6 Marine Stewardship Council Accreditation Peel-Harvey Fishery

Kim explained the Department of Fisheries were unable to attend the meeting. They provided answers to three questions Kim put to them prior to the meeting and their response via Carli Telfer, as follows, was distributed with the Agenda papers:

1) What impact has the two month closure to crabbing had on crab populations?

The season closure for recreational and commercial crab fishing in the Peel-Harvey Estuary (from 1 September to 31 October) provides additional protection to the breeding stock, specifically berried females which are allowed to spawn.

Environmental factors (cooler than average water temperatures and heavy rainfall) have negatively impacted the growth rates of juvenile crabs in the Peel-Harvey Estuary during 2016, such that the numbers of legal size crabs were very low at the commencement of the season on 1 November 2016. The numbers of sublegal crabs were high during 2016 so the abundance of crabs was good, but due to the lack of growth and potential movement of crabs

out of the estuary during periods of rainfall, the numbers of legal crabs during the season was much lower than previous years.

2) A brief description of the Harvest Strategy

Harvest Strategies for the blue swimmer crab and finfish resources of Peel-Harvey Estuary (published as Fisheries Management Papers No.273 and 274) were developed, in consultation with the Western Australian Fishing Industry Council (WAFIC), the Mandurah Licensed Fisherman's Association (MLFA) and Recfishwest, to assist the Marine Stewardship Council (MSC) certification of crab and mullet fisheries.

The Harvest Strategies include reference levels and control rules for a number of important commercial and recreational species. Both use commercial catch as the performance indicator due to there being little or no information available to estimate the recreational catch.

3) What actions are being taken to meet the conditions of the MSC accreditation for this year's audit.

In 2016, an MSC Conditions Steering Group (SG) Committee was established by the Department of Fisheries. WAFIC, Recfishwest and the MLFA are members of the Steering Group whose role is to monitor and review the progress of work required to address the conditions. Meetings are held quarterly. Three meetings have been convened to date. At the first meeting (August 2016) the SG established the following five projects:

1. Blue Swimmer Crab Harvest Strategy (addressing conditions 1 (PI 1.2.1) and 2 (PI 1.2.2))
2. Finfish Harvest Strategy – addressing conditions 3 (PI 1.2.1) and 4 (PI 1.2.2)
3. Finfish Bycatch – addressing conditions 5 and 6 (both PI 2.2.3)
4. Recreational Crabbing – addressing condition 7 (PI 2.4.1)
5. Stakeholder Engagement – addressing conditions 8 and 9 (PI 3.1.2)

Teams were established by the project lead for each of the projects following the first meeting. Progress against the milestones as set out in the agreed-to and published Client Action Plan (CAP) and progress against the two recommendations made by the Conformity Assessment Body are being monitored by the Steering Group and are generally tracking as expected. The Department and client are expecting to contact PHCC in April to discuss the progress and opportunities for involvement by PHCC.

Appendix 9 – with respect to Peel-Harvey estuary - KEY SPECIES AND COMMUNITIES:

A) Component **Invertebrates (Crabs):** The Department of Fisheries also provided a suggested update to the LAC in Appendix 9, LAC Table: Monitoring reports against Limits of Acceptable Change, for "**Invertebrates (Crabs)** in the Peel-Harvey estuary". The LAC as per the ECD has been set at:

- Median CPUE for blue swimmer crabs should not drop below **1.0 kg/trap** lift per annum (based on commercial fishing)

However, as per the MSC accreditation process and Fish Harvest Strategy a threshold has been set at:

- Standardised annual commercial catch rates (CPUE) for blue swimmer crabs should not drop below **0.7 kg/trap lift per annum** (based on commercial fishing). This level is defined as the threshold for this fishery (MSC full certification).

The LAC can't be adjusted at this point but this will be considered as part of a review of the LACs.

B) Component **Fish:** With respect to "Fish" for 2015 and 2016 the Department of Fisheries advised, "The Harvest Strategy for the Finfish Resources of the Peel-Harvey Estuary (2015) (http://www.fish.wa.gov.au/Documents/management_papers/fmp274.pdf) specifies reference levels (target, threshold, limit) for commercial catches of all commercially important finfish species (i.e. sea mullet, yelloweye mullet, yellowfin whiting, tailor, herring, cobbler and Perth herring). Reference levels are also given for catch rates of sea mullet and cobbler. Reference levels are based on annual catches within the estuary over a 12-year reference period (2000- 2011). Information about commercial catch levels, including any breaches of the Harvest Strategy, is published annually in 'State of the Fisheries'. In 2015, sea mullet and yellowfin whiting catches exceeded their threshold levels (70 and 14 t, respectively) (SRFaR in prep). DoF reviewed the risks posed by these levels and determined that they were acceptable (i.e. low risk to the sustainability of the stock). Recreational catches of finfish within the estuary are not monitored. (Source: (Telfer, Carli, Department of Fisheries, 2017), DoF)".

MSC

Dr Steve Fisher made a presentation on the Marine Stewardship Council certification process for the Peel Fishery to inform members how it relates to the Ramsar site and their collaborative management responsibilities.
Some of the points Steve highlighted include:

- Three principles of sustainability:
  - P1: Stock status & Harvest strategy
  - P2: Ecosystem impact
  - P3: Governance, Policy & Management system
- 5 Units of Certification
  - Crab traps /pots - blue swimmer crab (commercial)
  - Drop nets - blue swimmer crab (recreational)
  - Scoop net - blue swimmer crab (recreational)
  - Gill net - sea mullet (commercial)
  - Haul nets - sea mullet (commercial)
- Performance Indicators (PIs) against which sustainability is assessed (note 80 is a pass mark. PIs scored at less than 80 result in a condition that requires further action by the client to maintain the certification):
  - P1 – Management – 1.2.1 Harvest Strategy (scores of 70 against each unit of certification) and 1.2.2 Harvest control rules and tools (scores of 75 against each unit)
  - P2 – Bycatch Species– 2.2.3 Information (scores of 75 against Sea Mullet – Set Net & Haul net) and Habitats 2.4.1 Outcome (score of 60 against Blue Swimmer Scoop Net)
  - P3 – Governance and Policy – 3.1.2 Consultation, roles & responsibilities (scores of 75 against each unit)

Nine conditions need to be met by the client in order to maintain the MSC certification. Actions against these conditions will be assessed at a series of annual audits. These conditions apply to each of the three Principles and are spread across all units of certification. Harvest strategies for the blue swimmer crab and finfish stocks devised by the Department of Fisheries underpin Principle 1 with the objective that "the main factor affecting recruitment (for blue swimmer crabs and sea mullet) is the environment."

Conditions 1 through 4 require the clients to provide evidence that these harvest strategies are achieving their objectives and that control rules are in place to adaptively manage the fishery. For example, the harvest strategy defines a target catch rate range of 0.7 – 1.4 kg blue swimmer crab per traplift for the commercial sector. The 2014/15 season was within this target range but if in future years it falls outside this range (i.e. crosses the threshold values) then an investigation will be triggered. If the catch rate falls to 0.5 kg/traplift then some management action is required e.g. closure of the estuary to fishing. It was noted that the LAC for blue swimmer crabs in the Peel-Harvey Estuary is that the median catch rate should not fall below 1.0 kg / traplift / year and that this discrepancy with the Harvest Strategy should be addressed (see comments above in this section relating to Appendix 9).

Conditions 5 and 6 require fishery independent monitoring and reporting of the take of bycatch from the commercial sea mullet fishery. Condition 7 calls for provision of evidence that recreational scoop netting of crabs does not result in reduction of habitat to a point causing serious or irreversible harm, with a particular focus on the habitat of birds. Conditions 8 and 9 require greater opportunities stakeholder consultation.

The full presentation is available here:
http://www.peel-harvey.org.au/wp-content/uploads/TAg15_18.6_MSC_SF.pdf

(Note: With respect to the Ramsar listing of the PYS. Criterion 4 relates to Crabs and Criteria 4 & 7 relate to Fish).

18.7 Wetlands & People Plan – status; National CEPA report – Kim Wilson

Kim explained that the Ramsar Secretariat has a CEPA Programme. We were advised in 2014 this was to be re-named "Wetlands and People" Program, though this hasn't happened to date. The PYS Management Plan Action 9.1 is to "prepare a CEPA strategy to promote the international importance of the site and our commitments to the Convention for wetland 'wise use'." Thus, the draft Wetlands and People Plan. The Plan was developed with guidance from an expert Panel with experience in marketing, tourism, politics, government, community, natural resource management, and science, and has a focus on influencing decision makers.

Stakeholders have been provided with the opportunity for input and to provide feedback, endorsement and commitment to be involved in delivering the strategies.

Final edits to be completed (April). Publication including summary document (May).
Presentation available here:
http://www.peel-harvey.org.au/wp-content/uploads/TAG15_18.7_WPP_KW.pdf

18.8 Wetlands & People Project – introduction -Sharon Meredith

Kim introduced Sharon as the Wetlands & People project officer. Sharon provided an outline of the project. A recognised action from Binjareb Boodja Landscapes 2025 Strategic Plan and PYS Ramsar Site Management Plan. The project aims to raise awareness and inform people about the importance of the Peel-Yalgorup System and to build a real connection between people and the wetlands. The aspirational aim being that experiences and understandings lead to people changing their behaviour and supporting the health of the wetlands. Project period January 2017 to June 2018, 3 days per week. Funded through State NRM capability Grant $110,000; City of Mandurah cash contribution of $17,700 (to be allocated to projects within the Lake Clifton area)
There are also numerous in-kind contributions.

Presentation available here:
http://www.peel-harvey.org.au/wp-content/uploads/TAG15_18.8_WPProject_SM.pdf

19 Any other Stakeholder reports/business.

Jan Star thanked those in attendance and all Stakeholders for their contributions. She said, "We've come a long way (since 2004) and it is very heartening. Congratulations".

Dr Rhonda Butcher provided an external perspective saying, *"This TAG is very different to many others I have worked with. The ongoing, highly collaborative approach is very progressive. The work you are doing is inspiring and it is awesome that you have a CEPA Plan-the only one I know of for an individual site".*

Members were invited to partake in the photo shoot prior to sharing a light lunch over which discussions could continue.

20 Next meeting: Thursday 8th March 2018

The meeting closed at 1.20pm

Chairman: .....

Date: 8.3.2018

Appendix items from Agenda for Reference:

App. No.	DETAILS
1.	Business arising & Actions from TAG #12 Minutes as at 02/12/2013 – for information only
2.	TAG #14 Meeting Summary – for information only
3.	PHCC SAPPR submission 13/05/2016 - for information only http://www.peel-harvey.org.au/wp-content/uploads/0041_2016_0513_DPC_strategic-assessment_AW_AG.pdf
4.	Attachment to PHCC SAPPR submission 13/05/2016 - for information only http://www.peel-harvey.org.au/wp-content/uploads/0041_2016_0513_DPC_strategic-assessment_Attach-A.pdf
5.	Draft Ramsar TAG Communications Sheet
6.	PYS Stakeholder Organisations
7.	National Ramsar Implementation Plan
8.	Communication Education Public Awareness (CEPA) Plan
9.	LAC Table: Monitoring reports against Limits of Acceptable Change

10.	Review of activity against PYS Management Plan's Strategies & Actions (Table 11) Update
11.	Cormorant report_OTS_ 2016_v1.2