

## Revised Serpentine Sports Reserve Management Plan – Summary of Submissions

Number	Submitter	Date Received	Comment Summary	Response
1	Western Power	23/11/2020	1. We don't process submissions, please check the information on the website for proximity to the network.	1. Noted
2	Department of Mines, Industry Regulations and Safety	26/11/2020	1. DMIRS lodges no objections to the Draft Management Plan.	1. Noted
3	Department of Water and Environmental Regulation (Kwinana Peel Region)	27/11/2020	<ol style="list-style-type: none"> <li>1. The Department supports the development of the revised management plan as an important overarching document that seeks to manage and improve the values of the reserve for community, recreation and conservation benefits.</li> <li>2. Section 3.2.1 – surface water – there seems to be some uncertainty regarding the direction of surface water flows and connectivity. Update as needed including the surface water map in Appendix 2.</li> <li>3. Section 3.2.1 – groundwater – the Leederville aquifer is now over 75% allocated. Update to state “The Leederville aquifer of the Serpentine groundwater area (Serpentine 3 subarea) is currently over 75% allocated.”</li> <li>4. Section 3.2.1 – Public Drinking Water Source Area – there is no proposed PDWSA within the Serpentine Sports reserve. Remove paragraph regarding PDWSA.</li> <li>5. Section 3.2.2 – water quality – plan states that the nutrient rates of N and P are within the maximum rates, however the area is within the Peel-Harvey coastal plain catchment and provisions of SPP2.1 apply, with recommended nutrient input rates are 6.5kg/ha/year of P and 40kg/ha/year of N. Acknowledge the site is located within the Peel-Harvey coastal plain catchment and that nutrient input targets apply. Active measures to reduce the site's nutrient input through the reserve's various uses should be discussed.</li> <li>6. Section 3.2.4 – drainage and drawdown – this section refers to the State government assessment and approvals for groundwater extraction and water course modification, and should refer to the <i>Rights in Water and Irrigation Act 1914</i>. Suggest “Any groundwater extraction, other than for</li> </ol>	<ol style="list-style-type: none"> <li>1. Noted</li> <li>2. An action has been included to commission an updated drainage modelling report.</li> <li>3. Noted and incorporated</li> <li>4. Noted and incorporated</li> <li>5. Noted and incorporated</li> <li>6. Noted and incorporated</li> <li>7. An action has been included to commission an updated drainage modelling report.</li> </ol>

			<p>domestic use and stock water, and disturbances to a bed or bank of a water course, requires approval under the <i>Rights in Water and Irrigation Act 1914</i>.</p> <p>7. Appendix 2 – drainage map – map is difficult to view and is dated and differs to aerial imagery. Recommend figure is updated as needed (including recent work to mitigate flooding and improve outflows) and produced clearer.</p>	
4	Peel Harvey Catchment Council	3/12/2020	1. We do not wish to make a submission.	1. Noted
5	Serpentine & Districts Golf Club	4/12/2020	<ol style="list-style-type: none"> <li>1. We submitted an updated overview on the SDGC which has been included in the new draft management plan.</li> <li>2. We have no further submissions.</li> </ol>	<ol style="list-style-type: none"> <li>1. Noted</li> <li>2. Noted</li> </ol>
6	Department of Planning, Lands and Heritage (Aboriginal Heritage Operations)	7/12/2020	<ol style="list-style-type: none"> <li>1. DPLH notes section 4.1 acknowledges the Noongar people and the importance of the area to the Noongar community.</li> <li>2. DPLH acknowledges the Shire is aware there are Aboriginal Heritage sites and places within the Shire which are protected under the <i>Aboriginal Heritage Act 1972</i>. The Act protects all known and unknown heritage places; the Shire should be aware of its obligations under the Act.</li> <li>3. DPLH notes that although the Shire has not had formal consultation with the South West Aboriginal Land and Sea Council or the local Noongar people, this is a high priority action in the plan. DPLH recommends that the Shire engages with SWALSC and seeks the views of the Traditional Owners to ensure that good management decisions and strategies are in place.</li> </ol>	<ol style="list-style-type: none"> <li>1. Noted</li> <li>2. Noted</li> <li>3. The Shire has referred the management plan to SWALSC for comment and input.</li> </ol>
7	Water Corporation	8/12/2020	<ol style="list-style-type: none"> <li>1. The Serpentine Sub F and Sub F2 Drains which traverse the site are not designed to give flood protection at all times and some inundation can be expected. The drains are maintained to clear water from adjacent properties within three days of a storm event.</li> <li>2. It is still the intent of the Corporation to ultimately transfer the rural drains though the reserve to the Shire as per correspondence regarding the original management plan.</li> <li>3. The revised management plan discusses ongoing flooding issues in the golf course. If the Shire had responsibility for the drains, then some options could be considered at a local level to alleviate this problem.</li> <li>4. If the drains are to remain the responsibility of the Corporation then any proposed modifications would need to be assessed and approved by the Corporation.</li> <li>5. We encourage the Shire to consider how future drainage</li> </ol>	<ol style="list-style-type: none"> <li>1. Noted</li> <li>2. Noted</li> <li>3. Noted</li> <li>4. Noted</li> <li>5. Noted</li> </ol>

			will be managed for both the reserve and development of the townsite area, and how the Corporation could work with the Shire to transfer ownership of the drains.	
8	Department of Primary Industries and Regional Development	15/12/2020	1. DPIRD does not object to the draft revised management plan for the reserve.	1. Noted
9	Serpentine Horse and Pony Club	16/12/2020	<p>Fundamentally, does not appear to raise any new or surprising matters nor proposes any urgent changes or actions.</p> <ol style="list-style-type: none"> <li>1. Flora are increasingly at risk and need management, mostly by restricting camping and excess horse traffic (other than on the demarcated and agreed tracks). Some mention of fencing/barricading areas off?</li> <li>2. Dieback is increasingly prevalent and spread must be limited as far as possible by reduced horse activity in the bush area.</li> <li>3. Water use and irrigation developments are referred to.</li> <li>4. Comments are made about fertilizer use and effects on the water table.</li> <li>5. Comments about management of horse manure and urine, especially the concentration in the yards. Untenable to put solid flooring under yards. All users are diligent about manure management practices.</li> <li>6. Action to upgrade and improve signage all over – agreed and supported as Urgent as unauthorized users are a big problem.</li> <li>7. No mention of perimeter fencing and gates on Hall and Karnup Roads for upgrading although definitely needed. Internal fencing between the carpark and pony club fields also needs replacing.</li> <li>8. No mention of old yards or fencing in the bush area.</li> <li>9. Mention made of the degraded and eroded sand areas in the bush area.</li> <li>10. Original vesting for recreation and showgrounds, now parks and recreation. Action to amend vesting purpose to include conservation. Opposed unless use of trails and jumps continue in the way intended under the lease.</li> <li>11. Suggestion that equestrian parking is disorganized and inadequate, with proposed more directed parking system. Disagree as event parking and camping works well on the perimeters of the fields. Visitor and occasional user parking could be enhanced by fencing the old netball courts with access to Karnup Road.</li> </ol>	<ol style="list-style-type: none"> <li>1. Camping is prohibited in the bushland and horses restricted to the marked and agreed tracks. Fencing and barriers will be considered if access through the bushland becomes problematic.</li> <li>2. Horse activity in the bushland is limited to agreed events on demarcated and agreed tracks.</li> <li>3. Noted</li> <li>4. Noted</li> <li>5. Noted</li> <li>6. Noted</li> <li>7. The perimeter fencing is not mentioned specifically, but there is an action to review and replace all fencing as required.</li> <li>8. Noted and incorporated.</li> <li>9. Noted</li> <li>10. Conservation would only be added as an additional vesting purpose, to become “Recreation and Conservation”. All use of the trails and jumps will continue as prescribed under the licence.</li> <li>11. Noted. Text added regarding event parking and camping.</li> <li>12. Noted</li> <li>13. Noted. An action has been added regarding education and planting events with club members.</li> <li>14. This action refers to infrastructure improvements that require planning approval, and to maintenance requests such as for repair of facilities or other infrastructure.</li> <li>15. Noted</li> <li>16. Noted. Conflict is most likely to occur between organized recreational groups (such as the equestrian clubs), and informal users (such as dog walkers) or environmental users.</li> <li>17. Noted</li> </ol>

			<p>12. Mention of the effort and cost of raising surfaces to minimize wetness/flooding.</p> <p>13. Education about flora and perhaps more planting could be undertaken by Shire/Landcare officers to Pony Club members.</p> <p>14. Governance action 1 – what exactly are “improvement, development or requests for works”?</p> <p>15. Under 4.3.2, the description for SHPC is still appropriate.</p> <p>16. Conflict between user groups is mentioned. Currently and for the last years, the equestrian groups have worked well together with no conflict. Relations with the Shire have been equally positive.</p> <p>17. The cross country tracks and jumps are under continuing use, maintenance and management by SHPC.</p>	
10	Department of Planning, Lands and Heritage (Land Use Planning Policy – Bush Forever)	16/12/2020	<p>1. Section 3.4 – dieback – in 2010 comment was provided recommending a management plan to address dieback management, weed control and vegetation protection, in response to a plan to clear two tracks within dieback areas and close any tracks entering dieback free areas. It is unclear whether these tracks have been closed.</p> <p>2. Section 3.4 – dieback – the 2012 management plan has a number of strategies that no longer appear in the 2020 plan (e.g. raising awareness and constructing barriers). It is unclear whether this is because these measures have been undertaken, but clarification is sought as the 2012 plan provides more protection to the bushland than the 2020 plan.</p> <p>3. Section 3.4 – dieback – recommend that informal tracks are closed, especially within dieback free areas, and rehabilitated with local species and brush to deter their use.</p> <p>4. Section 3.4 – biodiversity – recommend an additional action for vegetation condition mapping, as the conservation area is used by the equine club. Condition information is needed to ensure further damage has not occurred, and if so, further actions to protect the site should be undertaken.</p> <p>5. Section 3.4 – fauna – fauna surveys trapped bandicoots until 2004, when a population crash was indicated. It would be beneficial for an updated targeted survey to see if the population has re-established.</p> <p>6. Section 3.4 – fauna – the fauna surveys are out of date and should be repeated at regular intervals. While one action is to review fauna surveys and gather additional information, this is considered to be long term and funding</p>	<p>1. The plan to clear two tracks within dieback areas was abandoned due to the vegetation damage that would result. The tracks through the dieback free areas have remained open.</p> <p>2. Dieback awareness signage was installed in 2020. Construction of barriers to control access to dieback free areas is not currently considered a feasible action due to the level of permitted access through the area and risk to users from barrier construction.</p> <p>3. The single remaining informal track through the dieback free area is regularly used by walkers (with or without dogs). Closing this track would lead to trampling of the bushland by users seeking a new path. The other informal and abandoned tracks have naturally regenerated.</p> <p>4. Noted and incorporated.</p> <p>5. Noted and incorporated</p> <p>6. Noted and incorporated. Surveys which cannot be carried out in-house will always be funding dependent.</p> <p>7. The actions in the revised plan are considered to be adequately defined according to current priorities and the need for ease of understanding by the community. The original plan incorporated so many actions that it was unachievable. The actions in the revised plan have been carefully selected to allow achievement during the life of the plan, at which time new actions will be included in a new revision of the plan.</p> <p>8. Maps of the current tracks and jump locations are included in the club’s licence, and the club must comply with the licence conditions of no expansion or movement. It is agreed, however, that a monitoring program is required, and an action to this effect has been</p>

			<p>dependent.</p> <p>7. Section 3.4 – in the 2012 plan, the targets and strategies are more clearly defined. Suggest the 2020 version incorporates more actions.</p> <p>8. Section 4.4.3 – pressure to exclude horses from the bushland – both plans state that historical use infers a right to continue use, and that the equine club has the opportunity to demonstrate that their use can be carried out safely by monitoring. How is this information obtained from the club? How often is it provided, and what type of information? Clarification is sought. If ongoing use is subject to safe use, an adequate monitoring program that clarifies no impact is required.</p> <p>9. Appendix 3 – fire management strategy – states that a low fuel buffer zone will be maintained adjacent to conservation areas. Is the conservation area based on the land use or management zone? A low fuel buffer zone within the vegetation management area would not be supported.</p> <p>10. It would be useful to have more maps, including of dieback areas, equine facilities (including walking trails, cross-country track, jumps, wash bays, horse yards and parking facilities), vegetation condition and mapped vegetation type.</p> <p>11. The 2020 plan states that the Serpentine Primary School last planted in 2014. It would be beneficial to re-engage the school, and this could be added as an action as part of the bushland rehabilitation and revegetation plan.</p>	<p>incorporated.</p> <p>9. A new map has been added to the fire management strategy that clarifies that the low fuel buffer zone is external to the conservation zone.</p> <p>10. More maps have been included in the management plan, including vegetation type, dieback status, and equine facilities. When vegetation condition has been mapped, this will also be included in the next revision of the management plan.</p> <p>11. An action has been added to re-engage the school for revegetation events.</p>
11	Main Roads WA	18/12/2020	<p>1. Main Roads has no objections.</p> <p>2. Main Roads requests a copy of the Council’s final determination on this proposal.</p>	<p>1. Noted</p> <p>2. Noted</p>
12	Department of Health	21/12/2020	<p>1. DOH has no objection to the draft revised management plan for the reserve.</p>	<p>1. Noted</p>
13	Department of Biodiversity, Conservation and Attractions (Parks and Wildlife Services)	16/2/2021	<p>1. Section 3.3.2 – Flora – Banksia Woodland – recommend second sentence of first paragraph be amended to “The community is listed as endangered under the TEC list Western Australian Minister Environmentally Sensitive Area (ESA) list in policy. The community also met the description, area and condition thresholds in the approved conservation advice for the Commonwealth <i>Environmental Protection and Biodiversity Conservation Act 1999</i> (EPBC Act) listed Banksia woodlands of the Swan Coastal Plain TEC (ranked Endangered).”</p> <p>2. Section 3.3.2 – Flora – Marri Woodland – recommend last sentence of first paragraph be amended to “The</p>	<p>1. Noted and incorporated</p> <p>2. Noted and incorporated</p> <p>3. There are no references to DEC in the section on Fire Management. Does this recommendation relate to the original management plan, rather than the revised version?</p> <p>4. Does this recommendation relate to the original management plan, rather than the revised version? An action has been added to assess the banksia woodlands to determine whether the TEC is present.</p> <p>5. Does this recommendation relate to the original management plan, rather than the revised version? There</p>

			<p>community is listed as vulnerable under the TEC list Western Australian Minister ESA policy list in policy.”</p> <p>3. Section 3.3.2 – Flora – Fire Management – references to DEC should be replaced with DBCA (Department of Biodiversity, Conservation and Attractions).</p> <p>4. Section 3.3.5 – Environmental Characteristics: Biodiversity Strategies – Issue 16 – recommend that the text include a description that “Banksia woodlands in the reserve may be protected under Commonwealth legislation”, that the priority for the target be set as High, and that an additional strategy of “.Assess the Banksia woodlands in the reserve against the description, area and condition thresholds in the EPBC approved conservation advice to determine if the TEC is present” be added, with the responsibility being the Shire.</p> <p>5. Section 3.3.5 – Environmental Characteristics: Biodiversity Strategies – Issue 19 – recommend that the text be amended to include “Regularly updated vegetation condition and weed mapping are required to assess management effectiveness”, an additional target “Maintain or improve vegetation condition, and reduce density and extent of major weeds”, and a strategy “Develop vegetation condition map and a map of boundaries and density of major weeds that are updated biannually”.</p>	<p>are actions to map and monitor weed distribution and prepare and implement a weed control program, and to map and monitor vegetation condition and adjust access as appropriate.</p>
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