| RECOMMENDATIONS | PRIORITY | KEY STAKEHOLDERS | ACTIONS/STATUS | |
|--|----------|--|----------------|--|
| Strategy: Peel-Yalgorup System 'management advisory group' established with formal support and representation from federal state and local government, industry and community stakeholders | | | | |
| Establish and support a Technical Advisory Group. The Technical Advisory group will: Provide technical advice regarding on going management of the Ramsar Site and assessment of management techniques Comprise representatives from all key stakeholder groups including primary stakeholders and local government stakeholders and catchment management organisations Have written support of State and Local Government stakeholders | High | All primary and local government stakeholders PHCC | | |
| Coordinate regular (at least every six months) management advisory group meetings | High | PHCC | | |
| Strategy: Review the boundary of the Peel-Yalgorup System to ensure maximum protection of the System's ecological, socio-cultural and economic values | | | | |
| Establish a zoning plan to protect the ecological and socio-cultural values of the Peel-Yalgorup System | High | All primary stakeholders | | |
| Seek funding for the production of a management plan for Aboriginal and European heritage in the Peel region (as per Goegrup and Black Lakes Action Plan Recommendation 52) | Medium | SWALSC and an appropriate Peel Region Aboriginal Group with input from regional elders | | |
| Establish guidelines for reviewing the boundary of the Peel-Yalgorup System before preparing a proposal to the Western Australian State Government | High | PHCC, Shire of Murray, City of Mandurah | | |

| Strategy 4: Prepare new or revise existing environmental guidance for land-use planning and environmental impact assessment at all levels of government decision-making (Local, State and Australian Government) | | | |
|--|--------|-----------------|--|
| Peel region scheme text amended or subordinate planning tool prepared to give greater protection to the ecological socio-cultural and economic values of the Peel-Yalgorup System | Medium | DPLH | |
| State government formally adopt guidance for determination of wetland buffers | Medium | DPLH, DBCA | |
| Incorporate key international and national Ramsar site management obligations and recommendations in local planning policies and strategies in the Shires of Murray, Waroona and Harvey and the City of Mandurah | High | PHCC | |
| Prepare strategic assessment guidelines for matters of national environmental significance associated with the Peel-Yalgorup System | High | DAWE | |
| Strategy: Review groundwater resource allocation: Lake McLarty System and Yalgorup Lakes | | | |
| Undertake regional scale hydrological assessment surrounding the Lake McLarty System | High | DWER | |
| Review groundwater allocation limits in the Southwest regional groundwater area (Lake Clifton subarea) | High | DWER | |
| Strategy: Protect good condition fringing and terrestrial environments | | | |
| Undertaken high priority site-specific management actions (see 'Wetland Action Plans' and 'Other Plans' | High | - | Water quality and levels are monitored monthly at Lake Mealup. Water levels are managed to optimise water quality and benefits to flora and fauna, with the advice of the Lake Mealup TAG. |
| Undertake further investigation into nutrient concentrations and eutrophication risk at Goegrup and Black Lakes. | High | SWALSC, DWER | |

| Establish tourism and recreational carrying capacity of the Peel-Waterways | Medium | DWER, DPLH | |
|---|--------|-------------|---|
| Control Typha at Lake Mealup | High | LMPS, PHCC | Typha was eliminated from Lake Mealup by 2013. Re- establishment of emergent sedge habitat with alternative species is still to be achieved. |
| Prepare and implementation an Interim Management Guideline for Lake Mealup | High | LMPS, DBCA | Lake Mealup Monitoring and Water Level Management Guide developed in 2010. Diversion weir management guide developed and updated. |
| Determine cause and extent of acid drainage in the Peel-Harvey estuary | High | DWER | |
| Collect baseline data on nutrient concentration in Yalgorup Lakes and McLarty System | High | DBCA, PHCC | Nutrient concentrations monitored as part of regular water level and quality monitoring at Lake Mealup |
| Investigate cattle grazing as a management tool for Lake McLarty | Medium | DPIRD, DBCA | |
| Strategy: Reduce nutrient loads to the Peel Harvey Estuary and Goegrup & Black Lakes by 50 % of 2009 levels | | | |
| Implement recommendations of the Water Quality Improvement Plan for the Rivers and Estuary of the Peel-Harvey Catchment – Phosphorous Management (EPA 2008) | High | - | |
| Strategy: Economic valuation of the Peel-Yalgorup System | | | |
| Undertake a wetland valuation session to improve knowledge and communication of wetland values | Low | PHCC | |
| Strategy: Catchment scale behaviour change investigation | | | |
| Scope options for a large scale behaviour change project to improve stewardship and conservation of local wetlands and waterways | High | PHCC PDC | |

| Strategy: Strategic awareness raising project | | | |
|--|------|--|--|
| Prepare a communication, education and public awareness raising (CEPA) strategy to promote the international importance of the Peel-Yalgorup Ramsar Site, and our commitments to the Ramsar Convention for wetland 'wise use'. | High | PHCC, DAWE, DBCA, DWER | |
| Implement high priority CEPA actions, as per CEPA strategy. | TBD* | To be determined | |
| Prepare a report card to the local community on the current status of ecological health of the Ramsar site | High | DBCA, DWER, PHCC | |
| Provide capacity building support to local volunteer community groups, particularly for waterbird monitoring (see 'Monitoring and Evaluation Guide for the Peel-Yalgorup Ramsar Site' | High | PHCC, community groups | |
| Foundational activities: establish a comprehensive baseline data set | | | |
| Implement recommendations of the 'Monitoring and Evaluation Guide for the Peel-Yalgorup Ramsar site', including monitoring coordination and data storage. | High | DBCA, DWER, Mandurah Bird Observers, Birds Australia, WA Wader Studies Group; WAMSI, DPIRD, PHCC | Monthly monitoring of water levels and quality in place at Lake Mealup |
| Report monitoring results against limits of acceptable change to Technical | High | DBCA, DAWE, PHCC | Lake Mealup results reported regularly to TAG. |

| Prepare an action strategy for components and processes reported to be outside the relevant limits of acceptable change (as per 'Monitoring and Evaluation Guide for the Peel-Yalgorup Ramsar Site') | High | DBCA, DWER, PHCC, DAWE |
|--|------|---------------------------|
| Undertake a management effectiveness assessment and report achievement of management plan recommendations to Technical Advisory Group. | High | PHCC |
| Review the prescribed limits of acceptable change using first year monitoring data. | High | DBCA, DWER, PHCC |
| Review management plan recommendations and revise when necessary, releasing new amendments to the management plan as updated 'versions' where required. | High | DBCA, DWER, PHCC |

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If the above doesn't apply to you, as an alternative please give a brief summary in the space below of your major achievements contributing to improved management or condition of your patch of the Ramsar Site. e.g. (restoration activities, community engagement, filling knowledge gaps) since the most recent Peel-Yalgorup Ramsar TAG meeting in 2021.

Your Name : Peter Wilmot Your Organisation: Lake Mealup Preservation Society

A number of the items in the previous sections were relevant to Lake Mealup, and I have responded where applicable. What follows is a brief summary of monitoring results compared to LAC, and some activities LMPS is pursuing.

Performance against LAC

Nutrients: LAC not met. All nutrients are above LAC, and phosphorus is increasing. On the advice of the Lake Mealup TAG, water levels are being managed to achieve modest drying of the lake bed in autumn to try to reduce levels.

Salinity: Salinity is not measured in sedges and rushes where target is <1 ppt (there are virtually none) nor under the paperbarks where target is <0.5 ppt. In the centre of the lake, salinity is around 1 ppt when water levels are above about 0.5 m AHD, but never down to 0.5 ppt.

pH: Levels are almost always above the LAC of >7, typically 7-8, and higher when there is significant algae in the lake.

Phytoplankton: Limited information. Since around 2015 algal blooms, at least sometimes including cyanobacteria, have occurred in summer and autumn.

Aquatic plants: There are no floating aquatic plants present, so the LAC of >50% open water is met.

Littoral vegetation: There is no typha present on the lake, so the LAC of <50% coverage is easily met. However there are very few other species of sedges present so the target of >20% coverage is not met. This is an area of future activity.

Paperbarks: While a small number of downgradient trees have died due to inundation, there has been no substantial loss, so this LAC is met.

Invertebrates: Insufficient information.

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LMPS has installed two floating islands to provide roosting habitat for waterbirds. These were used by the birds but are too small and do not retain vegetation. Other types of structures will be pursued.

Water level management is targeting lower peak water levels to try to reduce nutrients in the lake. This also should provide habitat for wading birds in mid-summer, earlier than is presently the case. This may provide synergies with Lake McLarty in summer and autumn.

LMPS is engaged in regular (monthly, October – April) waterbird surveys through Birdlife Australia, coordinated with those on Lake McLarty to get better information on waterbird use of Lake Mealup.