

Metropolitan Region Scheme Amendment 1050/33
Stakehill Swamp, Baldivis

Western Australian Planning Commission

**Report and recommendations
of the Environmental Protection Authority**

**Environmental Protection Authority
Perth, Western Australia
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Environmental Impact Assessment Process Timelines

Date	Progress stages	Time (weeks)
19 Jan 2004	Level of Assessment set (following any appeals upheld)	
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Assessment No. 1507

Summary and recommendations

The Western Australian Planning Commission (WAPC) proposes to reserve an area of 201 hectares (ha) of Stakehill Swamp, Baldivis for *Parks and Recreation* (P&R) in the Metropolitan Region Scheme (MRS). This report provides the Environmental Protection Authority's (EPA's) advice to the Minister for the Environment on the environmental factors, conditions and procedures relevant to the proposed scheme amendment.

Section 48D of the *Environmental Protection Act 1986* requires the EPA to report to the Minister for the Environment on the environmental factors relevant to the proposed scheme amendment and on the conditions and procedures to which the proposed scheme amendment should be subject, if implemented. In addition, the EPA may make recommendations as it sees fit.

The EPA is also required to have regard for the principles set out in section 4A of the *Environmental Protection Act 1986*.

Relevant environmental factors and principles

It is the EPA's opinion that the environmental factor relevant to the proposed scheme amendment, which requires detailed evaluation in the report is regionally significant wetland.

The EPA has also provided advice in relation to future land use in the vicinity of the proposed Stakehill Swamp P&R reserve in Section 5.

The following principles were considered by the EPA in relation to the proposed scheme amendment:

- (a) the principle of intergenerational equity; and
- (b) the principle of conservation of biological diversity and ecological integrity.

Conclusion

Since release of the advertised Environmental Review a number of modifications to the proposed scheme amendment have been made by the WAPC. These include:

- boundary modification to include at least all mapped Conservation Category Wetland (CCW) (minor exceptions);
- provision of at least a 10 metre (m) buffer with a 50m buffer where land is managed by the WAPC;
- modification to Old Mandurah Road alignment and South West Metro Rail;
- reservation of all land within the Jarvis Road peninsula (both eastern and western sides of road); and
- recommendation to close the unconstructed portion of Jarvis Road (between Sixty Eight Road and the southern boundary of Lot 156).

The revised P&R reserve boundary now proposes to reserve an area of 201ha.

The EPA has considered the revised boundary and concluded that MRS amendment 1050/33 as modified, to reserve 201ha of Stakehill Swamp for P&R can be implemented to meet the EPA's objectives. This boundary is considered to reflect the minimum extent acceptable in order to protect the significant ecological values and functions of Stakehill Swamp.

In view of the WAPC's acknowledgement of the environmental values of Stakehill Swamp and its commitment to long term protection and management initiatives, no environmental conditions have been recommended.

While the revised P&R reserve boundary reserves at least the accepted CCW boundary of Stakehill Swamp, and is supported, no measures have been included to protect the reserve from adjacent activities and future potential land development pressures.

It is the EPA's position that land use in the vicinity of the Stakehill Swamp P&R reservation will require careful consideration to ensure that no future developments adversely impact the values of the Stakehill Swamp P&R reserve.

The EPA is aware that the finalisation of the P&R reserve boundary is likely to further expectations for redevelopment of land adjacent Stakehill Swamp. Town Planning Schemes can provide effective planning and development controls that may appropriately investigate potential development scenarios and implement development controls or establish protective mechanisms such as buffers. In this regard, the EPA would expect that any proposed change in land use, including a rezoning or development application, would have regard for the protection of Stakehill Swamp and the final P&R boundary. It is expected that they will be supported by appropriate site specific investigations to identify significant values to be protected, potential threats and establishment of compatible land uses so as to demonstrate that the ecological values of the Stakehill Swamp P&R wetland and reserve will be protected from any adverse impacts.

Recommendations

The EPA submits the following recommendations to the Minister for the Environment:

1. That the Minister notes that the proposed scheme amendment being assessed is for the reservation of 201ha of Stakehill Swamp revised boundary – as modified, for P&R in the MRS.
2. That the Minister considers the report on the relevant environmental factor of regionally significant wetland and principles of:
 - (a) intergenerational equity; and
 - (b) conservation of biological diversity and ecological integrity, as set out in Section 3 of the EPA's report.
3. That the Minister notes that the EPA has concluded that the EPA's objectives can be met. The revised boundary of the amendment is considered to reflect the minimum extent acceptable in order to protect the significant ecological values and functions of Stakehill Swamp.
4. That the Minister notes that the EPA has not recommended conditions or procedures in view of the WAPC's commitment to long term protection and management initiatives.
5. That the Minister notes that the EPA has provided Other Advice in relation to future land use in the vicinity of the proposed Stakehill Swamp P&R reserve.

Contents

Page

Summary and recommendations	i
1. Introduction	1
2. The proposed scheme amendment	2
3. Environmental factors and principles	5
3.1 Relevant environmental factors	6
3.2 Regionally significant wetland.....	6
3.4 Relevant environmental principles.....	9
4. Conditions	9
5. Other Advice	9
6. Conclusions	11
7. Recommendations	12

Tables

Table 1: Key characteristics of proposed scheme amendment	3
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Figures

1. Revised P&R Boundary – as modified
2. Conservation Category Wetland boundary including lot numbers

Appendices

1. References
2. Identification of Relevant Principles
3. Summary of Assessment of Relevant Environmental Factors
4. Summary of Submissions and Responsible Authority's Response to Submissions
5. Statement That a Scheme May Be Implemented

1. Introduction

The Western Australian Planning Commission (WAPC), the Responsible Authority, proposes to reserve 201 hectares (ha) of Stakehill Swamp, Baldy for *Parks and Recreation* (P&R) in the Metropolitan Region Scheme (MRS).

Stakehill Swamp is approximately 50 kilometres south-west of Perth in the City of Rockingham. It is bounded by Stakehill Road, Mandurah Road, Sixty Eight Road and Eighty Road and is south-east of Lake Coo loongup. It consists of 34 properties including land owned by the WAPC and in private ownership. The land surrounding Stakehill Swamp has been significantly cleared over time for agricultural purposes such as market gardening.

The length of time that has elapsed since the initial proposal to reserve Stakehill Swamp and the number of investigations undertaken to determine an appropriate boundary demonstrate the particular challenges associated with the subject land. In recognition of the difficulties posed by this reservation over more than a decade, a brief description of this history is provided as background.

Background

In 1992 the inundated portions of Stakehill Swamp, amounting to approximately 126ha were gazetted for protection under the provisions of the *Environmental Protection (Swan Coastal Plain Lakes) Policy 1992*. While this protects a significant portion of Stakehill Swamp it does not protect the entire wetland area.

In 1993, the draft South West Corridor Structure Plan identified approximately 260ha of Stakehill Swamp for conservation. The boundary proposed for reservation as P&R was amended during the advertising of the draft structure plan which concluded that a proposed 50metre buffer from the edge of the wetland was not needed.

The 1993 MRS Amendment 937/33 proposed to reserve approximately 173ha of Stakehill Swamp consistent with the above recommendation. This amendment was not successful in progressing to finalisation due to considerable opposition.

In 1996 the wetland mapping, classification and evaluation system by the Water and Rivers Commission was released. This approach identified Stakehill Swamp as a Conservation Category wetland (CCW) in the 1996 *Wetlands of the Swan Coastal Plain* (Hill et al, 1996). The current Department of Environment (DoE) wetland database maintains Stakehill Swamp as a CCW supported by further ground truthing conducted in 2001 to confirm the boundary.

Bush Forever released in 2000, was prepared to identify and protect areas of regionally significant bushland on the Swan Coastal Plain portion of the Perth Metropolitan Region. Stakehill Swamp is identified as Bush Forever site 275 and meets the criteria of representation of ecological communities, rarity and general criteria for the protection of wetland. The area of Stakehill Swamp identified in Bush Forever is approximately 170ha.

After further studies to define and seek agreement on the wetland boundary, the WAPC initiated an MRS amendment 1050/33 to reserve Stakehill Swamp for P&R in 2001. This amendment recognised the CCW boundary as the extent of the wetland and a basis for reservation and included an additional 50m buffer within the public reserve.

The EPA received the amendment as a referral in accordance with Section 33E of the *Metropolitan Region Town Planning Scheme Act 1959*, and decided not to assess it as it was considered to represent a good environmental outcome. However, this amendment did not

On receiving this revised amendment 1050/33, the EPA determined that the potential environmental impacts associated with the revised amendment required further investigation. In particular, the proposed amendment boundary represented a significant departure from the 2001 amendment. The amendment boundary did not follow the CCW boundary and in some places intruded into the core area of the wetland, particularly on the eastern side of Jarvis Road. The previous proposal for a 50m buffer to the CCW had also been deleted.

The EPA made the decision to formally assess the revised amendment 1050/33 as an Environmental Review and issued a set of instructions for the Responsible Authority (WAPC) in February 2004. The final Environmental Review was received by the EPA in November 2004 and deemed sufficient for advertising. Advertising was conducted by the WAPC from 14 December 2004 until 1 April 2005.

Over 70 submissions were received by the WAPC. Following preliminary consideration of the matters raised in the submissions, the EPA was advised that the WAPC resolved to form a sub-committee to hear submissions.

In reviewing the matters raised in submissions, the subsequent hearings, the overall background and history and advice received regarding the environmental values and significance of the site, the WAPC recommended a number of changes to the advertised P&R reserve boundary.

This Revised P&R Boundary – as modified, is illustrated on Figure 1 as the yellow line. It is this revised and modified boundary which proposes to reserve 201 ha that is the subject of this report and recommendations of the EPA.

In compiling this report, the EPA has considered the relevant environmental factors and principles associated with the proposed scheme amendment, issues raised in public submissions, specialist advice from the DoE and other government agencies, the Responsible Authority's response to submissions and the EPA's own research and expertise.

Further details of the proposed scheme amendment are presented in Section 2 of this report while Section 3 discusses the environmental factor and principles relevant to the proposed scheme amendment. Section 4 explains the EPA's position on the recommendation of Conditions for the amendment. Section 5 provides the EPA's Other Advice, Section 6 presents the EPA's Conclusions and Section 7, the EPA's Recommendations.

References are listed in Appendix 1 and Appendix 2 contains the identification of relevant principles while Appendix 3 reports on the identification of relevant environmental factors. Appendix 4 contains a summary of the public submissions and the Responsible Authority's responses. The summary of public submissions and the Responsible Authority's responses is included as a matter of information only and does not form part of the EPA's report and recommendations. The EPA has considered issues raised in public submissions when identifying and assessing relevant environmental factors and principles. Appendix 5 contains the statement that a scheme may be implemented.

2. The proposed scheme amendment

MRS Amendment 1050/33 as modified by the WAPC proposes to reserve 201ha of Stakehill Swamp for *Parks and Recreation*. The area is currently zoned *Rural* and many of the lots are in private ownership. The proposed amendment boundary is illustrated as the yellow line on Figure 1. Lot locations are shown on Figure 2.

Land proposed for *Parks and Recreation* is reserved in view of its regional significance for ecological, recreation and/or landscape purposes.

The main characteristics of the proposed scheme amendment are summarised in Table 1 below.

Table 1 - Key characteristics of proposed scheme amendment

Element	Description
Stakehill Swamp	Regionally significant wetland. 201ha proposed for reservation as P&R in MRS. All areas identified as CCW by DoE mapping are reserved for P&R with the following minor exceptions: <ul style="list-style-type: none"> • Lot 155; • Lot 157; • Lot 597; and • Lot 596.
Buffer	A minimum buffer of 10m is provided in addition to the CCW mapped boundary. In some instances the buffer extends to include as much as 50m.
Boundary	Some areas proposed for P&R are not identified as either CCW or a buffer such as: Lots along Jarvis Road; Lot 779; and Lot 594
Management	WAPC have committed to preparing a management plan for the reservation.

Since release of the Environmental Review, a number of modifications to the proposed scheme amendment have been made by the Responsible Authority (WAPC). These include:

- boundary modification to include at least all mapped CCW (minor exceptions);
- provision of at least a 10m buffer with a 50m buffer where possible;
- modification to Old Mandurah Road alignment and South West Metro Rail;
- reservation of all land within the Jarvis Road peninsula (both eastern and western sides of road); and
- recommendation to close the unconstructed portion of Jarvis Road.

Details of the changes to the advertised boundary that have resulted in the 'Revised P&R Boundary – as modified' (yellow line) are found in the WAPC's Report on submissions, Appendix 4.

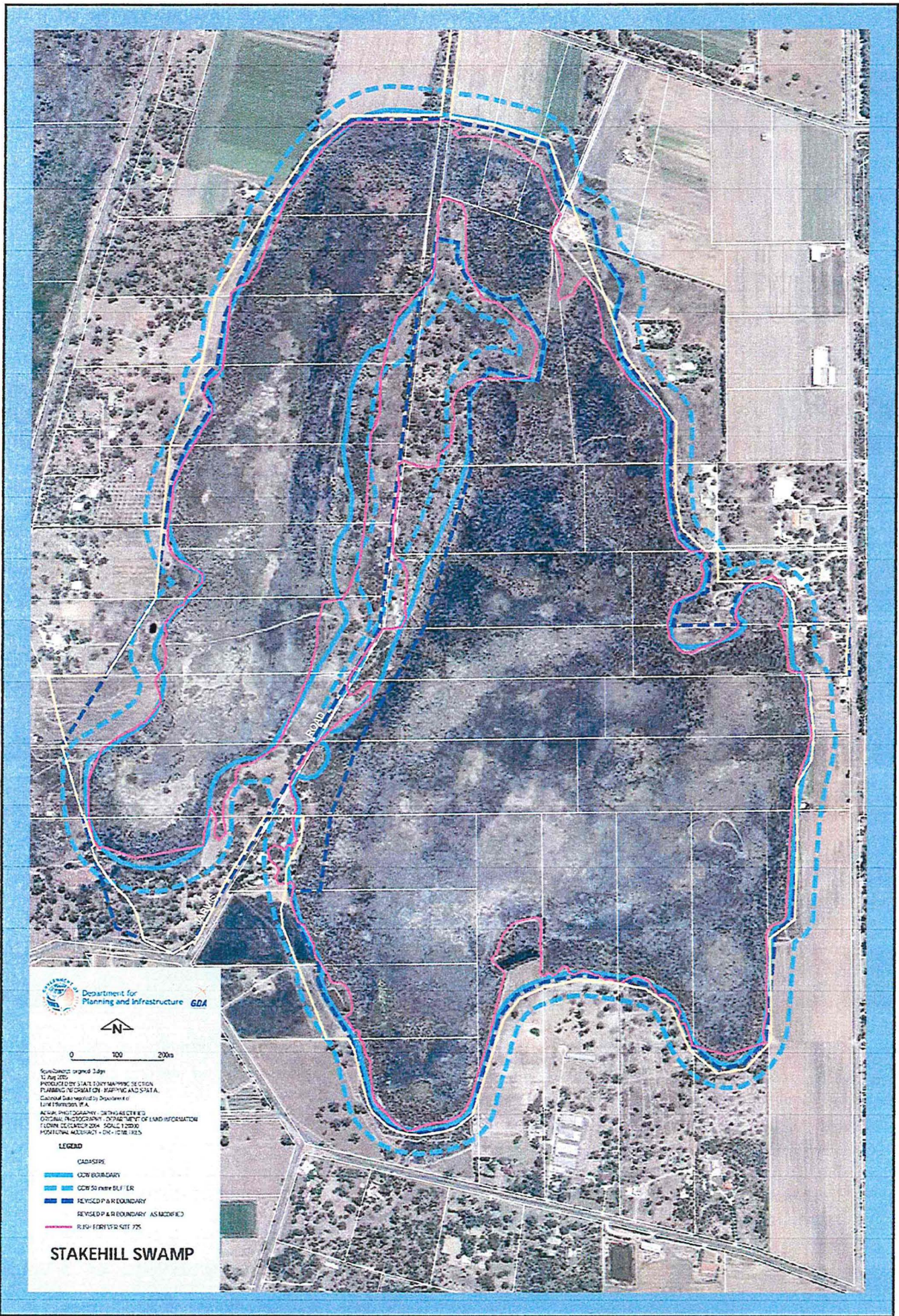


Figure 1: Revised P&R Boundary – as modified

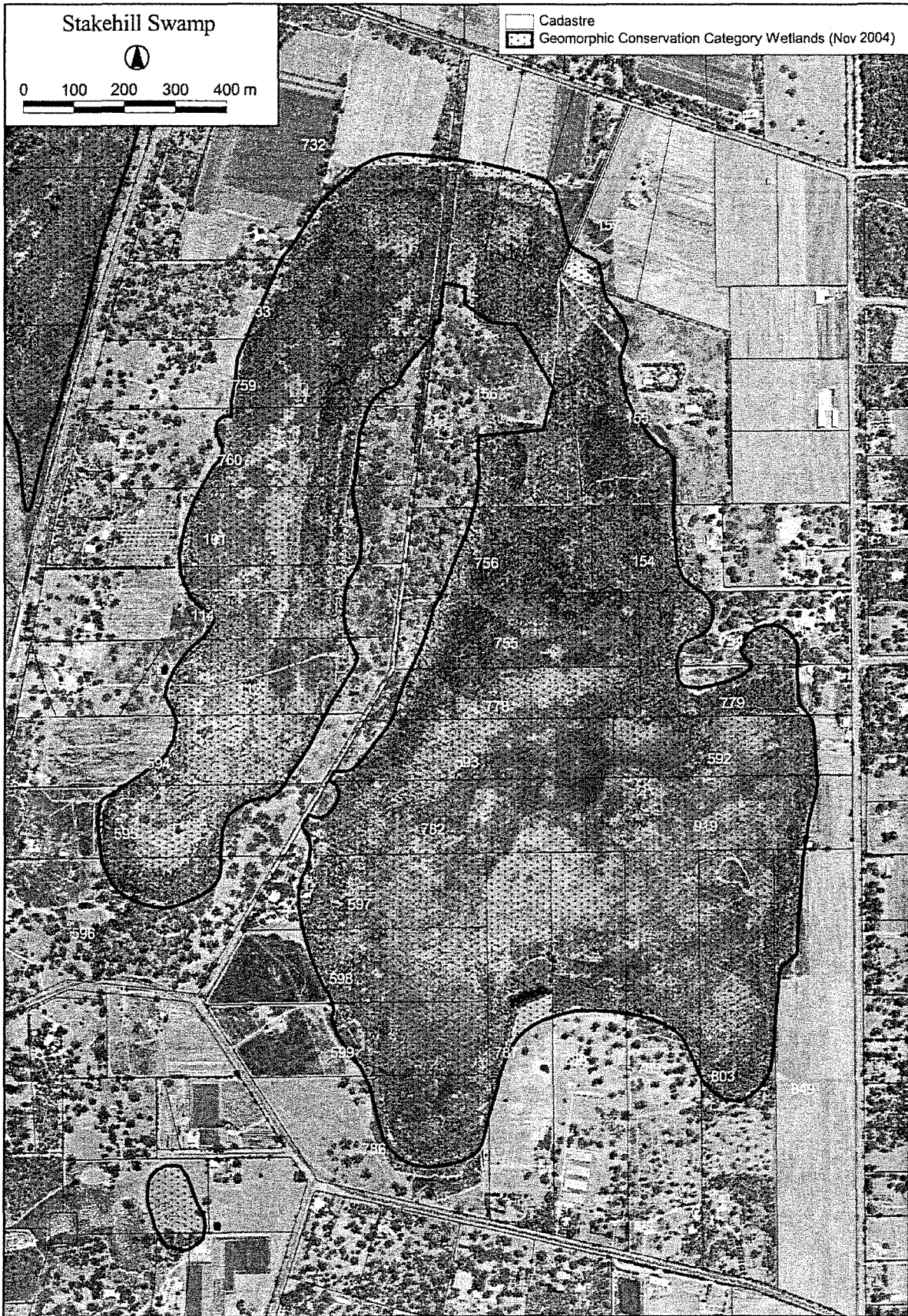


Figure 2: Lot locations.

3. Environmental factors and principles

3.1 Relevant environmental factors

Section 48D of the *Environmental Protection Act 1986* requires the EPA to report to the Minister for the Environment on the environmental factors relevant to the proposed scheme amendment and the conditions and procedures to which the proposed scheme amendment should be subject, if implemented. In addition, the EPA may make recommendations as it sees fit.

It is the EPA's opinion that the environmental factor relevant to the proposed scheme amendment, which requires detailed evaluation in this report is regionally significant wetland.

The above relevant factor was identified from the EPA's consideration and review of all environmental factors generated from the Environmental Review document and the submissions received, in conjunction with the proposed scheme amendment characteristics and alternative approvals processes which ensure that the factor will be appropriately managed.

3.2 Regionally significant wetland

Description

MRS Amendment 1050/33 proposes to reserve approximately 201ha of Stakehill Swamp Revised boundary – as modified, for *Parks and Recreation* in the MRS (see Figure 1).

An appropriate boundary for Stakehill Swamp has been the subject of considerable investigation over the last decade. Various boundaries for reservation have been proposed including the following:

- 1992 – *Environmental Protection (Swan Coastal Plain Lakes) Policy 1992*;
- 1993 – Western Australian Planning Commission (WAPC) reservation;
- 1996 – Water and Rivers Commission (WRC) mapping;
- 1999 – Overall line formulated in the Overall Report (June 1999) ;
- 2000 – *Bush Forever*;
- 2001– O'Brien report - the Stakehill Planning Study undertaken by O'Brien Planning Consultants for the City of Rockingham (2000);
- 2001 – WRC ground truth mapping;
- 2001 – WAPC Amendment 1050/33 1;
- 2003 – WAPC Amendment 1050/33 2;
- 2004 – Draft *Environmental Protection (Wetlands) Policy 2004*; and
- 2005 – WAPC revised boundary – as modified.

Figure 1 identifies the most recent proposed amendment boundaries:

- 2001 line (pale blue – solid and dashed);

- 2003 line (navy); and
- 2005 line (yellow).

The EPA understands that not all the above boundary proposals have been designed based on environmental values alone. A number of boundaries have been proposed with a view to reflecting the outcome of consultation with various landowners. However, the proposal that is currently before the EPA and that is the subject of this report and recommendations is the most recent 2005 Revised P&R boundary – as modified.

Assessment

The area considered for assessment of this factor is land contained within the yellow line on Figure 1, Revised Boundary – as modified. It amounts to 201ha and generally includes the mapped extent of the DoE recognised CCW plus an additional minimum 10m buffer, which in some instances is up to 50m.

The EPA's environmental objective for this factor is to maintain the integrity, ecological functions and environmental values of wetlands.

EPA Position Statement No. 4 *Environmental Protection of Wetlands* (EPA, 2004), provides the EPA's position on the significant environmental values and functions of wetlands and the EPA's principles for environmental protection of wetlands.

The EPA recognises that wetlands provide important wildlife habitats and are among the most biologically productive and diverse habitats. Wetlands provide recreational and landscape amenity through their intrinsic beauty and play an integral role in water quality protection and balance.

The continued degradation and loss of wetland habitat in Western Australia, particularly on the Swan Coastal Plain from land use practices and the pressures of development has been well documented. The EPA has previously estimated that some 80% of wetlands on the Swan Coastal Plain have been lost and that most of the remainder are heavily modified. Of the remainder, only 15% are estimated to exhibit high ecological values and are evaluated as CCW.

Therefore, those wetlands that do remain and are evaluated as exhibiting high ecological values worthy of conservation are considered a priority for protection.

Item 4.1 of Position Statement No. 4 provides the EPA's overarching statement of goals, as follows:

- protect the environmental values and functions of wetlands in Western Australia;
- protect, sustain and where possible, restore the biological diversity of wetland habitats in Western Australia;
- protect the environmental quality of the wetland ecosystems of Western Australia through sound management in accordance with the concept of 'wise use' ... and ecologically sustainable development principles, regardless of land use or activity; and
- have as an aspirational goal no net loss of wetland values and functions (EPA, 2004).

The high ecological values of Stakehill Swamp have been established over more than a decade.

Seminuik (1988) identified that Stakehill Swamp belongs to the Stakehill suite of wetlands which are a series of local sumplands in interdunal swales of the Spearwood Dune System. Stakehill Swamp provides an important ecological function due to the variety of habitats

which includes open water, sedgelands and paper bark forests important to fauna. The ecological values of Stakehill Swamp were also established as part of the draft Perth's Bushplan evaluation which culminated in *Bush Forever* (Government of Western Australia 2000). The wetland mapping, classification and evaluation system by the Water and Rivers Commission identified Stakehill Swamp as a CCW in the 1996 *Wetlands of the Swan Coastal Plain* (Hill et al, 1996). The current Department of Environment (DoE) wetland database maintains Stakehill Swamp as a CCW with further ground truthing to confirm the boundary of the wetland conducted in 2001. The boundary of the CCW is shown on Figure 2. Supplementary flora and fauna investigations were also undertaken by ATA Environmental in 2004 and form part of the Environmental Review.

The condition of the uncleared wetland vegetation associated with Stakehill Swamp ranges from *Very Good* to *Pristine*. It should be noted that the advertised Amendment omitted wetland and dryland vegetation in *Excellent* condition on the eastern side of Jarvis Road and an area of dryland vegetation in *good* condition in the southern portion of Lot 803. The modification to include these areas in the revised amendment is strongly supported by the EPA. Wetlands however are not limited to the vegetated areas and are also defined by areas that assist with retention of their important hydrological functions. Although there are historically cleared areas within the revised amendment boundary these areas are considered important to maintaining the hydrological function of the wetland and are unlikely to be supported for development. Jarvis Road in particular bisects Stakehill Swamp. This land, because of its hydraulic connectivity, is unlikely to be supported for redevelopment and land uses including residential within cleared areas are viewed by the EPA as likely to have a significant impact on the wetland through increased nutrients and pollutants. In the absence of a reticulated sewerage system it is unlikely that the significant environmental values could be protected. In addition, were Jarvis Road to be developed, an appropriate buffer to the wetlands would not be achieved.

In view of the current and historic investigations undertaken, the EPA accepts the mapped extent of the wetland boundary to be the CCW boundary established by the DoE in 2001. The wetland exhibits high ecological values worthy of CCW evaluation.

The reservation for P&R of Stakehill Swamp in the MRS is consistent with the EPA principles stated above. The 2005 revised boundary – as modified, is considered to be significant improvement on the previous 2003 (navy blue line) in that it recognises the requirement to at least protect the core wetland values within the accepted CCW boundary.

The EPA notes the WAPC acknowledgement of the significant environmental values of Stakehill Swamp. The WAPC has committed to undertaking a coordinated approach with Government agencies and the City of Rockingham to the implementation of future management of the P&R reserve which will include the preparation of a management plan for the larger area. In view of the WAPC's commitment to long term protection and management initiatives, no environmental conditions have been recommended.

The EPA has considered the revised boundary and concluded that MRS amendment 1050/33 as modified, to reserve 201ha of Stakehill Swamp for P&R can be implemented to meet the EPA's objectives. This boundary is considered to reflect the minimum extent acceptable in order to protect the significant ecological values and functions of Stakehill Swamp. Recognising that this is the minimum extent acceptable, the EPA has provided Other Advice with respect to buffer treatment during future rezoning or development (see Section 5).

Summary

Having particular regard to the:

- (a) small number of wetlands remaining on the Swan Coastal Plain exhibiting high ecological values worthy of CCW evaluation;
- (b) intention to reserve Stakehill Swamp in recognition of its status as CCW for its protection as *Parks and Recreation*;
- (c) the extent of the Revised P&R boundary – as modified, that recognises the CCW boundary;
- (d) the proposed reservation of the Jarvis Road area;
- (e) the proposed closure of the unconstructed portion of Jarvis Road (between Sixty Eight Road and the southern boundary of Lot 156);
- (f) the recognition of the importance of a ‘buffer’ to the reserve to separate adjacent land uses and the EPA’s expectation that it will be addressed during future rezoning or development proposals; and
- (g) the WAPC’s commitment to long term protection and management initiatives,

and consistent with the EPA’s principles contained in Position Statement No. 4, it is the EPA’s opinion that the proposed scheme amendment 1050/33 revised P&R boundary – as modified, if implemented, can meet the EPA’s environmental objective for this factor without the implementation of any conditions. The revised boundary of the amendment is considered to reflect the minimum extent acceptable in order to protect the significant ecological values and functions of Stakehill Swamp.

3.3 Relevant environmental principles

In preparing this report and recommendations, the EPA has had regard for the object and principles contained in s4A of the *Environmental Protection Act (1986)*. Table 2 (Appendix 2) contains a summary of the EPA’s consideration of the principles.

4. Conditions

Section 48D of the *Environmental Protection Act 1986* requires the EPA to report to the Minister for the Environment on the environmental factors relevant to the proposed scheme amendment and on the conditions to which the proposed scheme amendment should be subject, if implemented. In addition, the EPA may make recommendations as it sees fit.

Having considered the Responsible Authority’s environmental management measures and the information provided in this report, the EPA has not recommended any conditions.

5. Other Advice

Land use surrounding Stakehill Swamp

As described in EPA Position Statement No. 4, wetlands on the Swan Coastal Plain are increasingly subject to damaging land use practices and development pressures that have resulted in significant loss of wetland values and functions over time. Furthermore, only 15% of remaining wetlands exhibit high ecological values.

While the proposed amendment revised P&R boundary – as modified, reserves at least the accepted CCW boundary of Stakehill Swamp, and is supported, no measures have been included to protect the reserve from adjacent activities and future potential land development pressures.

The proposed minimum 10m ‘management buffer’ as described in the WAPC Report on Submissions provides a 10m separation from the CCW boundary that incorporates access and fire management and is not likely to adequately protect the reserves values.

It is the EPA’s position that land use in the vicinity of the Stakehill Swamp P&R reservation will require careful consideration to ensure that no future developments adversely impact the values of the Stakehill Swamp P&R reserve.

The EPA is aware that the City of Rockingham has previously expressed an intention to proceed with preparing a Town Planning Scheme (TPS) amendment to rezone land within the Stakehill Precinct 4B that may consider *Rural Residential* and *Special Residential* purposes, once the P&R reservation boundary has been finalised (ATA, 2004).

It is therefore considered appropriate at this time for the EPA to provide Other Advice as to its understanding and expectations for the control of activities and development in the land surrounding Stakehill Swamp.

Examples of the kinds of activities that can degrade wetlands are noted in the EPA’s Position Statement and include:

- draining;
- clearing of vegetation;
- excess abstraction of water from aquifers;
- introduction of exotic plants and animals adjacent to wetlands;
- grazing of stock; and
- developments, particularly those resulting in increased numbers of people living nearby (EPA, 2004) which can lead to increase in nutrient export to the wetlands.

The EPA supports the use of appropriate planning and separation distances – buffers – to limit the extent to which potentially incompatible land uses can impact each other and notes that site specific data as to land use capability can assist in determining an appropriate separation.

Town Planning Schemes (TPS) can provide effective planning and development controls that may appropriately investigate potential development scenarios and implement protective mechanisms such as buffers.

In this regard, the EPA would expect that any proposed change in land use, including a rezoning or development application, would have regard for the protection of Stakehill Swamp and the final P&R boundary through consideration of at least the following;

- detailed planning and appropriate site specific investigations;
- identification of significant values to be protected;
- potential threats/impacts;
- compatible land uses;
- acceptable separation distances;

- the use of appropriate technology;
- TPS provisions; and
- required development conditions,

and should demonstrate that the ecological values of the Stakehill Swamp P&R wetland and reserve will be protected from any adverse impacts.

6. Conclusions

Since release of the advertised Environmental Review a number of modifications to the proposed scheme amendment have been made by the WAPC. These include:

- boundary modification to include at least all mapped CCW (minor exceptions);
- provision of at least a 10m buffer with a 50m buffer where land is managed by the WAPC;
- modification to Old Mandurah Road alignment and South West Metro Rail;
- reservation of all land within the Jarvis Road peninsula (both eastern and western sides of road); and
- recommendation to close the unconstructed portion of Jarvis Road (between Sixty Eight Road and the southern boundary of Lot 156).

The revised P&R reserve boundary now proposes to reserve an area of 201ha.

The EPA has considered the revised boundary and concluded that MRS amendment 1050/33 as modified, to reserve 201ha of Stakehill Swamp for P&R, can be implemented to meet the EPA's objectives. This boundary is considered to reflect the minimum extent acceptable in order to protect the significant ecological values and functions of Stakehill Swamp.

In view of the WAPC's acknowledgement of the environmental values of Stakehill Swamp and its commitment to long term protection and management initiatives, no environmental conditions have been recommended.

While the revised P&R reserve boundary reserves at least the accepted CCW boundary of Stakehill Swamp, and is supported, no measures have been included to protect the reserve from adjacent activities and future potential land development pressures.

It is the EPA's position that land use in the vicinity of the Stakehill Swamp P&R reservation will require careful consideration to ensure that no future developments adversely impact the values of the Stakehill Swamp P&R reserve.

The EPA is aware that the finalisation of the P&R reserve boundary is likely to further expectations for redevelopment of land adjacent Stakehill Swamp. Town Planning Schemes can provide effective planning and development controls that may appropriately investigate potential development scenarios and implement development controls or establish protective mechanisms such as buffers. In this regard, the EPA would expect that any proposed change in land use, including a rezoning or development application, would have regard for the protection of Stakehill Swamp and the final P&R reserve boundary. It is expected that they will be supported by appropriate site specific investigations to identify significant values to be protected, potential threats and establishment of compatible land uses so as to demonstrate that the ecological values of the Stakehill Swamp P&R wetland and reserve will be protected from any adverse impacts.

7. Recommendations

Section 48D of the *Environmental Protection Act 1986* requires the EPA to report to the Minister for the Environment on the environmental factors relevant to the proposed scheme amendment and on the conditions and procedures to which the proposed scheme amendment should be subject, if implemented. The EPA is also required to have regard for the principles set out in section 4A of the *Environmental Protection Act 1986*. In addition, the EPA may make recommendations as it sees fit.

The EPA submits the following recommendations to the Minister for the Environment:

1. That the Minister notes that the proposed scheme amendment being assessed is for the reservation of 201ha of Stakehill Swamp revised boundary – as modified, for P&R in the MRS.
2. That the Minister considers the report on the relevant environmental factor of regionally significant wetland and principles of :
 - (c) intergenerational equity; and
 - (d) conservation of biological diversity and ecological integrity, as set out in Section 3 of the EPA's report.
3. That the Minister notes that the EPA has concluded that the EPA's objectives can be met. The revised boundary of the amendment is considered to reflect the minimum extent acceptable in order to protect the significant ecological values and functions of Stakehill Swamp.
4. That the Minister notes that the EPA has not recommended conditions or procedures in view of the WAPC's commitment to long term protection and management initiatives.
5. That the Minister notes that the EPA has provided Other Advice in relation to future land use in the vicinity of the proposed Stakehill Swamp P&R reserve.

Appendix 1

References

ATA Environmental (2004) *Metropolitan Region Scheme Amendment No. 1050/33 Stakehill Swamp, Baldivis Environmental Review*. Prepared for the Western Australian Planning Commission. ATA, December 2004.

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Appendix 2

Identification of Relevant Principles

Identification of Relevant Principles

PRINCIPLES		
Principle	Yes/No	Consideration
<p>1. The precautionary principle <i>Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. In the application of the precautionary principle, decisions should be guided by —</i></p> <p>(a) <i>careful evaluation to avoid, where practicable, serious or irreversible damage to the environment; and</i></p> <p>(b) <i>an assessment of the risk-weighted consequences of various options.</i></p>	No	The EPA does not regard the proposed amendment boundary – as modified, as representing a serious threat to Stakehill Swamp.
<p>2. The principle of intergenerational equity <i>The present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations.</i></p>	Yes	The EPA regards the proposed amendment boundary – as modified, as protecting Stakehill Swamp for future generations.
<p>3. The principle of the conservation of biological diversity and ecological integrity <i>Conservation of biological diversity and ecological integrity should be a fundamental consideration.</i></p>	Yes	The EPA regards the proposed amendment boundary – as modified as conserving the biological diversity and ecological integrity of Stakehill Swamp.
<p>4. Principles relating to improved valuation, pricing and incentive mechanisms</p> <p>(1) <i>Environmental factors should be included in the valuation of assets and services.</i></p> <p>(2) <i>The polluter pays principle — those who generate pollution and waste should bear the cost of containment, avoidance or abatement.</i></p> <p>(3) <i>The users of goods and services should pay prices based on the full life cycle costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any wastes.</i></p> <p>(4) <i>Environmental goals, having been established, should be pursued in the most cost effective way, by establishing incentive structures, including market mechanisms, which enable those best placed to maximise benefits and/or minimise costs to develop their own solutions and responses to environmental problems.</i></p>		

PRINCIPLES		
Principle	Yes/No	Consideration
	No	The EPA does not regard the proposed reservation of Stakehill Swamp as presenting any issues relevant to the principle valuation, pricing and incentive mechanisms.
<p>5. The principle of waste minimisation All reasonable and practicable measures should be taken to minimise the generation of waste and its discharge into the environment.</p>		
	No	The EPA does not regard the proposed reservation of Stakehill Swamp as presenting any issues relevant to the principle of waste minimisation.

Appendix 3

Summary of Assessment of Relevant Environmental Factors

Summary of Assessment of Relevant Environmental Factors

RELEVANT FACTOR	EPA OBJECTIVES	EPA ASSESSMENT	EPA ADVICE
Wetlands	To maintain the integrity, ecological functions and environmental values of wetlands	<ul style="list-style-type: none"> • Proposed reservation is consistent with principles of EPA Position Statement No. 4. • Responsible Authority has made appropriate commitments to manage the reserve for its protection. 	<p>This is a relevant environmental factor for assessment.</p> <p>Having particular regard to:</p> <ul style="list-style-type: none"> • the acknowledgement of the significant values associated with Stakehill Swamp as generally being contained within the CCW boundary; • the proposed reservation for P&R consistent with this acknowledgement; • the proposed reservation boundary – as modified; • the commitment by the Responsible Authority (WAPC) to prepare an Environmental Management Plan for the reservation; • the incorporation of a management buffer; and • the acknowledgement of the required management of adjacent land uses, <p>it is the EPA's opinion that the proposed scheme amendment (revised boundary) can be managed to meet the EPA's objective.</p>
Flora	To maintain the abundance, diversity, geographic distribution and productivity of flora at species and ecosystem levels through the avoidance or management of adverse impacts and improvement in knowledge.	<ul style="list-style-type: none"> • The proposed reservation boundary – as modified protects the significant flora values of Stakehill Swamp. • Responsible Authority has made appropriate commitments to manage the reserve for its protection. 	This is not an environmental factor requiring detailed evaluation.
Fauna	To maintain the abundance, diversity, geographic distribution and productivity of fauna at species and ecosystem levels through the avoidance or management of adverse impacts and improvement in knowledge.	<ul style="list-style-type: none"> • The proposed reservation boundary – as modified protects the significant fauna values of Stakehill Swamp. • Responsible Authority has made appropriate commitments to manage the reserve for its protection. 	This is not an environmental factor requiring detailed evaluation.

RELEVANT FACTOR	EPA OBJECTIVES	EPA ASSESSMENT	EPA ADVICE
Water (surface or ground)	To maintain the quantity of water so that existing and potential environmental values, including ecosystem maintenance, are protected.	<ul style="list-style-type: none"> • The reserve protects the surface and groundwater water resources of Stakehill Swamp within the P&R boundary. 	This is not an environmental factor requiring detailed evaluation.
Conservation Areas	To protect the environmental values of areas identified as having significant environmental attributes.	<ul style="list-style-type: none"> • The proposed reserve boundary – as modified protects the significant values of the Stakehill Swamp identified as worthy of conservation. 	This is not an environmental factor requiring detailed evaluation.
Visual Amenity.	To ensure that aesthetic values are considered and measures are adopted to reduce visual impacts on the landscape as low as reasonably practicable	<ul style="list-style-type: none"> • The proposed reservation of Stakehill Swamp protects the significant amenity values of the Stakehill Swamp. 	This is not an environmental factor requiring detailed evaluation.

Appendix 4

Summary of Submissions and Responsible Authority's Response to Submissions

Submission	Issue/Comment
No objection	
70, 4, 2, late submissions	No objection to current proposal
1	No objection to current proposal. The Western Australian Planning Commission is reminded of its obligations with respect to the Aboriginal Heritage Act 1972.
58	While the MRS boundary largely uses the CCW boundary as extent of P&R there are a number of locations where the boundary varies from this alignment. Given the significant difficulties experienced over many years between landowners and government authorities to resolve the boundary issues associated with the wetland and the detailed ER process which has taken place, the proposed P&R reserve boundary in the MRS Amendment is supported and the planning for the precinct should now be progressed.
Reservation	
7	Object to reservation – do not believe Stakehill Swamp is regionally significant.
66	Object to P&R reservation – land has been well managed in private ownership, the reservation is an impost to landowners, 50m buffer and associated constraints further impedes potential business growth. If there is a 50m buffer – it should be within the wetland boundary.
6, 7, 44, 50, 51, 56, 57	Support the Everall line only.
45	Object where the proposed MRS deviates from the Everall line – on Lot 156 it varies in 3 locations. This variation would not allow access to property from Perth side cuts off access to Sixty Eight road and isolates property. variation in centre of property is not ‘wetland’ but a higher plane covered with Tuarts in north western extremity – the variation is cleared pasture land. Suggest – retain ownership of access from Sixty Eight road through to property.

Submission	Issue/Comment
	<p>Adjust southern boundary to northern section to run as a continuation of Everall line – our land east of access road could be added to reservation.</p> <p>Where road access to Sixty Eight branches to Lot 155 the reservation boundary to run along the southern side of the branch to Lot 155.</p> <p>Reservation not to extend across entry to Sixty Eight road on Lot 156.</p> <p>The reserve boundary to be readjusted as proposed.</p>
Support	
5, 8-42, 48, 49, 52, 53, 55, 58, 59, 60, 61, 62, 63, 67	Support the proposal to reserve Stakehill Wetland to Parks and Recreation
4, 5, 8-42, 48, 49, 52, 53, 59, 61, 62, 63, 67, 69	The Reserve should be added to the Rockingham Lakes Regional Park
69	<p>In principle CALM supports the proposal to reserve Stakehill Swamp, however CALM objects to the proposed boundary because its compromises nature conservation objectives does not provide an adequate buffer and presents an impractical management boundary which will likely cause significant long term management conflicts</p> <p>The entire wetland and an appropriate buffer should be included in the P&R reservation as per normal policy for a CCW.</p> <p>The potential for ecological links should be addressed.</p>
48, 61, 64, 67	<p>Ideally land would be set aside for a corridor between Stakehill Swamp and Lake Walyungup and preserving the central Jarvis Road area as a high feeding ground for animals and birds. This would be invaluable both for fauna movement and ecological functionality. A brief glance at the region map will reveal the significance of this link.</p> <p>Submission 64 promotes corridor to the south</p>
Boundary	
63	<p>Supports the rezoning – but the current boundary does not encompass the entire CCW boundary and associated 50m minimum buffer. The current proposed boundary is not supported.</p> <p>The proposed boundary east of Jarvis Road extends within the mapped CCW boundary and in</p>

Submission	Issue/Comment
	<p>identified areas of Excellent vegetation condition. Omitting this area from the reserve will potentially degrade the wetland values reduce the viability of an important ecological link between two wetland areas and create small lots which may become difficult to manage. Lots below 2ha require reticulated water supply and on site effluent disposal requires a 50m separation distance to the wetland and at least 1.2m to groundwater</p>
48, 55, 59, 61, 60	<p>Support the rezoning but the area should be larger and should be based on ecological values It is hard to see why it was possible to adjust the reserve boundary around Lot 779 also purchased by the WAPC including some cleared areas outside the buffer zone, yet leave out vegetation in Excellent condition from the proposed reserve within Lot 593.</p>
67	<p>It is strongly suggested that the narrow section of land between the two branches of the wetland are added to the A Class Reserve as it would be secure and highly valuable fauna habitat The Railway reserve defining the boundary of the MRS Amendment is supported however the vegetated buffer for the wetland needs to be included in the A class reserve rather than railway land.</p>
62	<p>Support the proposed reservation but the area should be larger. The boundary should be ecological not what landowners want. The 1992 WAPC proposal was good and based on Bush Forever and CCW boundaries with a recommended 50m buffer. The current proposal goes back on this Suggested boundary Starting at the southwest corner. The rail reserve is now not required for rail, they have proposed a road should be built in the buffer and the rail moved further west. Any extension of the Mandurah road should be outside the buffer area. An unfenced Mandurah road will provide access, water and drainage issues. We suggest any development if it is allowed for road or rail include fauna exclusion fencing. From Lot 763 around the outside of the wetland and back around to Stakehill road Lot 599 the P&R reserve should be the wetland buffer boundary or blue dotted line. On the western side of Jarvis Road the boundary is supported along the road boundary. This has been made easier as most blocks have already been purchased back by the WAPC. On the eastern side of Jarvis road the suggested boundary is ridiculous. It is obviously to appease 1 or 2 landowners. On this side there are 5 different owners. Lots 593, 598 & 599 have already been</p>

Submission	Issue/Comment
	<p>purchased back by WAPC under Bush Forever. These need immediate inclusion Of the others 2 owners 775 & 778 want the reservation to cover all of their property. Ultimately they will probably sell to the WAPC then only then deciding what size they may wish or alternatively to live with a P&R reserve.</p>
65	<p>The reservation should be divided into at least 4 quadrants by constructing roads with the surrounding area including some of the current conservation areas being used for residential housing. The so called sumpland areas should be excavated to create habitat for species to be preserved.</p>
Buffer	
52, 62	<p>The wetland should be properly protected by a 50m buffer of dryland and large firebreak or ring road around the perimeter outside the buffer zone or should be fenced.</p>
5, 8-42, 48, 52, 53, 55, 61, 62, 64	<p>Object to the 50m buffer being left in private ownership</p>
48, 67, 69	<p>The proposed boundary does not apply adequate buffers appropriate for a conservation category wetland which is inconsistent with Department of Environment & policy. Larger (100m) buffer zone to surround the wetland. A corridor to be established on the south side to link Stakehill Reserve and Ansty and Paganoni Reserves.</p>
45, 46, 47, 50, 51, 54	<p>Object to any buffers being added around the Everall line. The proposed 50m buffer is excessive and not required – a site visit is required to physically view this. Buffer should only be put in place if the land was being developed into smaller sized blocks.</p>
6	<p>Buffer should be reduced to 10m as recommended in the O'Brien report and remain in private</p>

Submission	Issue/Comment
	ownership. The properties have been in private ownership for several generations and the CCW is still considered to be in excellent condition for the most part.
Fire	
65, 69	The proposed boundary would not allow adequate fire management or management access which would reduce the ability to protect the area from fire, and which may threaten the nature conservation values of the area and leave adjacent houses at risk. This is particularly the case in the area east of Jarvis Road.
56 - 58	Given the recent fires that have affected Stakehill Swamp, it is important that the abovementioned Management Plans pay close attention to fire management and relation hazards (including access).
48, 51,52, 67	A strategic fire break or management access track should be established around the entire wetland on the outer perimeter of the buffer zone.
6	Extending the reservation to west Jarvis Road increases fire risk.
45, 57	Extending the reservation across Jarvis Road north will mean a fire bridge and inhibit fire-fighting.
Jarvis Road	
59	The rezoning should include the CCW and its buffer east of Jarvis Road.
5, 8-42, 48, 49, 52, 53, 61, 62, 67	Jarvis Road should be closed
64	No further development either side of Jarvis Road. Jarvis Road to be closed to non residential through traffic except for emergency.
45, 47, 51, 56, 57	Want access through the whole of Jarvis Road as it is a gazetted road.
5, 8-42, 48, 49, 52, 55, 61, 62, 67	The Western side of Jarvis Road should be included in this (P&R) reservation
6, 45	The reservation to Jarvis Road on the western side is excessive – it impacts on the cleared land.

Submission	Issue/Comment
	Western side of Jarvis Road to be realigned with Everall line.
5, 8-42, 49, 52, 53, 55, 61, 62, 69	Object to land being left out of the P&R reserve on the eastern side of Jarvis Road. Blocks already owned by the WAPC 589, 599 and 593 should be included.
51	Do not agree with the land on the east of the property fronting the east side of Jarvis Road being included in the P&R reserve. It is excessive and adversely impacts on the potential value of cleared land along Jarvis Road.
Management/access	
69	Need for better management access in the area east of Jarvis road. As a minimum CALM would require a management buffer of at least five metres which includes a track with four metres running surface and a fence if required. It is not clear whether an adequate management buffer is allowed for around the majority of the wetland; the boundary east of Jarvis road certainly does not allow for this requirement. The document states that public access should be managed through the provision of dual use paths. Further planning would be required to determine appropriate forms of recreation at Stakehill Swamp and appropriate facilities. The inclusion of areas of cleared land within the proposed Parks and Recreation reservation may be appropriate for areas to facilitate recreation and is supported
59	The reserve to be transferred to the Conservation Commission for future management by CALM.
58	The proposed P&R reservation impacts upon the battleaxe access to Lot 155 Sixty Eight Road. It is important that the proposed reservation not prevent future access to the improvements on Lot 155. Upon purchase of the preserved portion of Lot 155 arrangements should be put in place to either provide an alternative access to Lot 155 (WAPC responsibility) or to grant an easement over the existing driveway or provide alternative access.
5, 8-42,59, 61, 62	The outside buffer boundary be fenced as a matter of urgency for overall protection of the reserve. I also point out the area is rich in fauna to mention just a few, Bandicoot, Honey Possum, Brush tail Possum, Monitor Lizard, Wedge tail eagle and of course Kangaroos.

Submission	Issue/Comment
5, 8-42, 48, 49, 61, 62	Outside the buffer a ring road should be created as a part of any subdivision or development as the open space commitment.
64	Undeveloped lots that have been acquired by the WPAC to be unfenced so native fauna can move freely between two sides of the swamp.
55	Adverse impacts are well documented in the ER.
65	Support some of proposed conservation area to be used for residential housing. It is recognised that if the area is more densely populated there are going to be more people interested in the welfare of the bush and created wetlands.
Management Plans	
69	The ER defers a number of issues to subsequent planning and states that a number of management plans will need to be prepared. The objectives of each plan, agency responsibility and resourcing are not outlined and these details need careful consideration and resolution. Commitments to implementing plans and strategies should be discussed with the managing agency for the area.
58	<p>The ER is not clear about which areas these Management plans and strategies should apply to or what issues are to be addressed and who would prepare these documents.</p> <p>The preparation of these plans and strategies will entail considerable work. These plans should be prepared concurrently with the local Town Planning Scheme Amendment process to ensure that management planning and strategies are properly integrated with the development of land use controls, scheme provisions, the Rural Concept Plan and Subdivision Guide Plans.</p> <p>It is not appropriate for the City to prepare these documents. They should be prepared by the WAPC (as proponent for the Amendment) or CALM (as future land manager).</p>
52, 59, 67	It is essential that an Environmental Management Plan for the wetland is prepared in the near future and implemented. The plan would include but is not limited to best practice groundwater

Submission	Issue/Comment
	<p>management, flora and fauna conservation, fire control, weed control and so on. This plan needs to be underpinned by thorough long-term flora and fauna surveying; the impacts of adjacent land uses, including market gardens on the hydrology of the wetlands and the management of threats to wetland ecology and functionality such as fire and weeds.</p>
Land use	
69	<p>Whilst adequate wetland buffers should be included in the P&R reservation, CALM is supportive of the proposal to investigate alternative mechanisms to ensure sustainable management of the properties adjoining the wetland such as through the City of Rockingham TPS and covenants. Particular consideration should be given to preventing land uses or developments that may negatively impact on Stakehill Swamp through changing the hydrological regime or increasing nutrients and pollutants in the wetland.</p>
63	<p>It is proposed that an alternative to the inclusion of a wetland buffer into the MRS reservation is to retain these areas in private ownership and control landuses through the Town Planning Scheme. As these areas would remain in private ownership, there is no guarantee that the wetland and buffer will be managed appropriately.</p>
50, 54, 56, 57	<p>Need agreed building envelopes on the remainder of our block outside the MRS line. There should be no restrictions on the remaining land outside the Everall line</p>
64	<p>There is no mention of the large Stake Hill Water Mount underneath the wetland and the risk of pollution from densely inhabited lots.</p>
58	<p>Support previous resolution to support the introduction of Special Rural zoning into Precinct 4B of the City's Rural Land Strategy.</p>
67	<p>Future development following the MRS Amendment is likely to result in the loss of a large number of locally native Tuart and Marri trees. The preservation of these trees however is critical in order to provide habitat, resting places and food sources for native fauna.</p>

Submission	Issue/Comment
Transport issues	
3, 43	The modified concept for the South West Metro Rail includes an extension and re-alignment of the Old Mandurah Road in the Stakehill Swamp area, southwards along the east side of the proposed railway to intersect with Stakehill Road. The modified concept will result in an encroachment on the south-west extremity of the Parks and Recreation reservation proposed in MRS Amendment 1050/33. I therefore request a modification to MRS Amendment 1050/33 to include the re-aligned Old Mandurah Road as "Other Regional Road" rather than P&R as proposed. This proposal requires 0.5ha of land outside the road and rail reserves.
5, 8-42, 49, 61, 62	Support the Rail line being the boundary on Lots 596, 595 and the suggested boundary of Lots 594 and 775
64	The Mandurah Train Track cuts the south west corner of the Reserve without obvious reason. Can it be rerouted to Ennis Avenue? This will prevent the realignment of Mandurah Road in the vicinity of the Reserve. If such a rerouting is impossible, the realignment of Mandurah Road through the wetland is unnecessary and will further degrade the state of the Reserve. Does the EPA approve such needless realignment?
48, 62	Oppose Mandurah Road being built in the reserve or buffer.
61	Oppose shifting the rail further west and put a new Mandurah Road through the buffer to the wetland. If it goes ahead, suggest a cyclone fence of 1.8m to protect the animals.
55	The south-west corner should receive protection complete with buffer from disturbances generated by a nearby transport route.
52	Happy for the railway reserve to define the boundary but it should be back beyond the vegetated buffer
65	Suggest another road going from Sixty Eight Road through the high ground in Stakehill area to the proposed Railway station – residents could appreciate the unique paperbark and sedgeland and have

Submission	Issue/Comment
	more direct access to the station and surrounding infrastructure.
56	How do you justify a railway going through on the western side of Jarvis Road straight through a ridge of Tuart trees??
Flora/fauna/hydrology/Environmental Review	
69	Further rehabilitation planning for Stakehill Swamp will be required.
64	I would like to point out that access to all properties was not sought. If this prevented the study area from being completely surveyed (ER, P22) then what is the value of this Review?
52, 55, 61, 62, 64	<p>The preliminary survey work of the PER for flora and fauna needs to be checked carefully. The fauna section of the review does not adequately report on all of the species that are present including Carnaby's Cockatoo, Wedge tailed eagles and numerous native mammal species.</p> <p>Much is still unknown about Stakehill values eg. important ecological links, shortcomings of the vegetation and fauna survey.</p> <p>The ER is deficient. No opportunity to provide input into the consultants work</p> <p>The hydrological value needs to be looked at especially as Stakehill is one of two water mounds in the area and has direct links to the Scientific Park and Ramsar listed wetlands.</p>
44, 51, 57, 65	<p>ER limited, inaccurate, prepared in limited time, based on aerial photos, not easily understood – It should be rewritten. It refers to animals and birds that could be within a 10km radius whilst the wildlife actually recorded was minimal and nothing rare and won't get better due to road and rail construction and development.</p> <p>Since 1990 there has been no inundation of the wetland – inappropriate to call it a sumpland; not even a wetland.</p>

RESPONSES TO THE ENVIRONMENTAL ISSUES

1. RESERVATION NOT NEEDED

The reservation is questioned because it is believed that Stakehill Swamp is not regionally significant. The reservation is not needed because the land has been well managed in private ownership; the reservation is an impost to landowners, a 50m buffer and associated constraints further impedes business growth.

WAPC Response

Conservation and proper management of valuable wetlands is encouraged under the 1997 State Government Wetlands Conservation Policy for Western Australia.

*Stakehill Swamp has long been recognised as regionally significant wetland. For example, in the 1993 draft South West Corridor Structure Plan the Western Australian Planning Commission (WAPC) recognised the regional significance of Stakehill Swamp and identified an area of approximately 260 ha for conservation. The conservation area included (i) land either side of Jarvis Road, (ii) low lying land at the southern end of Jarvis Road (within 50 metres of the wetland boundary); and (iii) elevated well drained sections at the northern end of Jarvis Road. The draft structure plan inferred that the designated area would be reserved for Parks and Recreation in the MRS and acquired by government in due course. **More recently, the WAPC outlined evidence demonstrating this in the Metropolitan Region Scheme Amendment 1050/33 Stakehill Swamp, Baldvis, Amendment Report, WAPC December 2004.** However, core wetland on east Jarvis Road was not included in the proposed P&R reserve.*

In addition, the WAPC acknowledges the Metropolitan Region Scheme Amendment 1050/33 Stakehill Swamp, Baldvis, Environmental Review, December 2004, prepared by ATA Environmental, which contains relevant environmental information and demonstrating the environmental values of the site, and indicating for example that the wetland vegetation associated with Stakehill Swamp generally ranges from Very Good to Pristine condition .

The Environmental Review notes that the condition of the vegetation indicates land owners have managed the land such that the wetland vegetation has not been degraded. However, it is considered that public management of the subject site is now appropriate.

It should be noted that Stakehill Swamp is categorised Conservation Category Wetland (CCW) under the Department of Environment Geomorphic Wetlands Swan Coastal Plain dataset, which provides detailed mapping of wetlands on the Swan Coastal Plain. Wetlands categorised CCW are regarded as regionally significant. This mapping is the most accurate and up to date reference for wetland mapping on the Swan Coastal Plain and displays the location, boundary, classification (wetland type) and management category of wetlands.

2. RESERVATION - ROCKINGHAM LAKES REGIONAL PARK AND LINKS

- a. The reserve should be added to the Rockingham Lakes Regional Park.

WAPC Response

This is a matter relating to the management of the future P&R reserve, which is beyond the scope of the MRS amendment. Should the P&R reserve boundary be determined and the reserve created and subsequently vested with the Conservation Commission, it is anticipated that CALM would manage the reserve as part of the Rockingham Lakes Regional Park.

- b. The potential for ecological links should be addressed. A corridor should be established on the south to link Stakehill Swamp with Anstey and Paganoni swamps.

WAPC Response

This is a matter beyond the scope of the MRS amendment as the Anstey and Paganoni swamps are outside the proposed P&R reserve boundary i.e are not the subject MRS amendment. Notwithstanding this, should land acquired by the WAPC outside the reservation be appropriate for a potential ecological link(s) the WAPC would give this matter due consideration.

3. BOUNDARY

- a. Everall Line: The reservation boundary should follow the Everall Line only. In relation to Lots 155 and 156, the reservation should not extend across these lots cutting off access to Sixty Eight Road. The western side of Jarvis Road should be realigned with the Everall Line.

WAPC Response

The proposed P&R reserve boundary and rationale for the boundary, which was outlined in Sections 4.2 and 4.3 of the Amendment Report, WAPC December 2004, generally recognised the extent of the mapped CCW and followed the edge of the CCW, plus a 5 metres wide management access track, adjacent to private land, excluded the CCW 50 metres wetland buffer, and for land east of Jarvis Road, the Amendment Report depicted the proposed P&R boundary within the core wetland and following the Everall Line.

The Environmental Review indicated that the proposed P&R reserve would protect the most environmentally significant elements of Stakehill Swamp, together with a buffer (the 'Wetland Protection Area') retained in private ownership with a high degree of land use and planning control under the local town planning scheme.

Should the reservation boundary follow the Everall Line environmentally significant and sensitive areas would be excluded from the reserve, which could potentially lead to degradation of these areas and limit effective management of the reserve, including fire management.

Following consideration of all submissions, it is considered that for privately owned land the reservation boundary should follow the extent of the mapped CCW and generally follow the edge of the CCW, plus a 10 metres wide management buffer/access track, and exclude the CCW 50 metres wetland buffer, except for the WAPC owned lots where the reservation boundary should be extended to approximately 50 metres from the CCW.

Reservation over the existing access legs to Lots 155 and 156 will not restrict access to these lots: upon the purchase of the reserved portion alone, arrangements would be put in place to either provide an alternative access (WAPC responsibility) or to grant an access easement over the existing driveway.

Regarding the reservation boundary/Everall Line in the east Jarvis Road area refer to WAPC Response 4, below.

- b. The reserve boundary on lots facing the western side of Jarvis Road is excessive and impacts on the potential value of cleared land along Jarvis Road.

WAPC Response

Extending the proposed P&R reserve boundary to the west side of Jarvis Road, and including the CCW and buffer areas, avoids residual lots less than 4 hectares being created. These areas do not contain existing dwellings. The existing lots containing CCW and buffer areas currently have road access from Mandurah Road. From a land management perspective, the reservation of areas beyond the CCW to the west of Jarvis Road will limit intensification of future land use and provides a management opportunity to control direct and indirect impacts, including fire risk and weed infestation.

- c. Buffer Excessive: The proposed 50 metres buffer is excessive and not required. The buffer should be reduced to 10 metres as recommended in the O'Brien report and remain in private ownership.

WAPC Response

The proposed P&R reserve boundary and rationale for the boundary, which was outlined in Sections 4.2 and 4.3 of the Amendment Report, WAPC December 2004, generally recognised the extent of the mapped CCW and followed the edge of the CCW, plus a 5 metres wide management access track, adjacent to private land, excluded the CCW 50 metres wetland buffer, and for land east of Jarvis Road, the Amendment Report depicted the proposed P&R boundary within the core wetland and following the Everall Line.

The Environmental Review indicated that the proposed P&R reserve would protect the most environmentally significant elements of Stakehill Swamp, together with a buffer (the 'Wetland Protection Area') retained in private ownership with a high degree of land use and planning control under the local town planning scheme.

Should the reservation boundary follow the edge of the CCW or the Everall Line environmentally significant and sensitive areas would be excluded from the reserve, which could potentially lead to degradation of these areas and limit effective management of the reserve, including fire management.

Following consideration of all submissions, it is considered that for privately owned land the reservation boundary should follow the extent of the mapped CCW and generally follow the edge of the CCW, plus a 10 metres wide management buffer/access track, and exclude the CCW 50 metres wetland buffer. However, for the WAPC owned lots the reservation boundary should be extended to approximately 50 metres from the CCW.

Also, refer to WAPC Responses 3a, 4, 5 and 7.

- d. The reserve should be divided into four quadrants, each surrounded by a road and some of the current conservation areas should be developed for residential housing.

WAPC Response

As indicated in Response 1 Stakehill Swamp is regionally significant wetland. The proposed MRS amendment recognises the regional significance of the majority of the core wetland and does not support the creation of four separate reserves and residential development in vegetated areas and within the core wetland. Clearing of wetland areas and associated buffers for residential development is considered to be inappropriate, as this would have potential to result in an adverse impact on a high conservation value wetland.

Also, refer to WAPC Response 3a and 4.

4. JARVIS ROAD

The proposed boundary east of Jarvis Road extends within the mapped CCW boundary and excludes an area of excellent vegetation condition. Omitting this area will potentially degrade wetland values and reduce the viability of an important ecological link between the two wetland areas. Jarvis Road should be added to the reserve, as it would secure valuable fauna habitat. Jarvis Road should be closed to non-residential through traffic except for emergency vehicles. The western side of Jarvis Road should be included in the reserve and lots owned by the WAPC east of Jarvis Road should be included in the reserve.

WAPC Response

The proposed reserve boundary east of Jarvis Road extends within the mapped CCW boundary and, therefore, excludes core wetland and an area of excellent vegetation condition and omitting this area could potentially degrade regionally significant wetland values and reduce the viability of an important ecological link between the two wetland areas.

Consequently, the proposed P&R reserve boundary should be revised to include the existing lots on the east side of Jarvis Road in the reserve i.e. lots either side of Jarvis Road should be within the reserve. This would ensure the core wetland / CCW area containing vegetation in very good - excellent condition is included in the reserve to ensure its conservation and protection. For planning and environmental reasons the balance portions of these lots that are outside the proposed P&R reserve boundary and the CCW, and within the 50 metres CCW buffer, should be included in the reservation (i.e. the P&R reserve should extend to Jarvis Road. This would ensure protection of core wetland within the reserve, provide for a more consolidated reserve and reduce the length of the boundary and adverse impacts of associated edge effects, provide for a buffer in public ownership to facilitate effective management of the reserve, including fire management and access; reduce potential degradation of the reserve and maintain ecological processes, improve ecological linkages between the two wetland areas and secure valuable fauna habitat.

The proposed P&R reserve should include the western side of Jarvis Road in the reserve for the reasons outlined in the Amendment Report.

Given the above and when appropriate, the WAPC should close Jarvis Road to non-residential traffic except for emergency vehicles to minimise possible degradation of

the reserve and to ensure effective management of the reserve. Currently, the northern portion of Jarvis Road is unconstructed and does not provide a link to Sixty Eight. The closed portion of Jarvis Road should be included in the P&R reserve.

5. CONSERVATION CATEGORY WETLAND (CCW) AND BUFFER

- a. The reserve should be larger and based on ecological values. The proposed boundary does not contain the entire CCW and associated 50 metres buffer. The reserve should include the CCW and its buffer east of Jarvis Road.

WAPC Response

The proposed P&R reserve boundary and rationale for the boundary, which was outlined in Sections 4.2 and 4.3 of the Amendment Report, WAPC December 2004, generally recognised the extent of the mapped CCW and followed the edge of the CCW, plus a 5 metres wide management access track, adjacent to private land, excluded the CCW 50 metres wetland buffer, and for land east of Jarvis Road, the Amendment Report depicted the proposed P&R boundary within the core wetland and following the Everall Line.

The Environmental Review indicated that the proposed P&R reserve would protect the most environmentally significant elements of Stakehill Swamp, together with a buffer (the 'Wetland Protection Area') retained in private ownership with a high degree of land use and planning control under the local town planning scheme.

Should the reservation boundary follow the Everall Line environmentally significant and sensitive areas would be excluded from the reserve, which could potentially lead to degradation of these areas and limit effective management of the reserve, including fire management.

Following consideration of all submissions, it is considered that for privately owned land the reservation boundary should follow the extent of the mapped CCW and generally follow the edge of the CCW, plus a 10 metres wide management buffer/access track, and exclude the CCW 50 metres wetland buffer, except for the WAPC owned lots where the reservation boundary should be revised so that the portion of those lots generally within the CCW 50 metres buffer is included in the reserve.

- b. The proposed boundary compromises nature conservation objectives because it does not provide an adequate buffer and presents an impractical management boundary. The entire wetland and an appropriate buffer should be included in the reserve as per normal policy for a CCW. The proposed boundary does not apply adequate buffers for a CCW and a 100 metres buffer should be reserved. The wetland should be properly protected by a 50 metres buffer, a large firebreak and a ring road.

WAPC Response

It is acknowledged that effective management of the reserve, including fire management and access issues are significant considerations. Reservation of a 100 metre buffer is considered unnecessary given the anticipated future local scheme amendment and opportunities to consider land management scheme provisions e.g. for the 'Wetland Protection Area' identified in the Environmental Review.

Also, refer WAPC Responses 3, 4 and 6.

6. FIRE

The proposed boundary would not allow adequate fire management or management access which would reduce the ability to protect the area from fire, and which may threaten the nature conservation values of the area and leave adjacent houses at risk. This is particularly the case in the area east of Jarvis Road. Given the recent fires that have affected Stakehill Swamp, it is important that Management Plans pay close attention to fire management and relation hazards (including access). A strategic fire break or management access track should be established around the entire wetland on the outer perimeter of the buffer zone. Extending the reservation to (i) west Jarvis Road increases fire risk; and (ii) extending the reservation across Jarvis Road north will mean a fire bridge and inhibit fire-fighting.

WAPC Response

It is acknowledged that the proposed boundary may limit adequate fire management or management access and nature conservation values of the area, particularly in the area east of Jarvis Road. Accordingly, it is considered that the proposed boundary be modified to address these concerns. The modified boundary will enable adequate access for fire management providing a 10 metre buffer adjacent to private land and a larger buffer, generally following the 50 metre CCW buffer on WAPC land. Further, the inclusion of Jarvis Road and all of the private land to the east and west as proposed in the P&R will allow for internal access for fire management to complement the external boundary access.

Also refer WAPC Responses 3, 4, 5 and 7.

7. MANAGEMENT / ACCESS

- a. Better management access in the area east of Jarvis road is needed. As a minimum CALM would require a management buffer of at least five metres which includes a track with four metres running surface and a fence if required. It is not clear whether an adequate management buffer is allowed for around the majority of the wetland; the boundary east of Jarvis road certainly does not allow for this requirement.

WAPC Response

It is necessary that the P&R reserve boundary facilitates adequate management access, including fire management, and an appropriate 'management buffer'. In order to achieve this, it is considered appropriate that where practicable the proposed P&R reserve boundary allow for a minimum 10 metres 'management buffer' generally extending from the CCW boundary. However, it may not be practical to achieve this around the entire area, for planning reasons, such as the approved SW Metro rail project. To achieve adequate management access and an appropriate 'management buffer,' and appropriate fire management planning for the Jarvis Road area, it is considered appropriate that this area be included in the reserve.

Also, refer WAPC Responses 4 and 6 above.

- b. Further planning would be required to determine appropriate forms of recreation at Stakehill Swamp and appropriate facilities. The inclusion of areas of cleared land within the proposed Parks and Recreation reservation may be appropriate for areas to facilitate recreation and is supported

WAPC Response

The main purpose of the proposed P&R reserve is for conservation of the regionally significant Stakehill Swamp wetland. Active recreation in the future reserve is generally not supported, although opportunities for limited/controlled public access for passive recreation in keeping with the conservation purpose of the future reserve, consistent reserve management objectives may be supported.

- c. The proposed P&R reservation impacts upon the battleaxe access to Lot 155 Sixty Eight Road. It is important that the proposed reservation not prevent future access to the improvements on Lot 155. Upon purchase of the preserved portion of Lot 155, arrangements should be put in place to either provide an alternative access to Lot 155 (WAPC responsibility) or to grant an easement over the existing driveway or provide alternative access.

WAPC Response

Reservation over a portion of the existing access leg to Lot 155 is preferable as this area is within the CCW, for reserve management purposes; and will not restrict access to the lot. Upon the purchase of the reserved portion alone, arrangements should be put in place to either provide an alternative access (WAPC responsibility) or to grant an access easement over the existing driveway.

- d. The outside buffer boundary be fenced as a matter of urgency for overall protection of the reserve. The area is rich in fauna including Bandicoot, Honey Possum, Brush tail Possum, Monitor Lizard, Wedge tail eagle and of course Kangaroos.

WAPC Response

Adequate fencing of the future reserve is intended as part of appropriate future management of the reserve.

- e. Outside the buffer, a ring road should be created as a part of any subdivision or development as the open space commitment.

WAPC Response

This is a matter beyond the scope of the MRS amendment. The land outside the proposed P&R reserve boundary cannot be considered under the subject MRS amendment. However, it is anticipated that this matter will be addressed when local government considers a future local scheme amendment and subdivision guide plan.

- f. Undeveloped lots that have been acquired by the WAPC to be unfenced so native fauna can move freely between two sides of the swamp.

WAPC Response

The above has been undertaken in relation to WAPC owned lots in the southwest corner of the subject land and where possible will be considered in relation to other WAPC owned lots.

8. MANAGEMENT PLANS

- a. It is essential that an Environmental Management Plan for the wetland is prepared in the near future and implemented. The plan would include but is not limited to best practice groundwater management, flora and fauna conservation, fire control, weed control and so on. This plan needs to be underpinned by thorough long-term flora and fauna surveying; the impacts of adjacent land uses, including market gardens on the hydrology of the wetlands and the management of threats to wetland ecology and functionality such as fire and weeds.

WAPC Response

The WAPC considers that an Environmental Management Plan for the wetland should be prepared and implemented when the P&R reserve boundary is determined. It is anticipated that any Environmental Conditions resulting from the formal assessment of the Amendment will guide the nature and content of an Environmental Management Plan for the wetland, which will be prepared by the WAPC.

- b. The Environmental Review defers a number of issues to subsequent planning and states that a number of management plans will need to be prepared. The objectives of each plan, agency responsibility and resourcing are not outlined and these details need careful consideration and resolution. Commitments to implementing plans and strategies should be discussed with the managing agency for the area.

WAPC Response

Refer WAPC Response 8a. above.

- c. The Environmental Review is not clear about which areas these Management plans and strategies should apply to or what issues are to be addressed and who would prepare these documents. The preparation of these plans and strategies will entail considerable work. These plans should be prepared concurrently with the local Town Planning Scheme Amendment process to ensure that management planning and strategies are properly integrated with the development of land use controls, scheme provisions, the Rural Concept Plan and Subdivision Guide Plans. They should be prepared by the WAPC (as proponent for the Amendment) or CALM (as future land manager).

WAPC Response

Refer WAPC Response 8a above.

9. LAND USE

- a. Whilst adequate wetland buffers should be included in the P&R reservation, alternative mechanisms to ensure sustainable management of the properties adjoining the wetland such as through the City of Rockingham TPS and covenants could be investigated. Particular consideration should be given to preventing land uses or developments that may negatively impact on Stakehill Swamp through changing the hydrological regime or increasing nutrients and pollutants in the wetland.

WAPC Response

Stakehill Swamp has long been recognised as regionally significant wetland. For example, in the 1993 draft South West Corridor Structure Plan the WAPC recognised the regional significance of Stakehill Swamp and identified an area of approximately 260 ha for conservation. More recently, the WAPC outlined evidence demonstrating this in the Metropolitan Region Scheme Amendment 1050/33 Stakehill Swamp, Baldivis, Amendment Report, WAPC December 2004. In addition, the WAPC acknowledges the Metropolitan Region Scheme Amendment 1050/33 Stakehill Swamp, Baldivis, Environmental Review, December 2004, prepared by ATA Environmental, which contains relevant information demonstrating the environmental values of the site.

The proposed P&R reserve boundary and rationale for the boundary, which was outlined in Sections 4.2 and 4.3 of the Amendment Report, WAPC December 2004, generally recognised the extent of the mapped CCW and followed the edge of the CCW, plus a 5 metres wide management access track, adjacent to private land, excluded the CCW 50 metres wetland buffer, and for land east of Jarvis Road, the Amendment Report depicted the proposed P&R boundary within the core wetland and following the Everall Line.

The Environmental Review indicated that the proposed P&R reserve would protect the most environmentally significant elements of Stakehill Swamp, together with a buffer (the 'Wetland Protection Area') retained in private ownership with a high degree of land use and planning control under the local town planning scheme.

Following consideration of all submissions, it is considered that for privately owned land the reservation boundary should follow the extent of the mapped CCW and generally follow the edge of the CCW, plus a 10 metres wide management buffer/access track, and exclude the CCW 50 metres wetland buffer, except for the WAPC owned lots where the reservation boundary should be extended to approximately 50 metres from the CCW.

Also, refer to WAPC Responses 4, 5 and 7.

- b. It is proposed that an alternative to the inclusion of a wetland buffer into the MRS reservation is to retain these areas in private ownership and control land uses through the Town Planning Scheme. As these areas would remain in private ownership, there is no guarantee that the wetland and buffer will be managed appropriately.

WAPC Response

Refer to WAPC Response 9a.

- c. For lots in the east Jarvis Road landowners need agreed building envelopes on the balance land outside the MRS line. There should be no restrictions on the remaining land outside the Everall line

WAPC Response

Refer to WAPC Response 4.

- d. There is no mention of the large Stake Hill Water Mound underneath the wetland and the risk of pollution from densely inhabited lots.

WAPC Response

As required by the EPA, the Environmental Review responded to the EPA Scope of Work by addressing the key environmental issues relevant to the amendment.

- e. The local government supports previous resolution to support the introduction of Special Rural zoning into Precinct 4B of the City's Rural Land Strategy.

WAPC Response

When the P&R reserve boundary is determined, planning consideration should be given to the balance of the Stakehill Swamp planning precinct, in particular amending the local town planning scheme and the introduction of land management provisions, where appropriate. Decision-makers need to ensure that future subdivision and development do not adversely impact on the identified significant environmental values of Stakehill Swamp

- f. Future development following the MRS Amendment is likely to result in the loss of a large number of locally native Tuart and Marri trees. The preservation of these trees however is critical in order to provide habitat, resting places and food sources for native fauna.

WAPC Response

Refer to WAPC Response 9e.

10. TRANSPORT ISSUES

- a. The modified concept for the South West Metro Rail includes an extension and re-alignment of the Old Mandurah Road in the Stakehill Swamp area, southwards along the east side of the proposed railway to intersect with Stakehill Road. The modified concept will result in an encroachment on the southwest extremity of the *Parks and Recreation* reservation proposed in MRS Amendment 1050/33. The MRS Amendment should be modified to include the re-aligned Old Mandurah Road as "Other Regional Road" rather than P&R reservation, as proposed. This proposal requires 0.5ha of land outside the road and rail reserves.

WAPC Response

The proposed modification of the P&R reserve boundary will facilitate an improved outcome for rail and road planning in the Baldivis area, has environmental approval, will have no adverse environmental impacts subject to appropriate management conditions, and does not encroach in core wetland. In the 0.5ha area of encroachment, approximately 10 - 15 Tuart trees need to be cleared, which is comparable to the number that would have been cleared in the previous approved proposal.

- b. The rail line should be the boundary on Lots 596, 595 and the suggested boundary of Lots 594 and 775.

WAPC Response

The previous alignment of the South West Metro Rail line was the subject of an EPA formal environmental assessment and achieved environmental approval subject to

environmental conditions. The proposed modification of this alignment to facilitate an improved outcome for rail planning also has EPA environmental approval.

- c. Any extension of Mandurah Road should be outside the buffer area.

WAPC Response

Refer to WAPC Response 10a.

- d. The rail line cuts the south west corner of the Reserve without obvious reason. It should be rerouted to Ennis Avenue, as this will prevent the realignment of Mandurah Road in the vicinity of the Reserve. If such a rerouting is impossible, the realignment of Mandurah Road through the wetland is unnecessary and will further degrade the state of the Reserve.

WAPC Response

Refer to WAPC Response 10a.

- e. Mandurah Road should not be realigned and constructed in the reserve or buffer. If it goes ahead, suggest a cyclone fence of 1.8m to protect the animals.

WAPC Response

A 1.8m fauna fence alongside the rail corridor is considered feasible.

- f. The southwest corner should receive protection complete with buffer from disturbances generated by a nearby transport route.

WAPC Response

Refer to WAPC Response 10a.

- g. The railway reserve can define the boundary but it should be back beyond the vegetated buffer.

WAPC Response

Refer to WAPC Response 10a.

- h. Suggest another road going from Sixty Eight Road through the high ground in Stakehill area to the proposed Railway station – residents could appreciate the unique paperbark and sedgeland and have more direct access to the station and surrounding infrastructure.

WAPC Response

Any additional road construction across the regionally significant Stakehill Swamp wetland, to achieve access from Sixty Eight Road through the high ground in Stakehill area to the proposed Railway station that would require clearing of wetland vegetation in the future reserve or buffer is not considered appropriate. Access issues for areas outside the proposed P&R reserve are anticipated to be considered as part of a future local town planning scheme amendment and subdivision guide plan.

- i. How do you justify a railway going straight through a ridge of Tuart trees?

WAPC Response

Refer to WAPC Response 10a.

11. FLORA / FAUNA / HYDROLOGY / ENVIRONMENTAL REVIEW

- a. Further rehabilitation planning for Stakehill Swamp will be required.

WAPC Response

Refer WAPC Response 8a and 8b above.

- b. What is the value of the Environmental Review without all lots being completely surveyed?

WAPC Response

A representative sample was selected for detailed flora and fauna survey and this was considered to be adequate to meet the requirements of the EPA Scope of Works to address the key environmental issues. However, this sample included several lots in east Jarvis Road, which landowners refused to grant access permission.

- c. The preliminary survey work of the assessment of flora and fauna needs to be checked carefully. The fauna section of the review does not adequately report on all of the species that are present including Carnaby's Cockatoo, Wedge tailed eagles and numerous native mammal species. Much is still unknown about Stakehill values eg important ecological links, shortcomings of the vegetation and fauna survey. The hydrological value needs to be looked at especially as Stakehill is one of two water mounds in the area and has direct links to the Scientific Park and Ramsar listed wetlands.

WAPC Response

As required by the EPA, the Environmental Review responded to the EPA Scope of Work and addressed the key environmental issues relevant to the amendment.

- d. The Environmental Review is limited, inaccurate, prepared in limited time, based on aerial photos, not easily understood – it should be rewritten. It refers to animals and birds that could be within a 10 kilometres radius whilst the wildlife actually recorded was minimal and nothing rare and won't get better due to road and rail construction and development. No opportunity to provide input into the consultants work. Since 1990, there has been no inundation of the wetland and it is inappropriate to call it a sumpland; not even a wetland.

WAPC Response

The Environmental Review was advertised together with the proposed amendment and through this public members have had an opportunity to comment submissions have been considered and public and private hearings have been conducted. Public on

Also, refer WAPC Response 11c above.

Appendix 5

Statement That a Scheme May Be Implemented

Statement No.

**STATEMENT THAT A SCHEME MAY BE IMPLEMENTED
(PURSUANT TO THE PROVISIONS OF DIVISION 3 OF PART IV OF THE
ENVIRONMENTAL PROTECTION ACT 1986)**

**METROPOLITAN REGION SCHEME AMENDMENT No. 1050/33
STAKEHILL SWAMP, BALDIVIS**

Scheme Purpose: (a) to reserve 201 hectares of the subject land shown shaded in Figure 1 from the 'Rural' Zone to the 'Parks and Recreation' Reservation; and
(b) to amend the Scheme maps accordingly.

Responsible Authority: Western Australian Planning Commission

Responsible Authority Address: 469 Wellington Street, PERTH WA 6000

Assessment Number: 1507

Report of the Environmental Protection Authority: Bulletin 1197

There is no known environmental reason why the Metropolitan Region Scheme amendment to which the above report of the Environmental Protection Authority relates should not be implemented.

Note: This does not fetter the Responsible Authority, or any other Decision-Making Authority, from imposing or requiring conditions to protect the environment.