



October 2021

Metropolitan Region Scheme Amendment 1377/57 (Minor Amendment)



Forrestfield North Environmental Conservation Areas

Submissions 13 – Late
Volume 2 of 2

City of Kalamunda

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Amendment 1377/57
(minor amendment)**

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Environmental Conservation Areas**

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The Western Australian Planning Commission acknowledges the traditional owners and custodians of this land. We pay our respect to Elders past and present, their descendants who are with us today, and those who will follow in their footsteps.

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Introduction to Metropolitan Region Scheme minor amendments

The Western Australian Planning Commission (WAPC) is responsible for keeping the Metropolitan Region Scheme under review and initiating changes where they are seen as necessary.

The Metropolitan Region Scheme (MRS) sets out the broad pattern of land use for the whole Perth metropolitan region. The MRS is constantly under review to best reflect regional planning and development needs.

An amendment proposal to change land use reservations and zones in the MRS is regulated by the *Planning and Development Act 2005*. That legislation provides for public submissions to be made on proposed amendments.

For a non-substantial amendment, often referred to as a minor amendment (made under section 57 of the Act), the WAPC considers all the submissions lodged, and publishes its recommendations in a report on submissions. This report is presented to the Minister for Planning for approval. The amendment takes legal effect with Gazettal of the Minister's approval.

In the process of making a non-substantial amendment to the MRS, information is published as a public record under the following titles:

Amendment report

This document is available from the start of the public advertising period of the proposed amendment. It sets out the purpose and scope of the proposal, explains why the amendment is considered necessary, and informs people how they can comment through the submission process.

Environmental review report

The Environmental Protection Authority must consider the environmental impact of an amendment to the MRS before it can be advertised. While formal assessment would be unlikely for a non-substantial amendment, were it required then an environmental review would be undertaken and made available for information and comment at the same time as the amendment report.

Report on submissions

The planning rationale, determination of submissions and the WAPC's recommendations for final approval of the amendment, with or without modification, is documented in this report.

Submissions

This document contains a reproduction of all written submissions received by the WAPC on the proposed amendment.

Alphabetical Listing of Submissions

MRS Amendment 1377/57

Forrestfield North - Environmental Conservation Areas

Submission Number	Name
8	ATCO Gas Australia Pty Ltd
13	De Reggi, Lynette & Miles, Peter
6	DoCouto Azcarate, Andrea
12	Education, Department of
4	Health, Department of
1	Jobs, Tourism, Science and Innovation, Department of
10	Kalamunda, City of
9	Main Roads WA
5	Mines, Industry Regulation and Safety, Department of
7	Public Transport Authority
3	Transport, Department of
11	Water and Environmental Regulation, Swan Avon Region, Department of
2	Water Corporation

Late Submissions	Name
14	Biodiversity, Conservation and Attractions, Swan Region, Department of

Submissions

FINDING 33

The *Rights in Water and Irrigation Act 1914* does not require the Department of Water and Environmental Regulation to maintain a register of spring exemptions or spring dams, as these do not require licencing and are not prescribed as part of the definition of ‘instrument’.

RECOMMENDATION 33

If the Department of Water and Environmental Regulation persists with its requirement that landowners make an application for a bed and banks permit to trigger a determination by the Department as to whether a section 5 exemption under the *Rights in Water and Irrigation Act 1914* applies, then the Department should establish and maintain a register of spring rights and spring dams. The *Rights in Water and Irrigation Act 1914* and regulations should be amended to provide for the establishment and maintenance of a register of spring rights and spring dams.

An example—Ms Melissa Nicholls and Mr Clinton Robertson—DWER determination of no spring exemption

6.195 Melissa Nicholls and Clinton Robertson purchased a property in Glenoran, near Manjimup, in 2014. There is a single dam on the property.⁶²⁰ The previous owner had a licence to take water and in addition, on the understanding that he had spring rights, he took water from a spring on the property into the dam.⁶²¹

The sale price was \$615,000, with a premium paid per acre due to the spring fed dam on site and quality of the water due to the natural spring feeding the dam.⁶²²

6.196 Based on a visual inspection and research into the land, they understood the spring to originate and be solely contained on the property, with the exception of a by-wash to an onsite dam. When Ms Nicholls and Mr Robertson heard about challenges to spring rights in the area in 2018, they sought official recognition of their exemption.⁶²³

6.197 Ms Nicholls and Mr Robertson were granted a surface water licence on 19 May 2017 for a volume equivalent to the capacity of their dam, resulting from a transfer from the previous licensee and owner.⁶²⁴

6.198 On 12 November 2018, Ms Nicholls emailed DWER requesting a review related to a claim of spring rights. On 12 February 2019, DWER identified to Ms Nicholls that a visit to the property boundary identified that the watercourse which fed the dam originated on the adjacent Crown Reserve. On 1 August 2019, DWER undertook a site visit with Mr Robinson and found that while water was found to rise and flow within the property, this water discharged into a watercourse that commenced upstream, or up-gradient of this point and outside the property boundary. As such, DWER reaffirmed in writing the following day that the exemption did not apply.⁶²⁵

⁶²⁰ Anthea Wu, Section Manager, Ministerial Liaison Unit, Department of Water and Environmental Regulation, email, 11 September 2020, attachment 1, p 4.

⁶²¹ David Wren, Secretary, Western Australia Water Users Coalition, email, attachment 1, 14 November 2019, pp 2-3.

⁶²² *ibid.*, p 2.

⁶²³ *ibid.*, p 3.

⁶²⁴ Department of Water and Environmental Regulation, Answer to question on notice 3 asked at hearing held 19 August 2020, dated 1 September 2020, p 3.

⁶²⁵ *ibid.*

- 6.199 As DWER do not maintain a register of spring rights or spring dams, it is not possible for a prospective purchaser of a property to readily determine whether assumptions they are making or information provided by the seller or the seller's agent is accurate.
- 6.200 Ms Nicholls and Mr Clinton say they purchased the property at a premium price on the understanding that the dam was spring fed and the loss of the spring exemption has diminished the value of the property.⁶²⁶ They maintain the dam has historically been fed by the spring in addition to the licenced water allocation and this should have been recognised by DWER.⁶²⁷
- 6.201 DWER maintain the licence to take water transferred from the previous owner and licensee is equivalent to the dam's capacity.⁶²⁸
- 6.202 It should be noted that DWER attaches conditions to licenses, including when the water can be taken to top up the dam. Possibly the spring feeding into the dam provided further top up outside the period of the license to take water, thus providing more water for the agricultural business, which has now been lost as a result of DWER's determination.
- 6.203 It is not known whether the previous owner had a letter from DWER incorrectly advising a section 5 exemption applied or whether he had made an incorrect self-assessment.

An example—Mr Garry Kilrain—DWERs inconsistent advice

1. Spring exemption

- 6.204 In an email dated 18 October 2020, Mr Maskew informed Mr Kilrain that he and another DWER officer had determined that a section 5 exemption applied to the site, east of Dixvale Road, where Mr Kilrain intended to build a spring dam. The email reads as follows:

we agree that the site you propose on the east side of Dixvale Rd is covered by spring rights. You will not need a permit to construct or take water from this site.⁶²⁹

- 6.205 On the basis of this advice, the Committee understands Mr Kilrain proceeded to purchase what he needed to construct the spring dam and to pipe the water to where it was needed on his landholdings and began construction of the dam.⁶³⁰
- 6.206 DWER subsequently told Mr Kilrain that, contrary to earlier advice, a section 5 exemption does not apply to the dam. The Committee questioned DWER on this:

The first advice was based on a desktop assessment, and we have subsequently been out on site with Mr Kilrain and looked at all of the watercourses on his property to determine, with our updated understanding, which ones were eligible for spring exemptions and which ones were not, and with that updated understanding, I got it wrong.⁶³¹

⁶²⁶ David Wren, Secretary, Western Australia Water Users Coalition, email, attachment 1, 14 November 2019, p 2.

⁶²⁷ *ibid.*

⁶²⁸ Anthea Wu, Section Manager, Ministerial Liaison Unit, Department of Water and Environmental Regulation, email, 11 September 2020, attachment 1, p 4.

⁶²⁹ Garry Kilrain, private citizen, email, 18 September 2020, p 5.

⁶³⁰ Hon Adele Farina MLC, Chair, Standing Committee on Public Administration, transcript of evidence, 19 August 2020, p 7.

⁶³¹ Adam Maskew, South West Regional Manager, Department of Water and Environmental Regulation, transcript of evidence, 19 August 2020, p 7.

6.207 The Committee understands that water from stock and domestic purpose dams cannot be used for commercial production. Thus, it does not meet Mr Kilrain's need for water for commercial production.⁶³²

6.208 Unclear about the nature of the 'updated understanding' between October 2018 when the initial advice was provided to Mr Kilrain and DWERs subsequent advice that the initial advice was incorrect, the Committee sought clarification:

That is because we went out and did that site inspection, and we determined that you can see the mapping—that was quite old in that instance—had not correctly mapped the watercourse on that property and that that watercourse actually started on the other side of the Dixvale Road on a different property, so it actually came across a number of different types of ownership before it entered Mr Kilrain's property.⁶³³

6.209 DWER explained that with the competition for water, they are now having to do site inspections rather than rely on desktop assessments using Landgate maps.⁶³⁴

6.210 In response to the Committee's question about the uncertainty caused to landowners as a result of DWERs inconsistent advice, Mr Rowe explained:

I think we have acknowledged in evidence to this committee previously that the advice we have given in the past has been inconsistent, and it has changed over time, based on our understanding of the legal interpretation of the legislation and how it should apply. That is, as I understand it, part of the reason why we are now asking people to apply for a licence anyway, because it allows us to do that thoroughly.⁶³⁵

6.211 In response to a further question concerning changed legal interpretation since October 2018, Mr Rowe explained that DWER cannot necessarily rely on the mapped or desktop assessment as they have done in the past because of the nuances and locally specific situations. This has resulted in the added due diligence of DWERs site inspections.⁶³⁶

6.212 Noting that DWERs email to Mr Kilrain did not contain any qualifying statement that it was preliminary advice only or inform Mr Kilrain of the new administrative process, the Committee put further written questions to DWER and received the following responses:

Q3 If DWER had implemented the administrative process requiring farmers to lodge an application under the licence approval system –

a. why didn't the email to Garry Kilrain tell him that he was required to lodge an application under the licence approval system?

Answer: The Department sought to implement the requirement to lodge an application after this time. Experiences such as those with Mr Kilrain, who progressed his plans based on informal correspondence from the Department, led

⁶³² Garry Kilrain, private citizen, email, 21 September 2020, p 1.

⁶³³ Adam Maskew, South West Regional Manager, Department of Water and Environmental Regulation, transcript of evidence, 19 August 2020, p 7.

⁶³⁴ *ibid.*

⁶³⁵ Michael Rowe, Director General, Department of Water and Environmental Regulation, transcript of evidence, 19 August 2020, p 7.

⁶³⁶ *ibid.*

the Department to instigate a formal method of assessment where there is the possibility that regulation will ultimately be required.⁶³⁷

Committee comment: this is inconsistent with DWERs evidence that the new process was in place in late 2016 and has been consistently applied since this date.

b. Why did Mr Maskew tell Garry Kilrain they agreed he had spring rights if an application [under the new process] hadn't been lodged and assessed?

Answer: The Department had not implemented the requirement at that time and the nature of the discussions were largely conceptual in nature.⁶³⁸

Committee comment: this is inconsistent with DWERs evidence that the new process was in place in late 2016 and has been consistently applied since this date.

c. Why did Mr Maskew tell Garry Kilrain the Department agreed he had spring rights based on a desktop assessment if an onsite inspection was required?

Answer: The Department provided informal advice to support the conceptual development of water supply options for Mr Kilrain.⁶³⁹

Committee comment: this is inconsistent with DWERs evidence that the new administrative process required site assessments and that DWER was conducting site inspections from early 2018.

If [the October 2018 email] was a preliminary assessment only, why doesn't the email say so?

Answer: The Department has been in communication with Mr Kilrain since early 2018 around the potential water development options for the property. Much of this discussion has been conceptual in nature with various options discussed, as Mr Kilrain had not indicated a preferred option. It was an oversight not to specify the desktop nature of the assessment in this email but was consistent with the nature of the preceding discussions.⁶⁴⁰

Committee comment: nothing in DWERs email indicates to Mr Kilrain that it is preliminary advice and should not be acted on. It needs to be understood, Mr Kilrain was operating on the basis that DWER do not regulate spring dams, as specified in the RIWI Act, and thus had no expectation that the advice could not be relied on and acted on.

6.213 This example raises serious doubts as to the reliability of DWERs evidence to the Committee that the new administrative process has been consistently applied by DWER since last 2016. Further, it highlights that landowners cannot have any confidence in advice provided by DWER as recently as October 2018 that they have spring rights. Also, DWERs inconsistent or incorrect advice is not a matter of the past, as suggested by DWER.

6.214 The Committee does not accept DWER's evidence on this matter, as it is contrary to DWER's evidence that:

- The new administrative process commenced in late 2016 and has been applied consistently since. This predates the October 2018 email to Mr Kilrain.

⁶³⁷ Rachel Osborne, Acting Ministerial Coordinator, Ministerial Liaison Unit, Department of Water and Environmental Regulation, 1 September 2020, attachment 4, p 3.

⁶³⁸ *ibid.*

⁶³⁹ *ibid.*

⁶⁴⁰ *ibid.*, p 1.

- The new administrative process requires DWER to do an on-site assessment before making a determination, thus DWER ought to have completed the on-site assessment before providing the October 2018 email to Mr Kilrain, as this is the process that had been in place either since late 2016 or early 2018 when DWER say they were doing site inspections and assessments.

Further,

- nothing in the email indicates—
 - the advice was based on a desktop assessment only
or
 - it was a discussion that was ‘conceptual in nature’
or
 - the advice was informal only
and/or
 - the advice in the email should not be relied on or acted on.

indeed, the email is unambiguous, it states that Mr Kilrain has a spring exemption and no bed and banks permit is required.

- DWER presented no evidence to support its claim that the Landgate map was outdated and inaccurate.
- There was no ‘updated understanding’ between 18 October 2018 and DWER’s subsequent advice. DWER’s evidence is that the ‘updated understanding’ occurred sometime before or around late 2016.

6.215 If advice on spring exemptions provided by DWER to Mr Kilrain as recently as October 2018 is ‘wrong’, noting that this occurred after DWERs ‘updated understanding’ and almost four years after implementing the new process, and at a time when DWER has been reviewing its past incorrect advice, it does little to instil confidence in DWER and its compliance with the new process. Further, it raises serious doubts as to which of DWERs advice to Mr Kilrain was incorrect, the initial advice that he had a spring exemption or the subsequent advice that he does not.

6.216 DWER told the Committee that Mr Kilrain was approved to build a small dam at this site:

that was deemed to be an exempt one for stock and domestic purposes, not for springs...⁶⁴¹

6.217 This example serves to illustrate the serious and costly ramifications of DWERs inconsistent or incorrect advice for landowners.

6.218 Landowners cannot proceed with any certainty while DWER continues to provide inconsistent and/or incorrect advice.

An example—Mr Garry Kilrain—DWERs inconsistent advice

2. Dam alongside Graphite Road

6.219 Mr Kilrain has a licensed dam on his property alongside Graphite Road. It was commissioned by his uncle (deceased) in about 1991.⁶⁴² Mr Kilrain maintains that the dam was previously

⁶⁴¹ *ibid.*, p 8.

⁶⁴² Garry Kilrain, private citizen, email, 18 September 2020, p 3.

licensed to take water up to its capacity of 77 000KL.⁶⁴³ He has a department storage/use form provided to his uncle (then licensee) which lists all his licenced dams and indicates a dam with a capacity of 77 00KL.⁶⁴⁴ Also, he has a letter from the surveyor of the dam dated 6 June 1991 which states the capacity of the dam is 74 000kl.⁶⁴⁵

6.220 DWER dispute this capacity. DWER maintain that it is not clear from the departmental storage/use form to which dam the 77 000KL refers.⁶⁴⁶ DWER has not identified to the Committee another dam on Mr Kilrain's property to which it may refer. Also, DWER maintains that the surveyor letter doesn't identify with sufficient clarity the location of the dam referred to or provide supporting design and other information.⁶⁴⁷

6.221 DWER is not satisfied by an email from the surveyor dated 13 June 2020, confirming the dam is the one alongside Graphite Road and citing its capacity of 74 000 kilolitres:⁶⁴⁸

The email ... was not supported by a statement of accuracy, plans or cross sections from which the department could verify the volume.⁶⁴⁹

6.222 DWER undertook an on-site inspection and determined that the capacity of the dam is 30 000KL. Subsequently, DWER did another on-site inspection and revised the capacity of the dam to 55 000KL, which DWER maintain is consistent with information from Mr Kilrain's uncle.⁶⁵⁰ The documents in support provided by DWER are:

- A schedule of existing surface water diversions which DWER say cites the dam as having a capacity of 60 000 KL, this being a request for a surface water diversion.⁶⁵¹ This document is signed by Mr Kilrain's deceased uncle and dated 30 July 1991.⁶⁵²
- An inspection note dated 27 May 2003 which DWER say cites a dam capacity of 52.5 megalitres.⁶⁵³ It is not signed by Mr Thomas Kilrain.⁶⁵⁴

6.223 The Committee acknowledges that the information provided in the three departmental documents⁶⁵⁵ is not clear, there are inconsistencies between the documents and within the inspection note, and arguably the information contained in the documents is subject to interpretation. The Committee is of the view that the surveyor's email provides clarity as to

⁶⁴³ *ibid.*, p 2.

⁶⁴⁴ *ibid.*, p 4.

⁶⁴⁵ *ibid.*, p 3.

⁶⁴⁶ Rachel Osborne, Acting Ministerial Coordinator, Ministerial Liaison Unit, Department of Water and Environmental Regulation, 1 September 2020, attachment 4, p 5.

⁶⁴⁷ *ibid.*

⁶⁴⁸ Garry Kilrain, private citizen, email, 18 September 2020.

⁶⁴⁹ Rachel Osborne, Acting Ministerial Coordinator, Ministerial Liaison Unit, Department of Water and Environmental Regulation, 1 September 2020, attachment 4, p 5.

⁶⁵⁰ Anthea Wu, Section Manager, Ministerial Liaison Unit, Department of Water and Environmental Regulation, email, 11 September 2020, attachment 1, p 6.

⁶⁵¹ Rachel Osborne, Acting Ministerial Coordinator, Ministerial Liaison Unit, Department of Water and Environmental Regulation, 1 September 2020, attachment 4, p 5.

⁶⁵² Anthea Wu, Section Manager, Ministerial Liaison Unit, Department of Water and Environmental Regulation, email, 8 September 2020, attachment 1, p 4.

⁶⁵³ Rachel Osborne, Acting Ministerial Coordinator, Ministerial Liaison Unit, Department of Water and Environmental Regulation, 1 September 2020, attachment 4, p 5.

⁶⁵⁴ *ibid.*

⁶⁵⁵ These include the site inspection note and schedule provided by the Department of Water and Environmental Regulation, and the storage/use form provided by Mr Kilrain.

the dam being referred to, however acknowledges that the supporting documentation required by DWER has not been provided.

- 6.224 Subsequently, DWER advised the Committee that Mr Kilrain also has a 20 000 kilolitre pump back entitlement, and this will result in a revised license of 75 000 kilolitres.⁶⁵⁶ However, Mr Kilrain maintains that DWER should not be using the pump back entitlement as a means of suggesting how he could achieve an entitlement of 75 000KL at this dam. He maintains the dam has a capacity of 74 000KL – 77 000KL and was previously licenced for 77 000KL, and DWER should license it for 74 000KL – 77 000KL.
- 6.225 It is not clear how the dam can be assessed by DWER as having different capacities and the dam can be recorded by DWER as having different capacities.
- 6.226 This illustrates the frustrations caused by DWERs inconsistent advice/records. It is not unreasonable to expect that DWER would have a record that clearly identifies the dam and clearly states the capacity of the dam.

Concluding comments

- 6.227 The Committee expresses its view that DWER providing inconsistent and incorrect advice is not a matter of the past, as suggested by DWER.

RECOMMENDATION 34

The Department of Water and Environmental Regulation:

- immediately provide comprehensive training to its officers on all aspects of the *Rights in Water and Irrigation Act 1914*, not limited to those matters identified by this inquiry, and the new administrative process for the Department to determine whether a section 5 exemption under the *Rights in Water and Irrigation Act 1914* applies
- implement a quality assurance program to monitor the accuracy and consistency of advice provided by its officers
- develop a clear set of guidelines for Department officers to use in determining whether a section 5 exemption under the *Rights in Water and Irrigation Act 1914* applies
- seek independent legal advice on the Department’s legislative authority to implement the new administrative process and any changes needed to improve the process, provide procedural fairness and a right of review.

RECOMMENDATION 35

The Department of Water and Environmental Regulation implement a departmental policy requiring all Department officer emails providing advice of a preliminary nature or based on a desktop assessment only to clearly state:

1. the advice contained in the email is of a preliminary nature only (and based on desktop assessment only, where applicable) and should not be taken as formal or final advice and the landowner should not commence any activities based on this advice

And in relation to emails to Warren-Donnelly landowners in relation to spring rights, emails should also clearly state:

2. an onsite visit and assessment is required before the Department is able to provide a formal determination

⁶⁵⁶ Anthea Wu, Section Manager, Ministerial Liaison Unit, Department of Water and Environmental Regulation, email, 11 September 2020, attachment 1, p 6.

3. to reduce the risk of being in breach of the legislation and associated enforcement activity, landowners need to ensure they have formal confirmation in writing from the Department as to whether they have spring rights before undertaking any works
4. the Department has implemented a new administrative process requiring formal assessment by the Department on whether a section 5 exemption under the *Rights in Water and Irrigation Act 1914* applies. Landowners must comply with the process, by making an application for a bed and banks permit in order to trigger the formal assessment by the Department.

RECOMMENDATION 36

If the Department of Water and Environmental Regulation persist with this new administrative process providing for the Department to make a formal determination on section 5 exemptions, the *Rights in Water and Irrigation Act 1914* should be amended to provide for the process and for a right of review against a decision by the Department that a section 5 exemption does not apply. Where an application for review is received by the Department, an independent hydrologist and surveyor, as agreed by the Department and the landowner, and in the absence of agreement as chosen by the landowner, are to be engaged to undertake an independent assessment on whether a section 5 exemption applies. The decision of the hydrologist and the surveyor as to whether a section 5 exemption applies shall stand. The costs are to be equally shared between the Department and the landowner.

Registration and perpetual licences

- 6.228 Most encumbrances that restrict or limit the use and enjoyment of a property, such as an ESA, energy operator easements or planning scheme reservations, are attached to the affected land, rather than the owner. While water licences are entitlements and not restrictions, the Committee understands why landowners may draw a comparison, due to the ability of water entitlement levels to affect use and enjoyment of land.
- 6.229 Water licences are not automatically transferred with the sale of a property. The buyer must negotiate the transfer of the licence prior to or within 30 days of settlement. In the event that the licence is not transferred, the buyer must apply for a new licence.⁶⁵⁷ In addition to being a burden on buyers, this requirement can be problematic in areas where the allocation limit has been reached.
- 6.230 The main difference between water licences and encumbrances such as ESAs is that water entitlements in WA are subject to transfer and trade. The benefits of a water transfer scheme include increased efficiency of water use through the use of price signals to regulate supply and demand, and the flexibility to respond to fluctuations in water availability. Transfer schemes are considered to be particularly beneficial where conditions such as population growth and declining rainfall are driving water scarcity.⁶⁵⁸
- 6.231 Water licences are not perpetual. This provides flexibility for regulators, but creates uncertainty amongst landowners:

Currently, they give you a 10-year licence and then you have this uncertainty.⁶⁵⁹

⁶⁵⁷ Department of Water and Environmental Regulation. See: <https://www.water.wa.gov.au/licensing/water-licensing/transfers,-trades-and-agreements>. Viewed 24 September 2020.

⁶⁵⁸ University of Western Australia, School of Agricultural and Resource Economics, *Institutional impediments to groundwater trading: the case of the Gnamara groundwater system of Western Australia*, report prepared by James Skurray, Ram Pandit and David Pannell, November 2011.

⁶⁵⁹ David Wren, Secretary, Western Australian Water Users Coalition, transcript of evidence, 30 October 2020, p 7.

6.232 The Coalition proposes that to grant perpetual licences, including in relation to spring rights, would decrease their fear of their entitlements being taken away:

In this situation, my understanding is that if the spring rights were made into a legal document, it would be a perpetual licence, tied to the land. So you would have to have land and you would have a perpetual licence—that is it. They could not take it.⁶⁶⁰

6.233 Because water allocation plans are ‘ever changing documents’, members of the Coalition do not consider the plans a good substitute for perpetual licences. While the Committee understands why landowners wish for an ongoing guarantee of their water entitlements, it is also aware that water availability is highly variable, and flexibility is essential to its management.

6.234 The Committee asked DWER about their position on perpetual licences. DWER advised that it manages the taking of water under the RIWI Act, and that its long-standing policy is to issue licences for a maximum term of 10 years.⁶⁶¹

6.235 The Coalition also proposes that registration would promote certainty. WA already has a publicly accessible water register on the DWER website, as required by the NWI Intergovernmental Agreement. This aims to foster public confidence and state unambiguously who owns the entitlement, and the nature of any encumbrances on it.⁶⁶²

6.236 Certain types of water are not included on the water register. Division 3E of the RIWI Act provides for the register of instruments. Because section 5 exemptions for springs and wetlands are not included in the definition of ‘instrument’,⁶⁶³ they are outside the scope of the water register.⁶⁶⁴

6.237 When asked for its position on registering water licences on a Certificate of Title, DWER advised:

whatever the law provides for is what we manage to. The current licensing regime provides for licences to be transferred to a new owner, but they do have to apply for that transfer to occur.⁶⁶⁵

6.238 The Committee notes that while such a register increases security for landowners by enabling them to be certain of their existing entitlements at a point in time, registration does not mean that entitlements are perpetual or fixed.

⁶⁶⁰ *ibid.*

⁶⁶¹ Michael Rowe, Director General, Department of Water and Environmental Regulation, email, 14 August 2020.

⁶⁶² Department of Agriculture, Water and the Environment. See: <https://www.agriculture.gov.au/sites/default/files/sitecollectiondocuments/water/Intergovernmental-Agreement-on-a-national-water-initiative.pdf>. Viewed 24 September 2020.

⁶⁶³ *Rights in Water and Irrigation Act 1914*, s 26GZH.

⁶⁶⁴ Michael Rowe, Director General, Department of Water and Environmental Regulation, transcript of evidence, 2 May 2020, p 8.

⁶⁶⁵ Michael Rowe, Director General, Department of Water and Environmental Regulation, transcript of evidence, 17 February 2020, p 4.

Compensation

6.239 The Committee heard that where water entitlements are reduced, licence holders should be adequately compensated. In a paper for the Institute of Public Affairs, Louise Staley said:

A government should have the authority to 'resume' water for public amenity, just as it may resume land, but only on just terms.⁶⁶⁶

6.240 The Coalition suggested to the Committee that compensation should also be payable for any resulting loss of property value arising from a reduction in water entitlements.⁶⁶⁷ The Committee has not received specific evidence to suggest that property values are impacted by fluctuations in water entitlements. DWER also told the Committee that it was not aware of any evidence to suggest reductions in water entitlements have an impact on property value.⁶⁶⁸

6.241 The City of Wanneroo told the Committee about its attempts to obtain compensation for growers affected by a reduction in water licences expected to arise from proposed revisions to the Gngangara Groundwater Areas Allocation Plan:

The Taskforce recommended that if water licences are to be reduced the State Government should consider an 'adjustment package' for growers, including the making of 'ex gratia' payments (ie. payments which are not legally required to be made). In response to this particular part of the recommended adjustment package, the Minister advised that she cannot support ex gratia payments, where reduction of water licences is due to climate change.

These reason why the above payments were referred to as ex gratia is because in Western Australia, there is no legal obligation on the State Government to compensate growers when government reduces water licences.⁶⁶⁹

6.242 The RIWI Amendment Bill 1999 introduced provisions to provide for compensation for licence amendments, suspensions or cancellations, in limited circumstances.⁶⁷⁰ These provisions can be found at Division 9, Schedule 1 of the RIWI Act.

6.243 Although section 39 was broadened in response to a recommendation of the Standing Committee on Legislation in 2000, it remains relatively narrow.⁶⁷¹ In a submission to the Water Resources Management Reform position paper, Research Assistant Professor Michael Bennett provides useful commentary on the effect of the compensation provisions:

It is clear that under these provisions compensation is not available where a licence is amended to recoup unused water entitlements and that compensation may be available in most other cases, such as where a water entitlement is reduced to protect the water resource or the associated environment, or for consistency with an approved water resource management plan. However, the right to compensation is so heavily qualified as to have very little operation. There are two important exemptions:

⁶⁶⁶ Institute of Public Affairs, *Property rights in Western Australia: time for a changed direction*, report prepared by Louise Staley, July 2006, p 6.

⁶⁶⁷ Submission 33 from Western Australian Water Users Coalition, 30 July 2019, p 4.

⁶⁶⁸ Michael Rowe, Director General, Department of Water and Environmental Regulation, transcript of evidence, 17 February 2020, p 4.

⁶⁶⁹ Submission 50 from City of Wanneroo, 31 July 2019, p 1.

⁶⁷⁰ University of Western Australia, Michael Bennett. See: https://www.law.uwa.edu.au/data/assets/pdf_file/0008/2474819/Submission-on-Water-Resources-Law-Reform_M-Bennett.pdf. Viewed 24 September 2020.

⁶⁷¹ Western Australia, Legislative Council, Standing Committee on Legislation, Report 51, *Rights in Water and Irrigation Amendment Bill 1999*, 20 June 2000, pp 42-3.

- a. In all cases, compensation is only available if the licence holder's use of water is consistent with the objects of the Act. This arguably means that no compensation is payable where entitlements are reduced to return water use to sustainable levels, given that one of the objects of the Act is sustainable water use. This would be consistent with the statement in the Second Reading speech for the Amendment Bill, highlighted above, that no compensation is payable for "changes that are necessary to reduce excessive use to sustainable levels."
- b. In most cases compensation will not be available unless "the Minister is of the opinion that the effect of the exercise of the power on the person is not fair and reasonable having regard to the exercise of the power in respect of other licence holders in the surrounding area". This appears to pick up on the suggestion by West Australian Water Users Coalition and Pastoralists and Graziers Association, as noted by the Standing Committee on Legislation, that "compensation is not necessary where there is a 'pro-rata' reduction to all users for environmental purposes".

6.244 Michael Bennett also notes that there are other ways in which the Minister for Water may prevent a licence holder from taking their full water entitlement, including through conditions or issuing a direction in writing.⁶⁷² These are not compensable.

6.245 DWER advised that the compensation provisions have never been utilised, and there has never been a request for compensation under those provisions:⁶⁷³

The CHAIR: Why do you think these provisions have never been used?

Mr ROWE: Probably because they are a very narrow set of circumstances in which people can apply for compensation.⁶⁷⁴

FINDING 34

Although compensation for water licence amendment is available under the *Rights in Water and Irrigation Act 1914*, the provisions are very narrow and as a result have never been used.

6.246 Current compensation provisions may evolve through the Water Resources Management Bill, but at this stage, it is not clear how. Any changes are likely to move towards alignment with other states and the NWI principles, which provide for slightly different compensation arrangements than those available under the RIWI Act:

As far as I can tell, most other legislation around Australia is broadly consistent with the national water initiative, which sets out a set of guiding principles that Australian governments have signed up to. The national water initiative contains provisions for what is known as risk sharing. It sets out, effectively, provisions for when water users might be entitled to compensation. It is quite narrowly defined in the sense that the principle is that it is only if there is a government policy decision which would mean that water users' access to water is significantly impacted. For example, the national water initiative contemplates that if water has to be reduced as a result of climate change, then that is not a compensable trigger.

⁶⁷² University of Western Australia, Michael Bennett. See: https://www.law.uwa.edu.au/_data/assets/pdf_file/0008/2474819/Submission-on-Water-Resources-Law-Reform-M-Bennett.pdf. Viewed 24 September 2020.

⁶⁷³ Michael Rowe, Director General, Department of Water and Environmental Regulation, transcript of evidence, 17 February 2020, p 6.

⁶⁷⁴ Michael Rowe, Director General, Department of Water and Environmental Regulation, transcript of evidence, 20 May 2020, p 11.

Up until now, the *Rights in Water and Irrigation Act 1914* is our enabling legislation for the management and use of water in Western Australia. Parts of that legislation are not consistent with the national water initiative. When the government introduces a new water resources management bill, that is an opportunity to make Western Australia's law more consistent with the national water initiative.⁶⁷⁵

RECOMMENDATION 37

The Department of Water and Environmental Regulation review and consider the effectiveness of current compensation provisions.

Conclusion

6.247 Water is an increasingly scarce and variable public good, yet many livelihoods rely on access to it. While water licences are not 'real' property, they can be thought of as existing on a continuum of property interests. The Committee considers that clearly defined entitlements and fit-for-purpose compensation processes could provide landowners with the sense of security they seek.

⁶⁷⁵ Michael Rowe, Director General, Department of Water and Environmental Regulation, transcript of evidence, 17 February 2020, p 6.

CHAPTER 7

Fishing licences: Current legislative scheme regarding commercial fishing

Introduction

- 7.1 The terms of reference for this Inquiry include that the House:
- Recognises the property rights of government-issued licenses and authorities including commercial fishing.
- 7.2 This Chapter will discuss:
- the proprietary nature of fishing access rights
 - management of commercial fishing
 - issues specific to commercial fishing, aquaculture, and pearling, including allocation of entitlements
 - compensation.
- 7.3 WA has a coast line of almost 13 000km,⁶⁷⁶ and is home to a vast range of fish and other aquatic resources sought by fishers and farmed by aquaculturalists.⁶⁷⁷
- 7.4 Commercial fishing (including aquaculture) contributes approximately \$1 billion annually to the WA economy.⁶⁷⁸

Relevant law

- 7.5 Access to fish and aquatic resources in WA is governed primarily by State legislation, and Commonwealth legislation applies in some instances. Some common law principles continue to apply such as the public's right to fish. The scope of the following two chapters will be limited to discussion of management of fish and aquatic resources within WA's jurisdiction under State legislation.⁶⁷⁹
- 7.6 The FRM Act is the primary Act which regulates fishing and aquaculture in WA, and distinguishes between commercial, recreational, and customary fishing. The *Pearling Act 1990* (Pearling Act) regulates pearling and pearl oyster hatchery activities in WA.
- 7.7 Aquatic resource management in WA is currently under reform. The *Aquatic Resources Management Act 2016* (ARM Act) will repeal the FRM Act and Pearling Act when Part 17 is

⁶⁷⁶ Landgate, 4 March 2020. See: <https://www0.landgate.wa.gov.au/maps-and-imagery/wa-geographic-names/interesting-wa-facts>. Viewed 7 April 2020.

⁶⁷⁷ Department of Primary Industries and Regional Development, 4 April 2018. See: <http://www.fish.wa.gov.au/species/Pages/default.aspx>. Viewed 7 April 2020.

⁶⁷⁸ BDO EconSearch, *Australian Fisheries and Aquaculture Industry 2017/18: Economic Contributions Estimates Report, A Report to the Technical Advisory Group*, 30 September 2019, p 49.

⁶⁷⁹ Western Australia has jurisdiction over the State's coastal waters, which are waters within three nautical miles of the Western Australian coast. The Commonwealth has jurisdiction over Australia's Exclusive Economic Zone, which is waters between three and 200 nautical miles of the Western Australian coast. However, responsibility for management of fisheries may be reallocated by agreement between the State and Commonwealth under an Offshore Constitutional Settlement arrangement. This has occurred in relation to numerous fisheries.

proclaimed.⁶⁸⁰ The Department of Primary Industries and Regional Development (DPIRD) advises that:

The new Act was scheduled for commencement on 1 January 2019, however, this has been deferred while an amendment to the Act is progressed.⁶⁸¹

- 7.8 The ARM Act received Royal Assent almost four years ago, on 29 November 2016, however it has not yet been proclaimed in its entirety. Amendments to the ARM Act are currently being progressed through the Aquatic Resources Management Amendment Bill 2020 (ARM Amendment Bill).
- 7.9 Various fishing sectors have differing interests in the shared fish and aquatic resources. The aim of the commercial sector is to profit from catching and selling fish, the recreational sector's focus is on enjoyment of the experience, and the customary sector's interest relates to cultural needs and values.⁶⁸²
- 7.10 DPIRD is responsible for protecting and growing WA's agricultural, fisheries, aquaculture, food industries and regional economies.⁶⁸³ In managing fish and aquatic resources, DPIRD advised that it is:
- Providing for the sustainability of our fish resources in our aquatic environment, providing security and certainty to commercial fishers, while also recognising the need of other resource users and broader community expectations.⁶⁸⁴
- 7.11 Across all sectors, the primary objective is to ensure that fisheries and their habitats are sustainable. Fish and aquatic resources are managed through an integrated approach that considers a wide range of social, economic, and environmental factors, particularly in the context of population growth, changing environmental conditions, and advancing fishing technologies.⁶⁸⁵ DPIRD publishes status reports of the fisheries and aquatic resources of Western Australia; refer to paragraph 7.49 for discussion of the most recent report.

⁶⁸⁰ The *Aquatic Resources Management Act 2016* (ARM Act) is part of the new legislative framework (discussed in Chapter 8) and will replace the *Fish Resources Management Act 1994* and *Pearling Act 1990*. The ARM Act received Royal Assent almost four years ago, on 29 November 2016, however it has not yet been proclaimed in its entirety. On 1 May 2018, a proclamation was published in the Government Gazette that on 2 May 2018, the following provisions of the ARM Act come into operation: Part 1 sections 3, 4, 5, and 8; Part 2; Part 3 Division 1, Division 2 sections 14(1) and (4), 15 to 21, and 23 to 27, Division 3 section 32 to 40; and Part 16 sections 253 to 257. Amendments to the ARM Act are currently being progressed through the Aquatic Resources Management Amendment Bill 2020 (discussed in Chapter 8).

⁶⁸¹ Department of Primary Industries and Regional Development, 10 December 2018. See: <https://www.fish.wa.gov.au/Fishing-and-Aquaculture/Aquatic-resources-management-act/Pages/default.aspx>. Viewed 10 April 2020.

⁶⁸² Department of Primary Industries and Regional Development, 30 September 2015. See: <https://www.fish.wa.gov.au/Fishing-and-Aquaculture/Customary-Fishing/Pages/Customary-Fishing-FAQ.aspx>. Viewed 7 April 2020.

⁶⁸³ Department of Primary Industries and Regional Development *Annual Report 2019*, p 3.

⁶⁸⁴ Ralph Addis, Director General, Department of Primary Industries and Regional Development, transcript of evidence, 17 February 2020, p 2.

⁶⁸⁵ Department of Primary Industries and Regional Development, 8 November 2016. See: <http://www.fish.wa.gov.au/Sustainability-and-Environment/Pages/default.aspx>. Viewed 7 April 2020.

Are fishing rights property rights?

7.12 The common law position is that, with some exceptions, fish found in tidal waters are common property and are not owned by any person. Once caught, a fish becomes owned by the person who caught it.⁶⁸⁶

7.13 Previous inquiries or reports have found that fish resources are common property and it is for Government to determine who has access to the resource and on what conditions:

While a licence may be seen as having characteristics of a proprietary nature, it is the creation of government, is controlled by government and may be revoked by government.

...

There is no property vested in anyone in the resources of the sea.⁶⁸⁷

7.14 Another report found that fishing rights:

Describe the right of individuals or groups to engage in the act of fishing, with the aim of capturing fish.

...

Fishing rights appear to have the most similarity with the legal notion of a 'non-possessory interest' used in property law, rather than land title.⁶⁸⁸

7.15 A non-possessory interest right includes a right to use and enjoyment; easements, profit a prendre⁶⁸⁹ and licences.

7.16 The former Minister for Fisheries stated:

It needs to be recognised that fish and aquatic resources in WA are a community resource. In short, no person owns any fish in tidal waters until they are lawfully caught.

...

Authorisations permitting commercial fishing activities do not provide a property right, but rather a right to access this resource.⁶⁹⁰

7.17 At a hearing, DPIRD reiterated that:

Our fish resources in WA are common property, so they belong to no-one while they are in a wild state, and are essentially managed by the state on behalf of the Western Australian community.⁶⁹¹

⁶⁸⁶ Government of Western Australia, (then) Department of Fisheries, Fisheries Management Paper No. 195, *Nature and Extent of Rights to Fish in Western Australia, Final report*, June 2005, p 15.

⁶⁸⁷ Government of Western Australia, (then) Department of Fisheries, Fisheries Management Paper No. 165, *Report to the Minister for Agriculture, Forestry and Fisheries by the Integrated Fisheries Management Review Committee*, November 2002, p 40.

⁶⁸⁸ Government of Western Australia, (then) Department of Fisheries, Fisheries Occasional Publication No. 102, *Improving Commercial Fishing Access Rights in Western Australia: Access Rights Working Group Report to the Hon Norman Moore, MLC, Minister for Fisheries*, April 2011, p 8.

⁶⁸⁹ Profit a prendre means the right of persons to share.

⁶⁹⁰ Hon Dave Kelly MLA, (then) Minister for Fisheries, letter, 26 September 2019, p 2.

⁶⁹¹ Ralph Addis, Director General, Department of Primary Industries and Regional Development, transcript of evidence, 17 February 2020, pp 1-2.

7.18 The Committee agrees that fish and aquatic resources are a community resource not owned by any particular person.

FINDING 35

Fish and aquatic resources are a community resource, not owned by any particular person until lawfully caught.

7.19 Further, DPIRD advises that fishing access rights under the FRM Act:

Are not full inalienable or perpetual property rights in the way that perhaps freehold ownership of land is, but they are on the continuum of property interests relatively strong and relatively clear.⁶⁹²

7.20 Many stakeholders agree with this position regarding the nature of fishing access rights, including the peak industry body for the commercial sector, the Western Australian Fishing Industry Council (WAFIC). It advises that the:

Issue of property rights is still a critical one for all of us... We are not talking about exclusive property rights; we are talking about a shared resource in a responsible policy framework.⁶⁹³

7.21 The WAFIC submits that fishing access rights have acquired the typical characteristics of property rights, including:

- tenure
- right to renew
- register of interests
- ability to lease, lend, mortgage and transfer under a will
- compensation rights in some circumstances. For example, under the *Fishing and Related Industries Compensation (Marine Reserves) Act 1997* (FRICMR Act)⁶⁹⁴
- being subject to stamp duty.⁶⁹⁵

7.22 The Committee notes that, further to WAFIC's submission, fishing access rights may also be transferred other than by will.⁶⁹⁶

7.23 The peak body for the recreational sector, Recfishwest, advises that:

Defining property rights as they apply to fisheries is problematic as property rights consists of a collection of different characteristics. While [a] number of distinguishable characteristics of property rights can be high, security of title, exclusivity, longevity and the ability to be transferred are considered the most

⁶⁹² Ralph Addis, Director General, Department of Primary Industries and Regional Development, transcript of evidence, 17 February 2020, p 10.

⁶⁹³ Ron Edwards, Chairman, Western Australian Fishing Industry Council, transcript of evidence, 28 October 2019, p 2.

⁶⁹⁴ In part, the Long Title of the Act states that it is 'AN ACT to provide for the payment of compensation to holders of leases, licences and permits under the *Fish Resources Management Act 1994* and *Pearling Act 1990* on account of the effect of marine nature reserves and marine parks constituted under the *Conservation and Land Management Act 1984*...'

⁶⁹⁵ Submission 55 from Western Australian Fishing Industry Council, 31 July 2019, p 5.

⁶⁹⁶ For example, section 140 of the *Fish Resources Management Act 1994* allows for transfer of authorisations (such as licences) and section 141 allows for the temporary transfer of entitlements under an authorisation.

crucial property rights characteristics as they apply to government issued fishing authorisations.⁶⁹⁷

- 7.24 The Pearl Producers Association (PPA) also agrees that fishing access rights share some characteristics of traditional property rights. It submits that rights in the marine domain are property rights; not in the traditional sense, but in the sense of a multi-user and multi-activity environment.⁶⁹⁸
- 7.25 The Committee's view is that certain characteristics of fishing access rights suggest that they are indeed a form of property right, notwithstanding that some matters require approval by the CEO of DPIRD (CEO), including that:
- authorisations (s 68 FRM Act), fish processing licences (s 85 FRM Act), aquaculture licences (s 94 FRM Act), and aquaculture leases (s 97 FRM Act) may be renewed
 - authorisations may be transferred (s 140 FRM Act) and entitlements under authorisations may be temporarily transferred (s 141 FRM Act)
 - authorisations and aquaculture leases may be used as security for lending, as suggested by Part 12 of the FRM Act which allows security interests to be recorded on a public register
 - the CEO may sell a forfeited entitlement (which is an entitlement reduced by a Court following conviction of certain offences) to an eligible person (s 76(4) FRM Act)
 - in relation to an aquaculture lease, a holder has an exclusive right to keep, breed, hatch, culture and harvest within the leased area the species of fish that are specified in the lease, and has ownership of all fish within the leased area under the licence (s 97 FRM Act).
- 7.26 Another position is that ownership of resources is not the key contention, but rather, how access to resources is managed:
- In the marine domain what is at issue is rarely absolute ownership but the setting of priorities between different uses and between different users and, if conflicting the processes to resolve these.⁶⁹⁹
- 7.27 The Committee supports the Government's aim that fish and aquatic resources should be managed or regulated for the benefit of industry and the community.

FINDING 36

Fish and aquatic resources in Western Australia should be managed by the State on behalf of the Western Australian community.

Commercial fishing

- 7.28 Commercial fishing under the FRM Act means fishing for a commercial purpose.⁷⁰⁰ Commercial purpose means the purpose of sale or any other purpose that is directed to gain or reward.⁷⁰¹

⁶⁹⁷ Submission 72 from Recfishwest, 31 July 2019, p 2.

⁶⁹⁸ Aaron Irving, Executive Officer, Pearl Producers Association, transcript of evidence, 28 October 2019, p 15.

⁶⁹⁹ Submission 55 from Western Australian Fishing Industry Council, 31 July 2019, p 3.

⁷⁰⁰ *Fish Resources Management Act 1994*, s 4(1).

⁷⁰¹ *ibid.*

- 7.29 The commercial fishing industry is WA's third most important industry in terms of economic impact, after mining and agriculture.⁷⁰² Key stakeholders in the commercial sector include the:
- WAFIC – for fishing, aquaculture, and pearling
 - Western Rock Lobster Council (WRLC) – for rock lobster
 - West Coast Abalone Divers Association (WCADA) – for abalone
 - PPA – for oyster pearls.
- 7.30 The FRM Act refers to 'fish' which it defines as meaning various aquatic organisms (with some exceptions), and a 'fishery', which it defines as stocks of fish and classes of fishing activities in respect of those stocks.⁷⁰³ By contrast, the ARM Act refers to 'aquatic organisms' which it defines as organisms of any species that lives in or adjacent to waters (with some exceptions), and 'aquatic resources' which it defines as populations or groups of aquatic organisms in bioregions, areas, habitats, or ecosystems.⁷⁰⁴
- 7.31 The FRM Act prohibits people from undertaking commercial fishing activities unless the person is authorised to engage in that activity.⁷⁰⁵
- 7.32 Authorisations (defined in section 4(1) of the FRM Act as meaning a licence or permit) and associated entitlements (for example, to catch a certain quantity of fish) confer only a right to access the public resource, not ownership of it. DPIRD explained the distinction as follows:
- Consistent with the concept of commercial fishing rights representing a right of access, rather than ownership, commercial fishers in WA have not been required to pay a Government fee for grant of authorisations or entitlement which reflects a property-like value. Commercial fishers pay an annual access fee.⁷⁰⁶
- 7.33 In broad terms, commercial fishing activities are managed by restricting inputs and outputs. Inputs include matters such as boat numbers and sizes, types of fishing gear, and the length of the fishing season. Outputs include matters such as the quantity of fish which may be caught.⁷⁰⁷
- 7.34 Aquaculture, which is a form of commercial fishing, under the FRM Act means the keeping, breeding, hatching, culturing or harvesting of fish.⁷⁰⁸ It may be conducted in marine or inland waters. It is the world's fastest-growing food production sector and is projected to provide 62 percent of global seafood by 2030.⁷⁰⁹
- 7.35 Pearling is another form of commercial fishing. Under the Pearling Act, pearling means all or any of the following activities:
- (a) taking, or attempting to take, pearl oysters; or

⁷⁰² Department of Primary Industries and Regional Development, 18 May 2012. See: <https://www.fish.wa.gov.au/Fishing-and-Aquaculture/Commercial-Fishing/Pages/Commercial-Fishing-Guide.aspx>. Viewed 10 April 2020.

⁷⁰³ *Fish Resources Management Act 1994*, s 4(1).

⁷⁰⁴ *Aquatic Resources Management Act 2016*, ss 3(1) and 4.

⁷⁰⁵ Government of Western Australia, (then) Department of Fisheries, Fisheries Management Paper No. 195, *Nature and Extent of Rights to Fish in Western Australia, Final report*, June 2005, p 18.

⁷⁰⁶ Submission 68 from Department of Primary Industries and Regional Development, 29 July 2019, p 2.

⁷⁰⁷ *ibid.*, p 1.

⁷⁰⁸ *Fish Resources Management Act 1994*, s 4(1).

⁷⁰⁹ Department of Primary Industries and Regional Development *Annual Report 2019*, p 44.

- (b) removing, or attempting to remove, pearls from pearl oysters; or
 - (c) moving, dumping, holding, storing or transporting pearl oysters; or
 - (d) practising, or attempting to practise, pearl culture techniques,
- and a reference to a pearling activity is a reference to one of those activities.⁷¹⁰

7.36 Various licences and permits control pearling activity, for example, a pearl diver's licence under section 13 of the Pearling Act.

FINDING 37

Commercial fishing authorisations and entitlements confer only a right of access to the public resource, not a right of ownership over that resource.

Recreational fishing

- 7.37 Recreational fishing under the FRM Act means fishing other than commercial fishing or customary fishing.⁷¹¹ It is permitted with a licence for certain types of fishing activities, and is managed by rules relating to bag and size limits, and rules specific to species and bioregions.⁷¹²
- 7.38 The recreational fishing sector comprises approximately 700 000 fishers which represents approximately one quarter of the State's population.⁷¹³
- 7.39 Recfishwest claims that increasing regulation of fishing access rights has led to those rights taking on more characteristics of property rights. It claims that:
- Security of title, exclusivity, longevity and the ability to be transferred are considered the most crucial property rights characteristics as they apply to government issued fishing authorisations.⁷¹⁴

Customary fishing

- 7.40 Customary fishing under the FRM Act means fishing by an Aboriginal person that:
- (a) is in accordance with the Aboriginal customary law and tradition of the area being fished; and
 - (b) is for the purpose of satisfying personal, domestic, ceremonial, educational or non-commercial communal needs;⁷¹⁵
- 7.41 Customary fishing acknowledges that Aboriginal people have rights to fish and hunt in accordance with ongoing tradition and culture. Section 6 of the FRM Act allows an Aboriginal person to take fish from any waters without a recreational fishing licence if it is done so in accordance with continuing Aboriginal tradition if 'taken for the purposes of the person or

⁷¹⁰ *Pearling Act 1990*, s 3(1).

⁷¹¹ *Fish Resources Management Act 1994*, s 4(1).

⁷¹² Department of Primary Industries and Regional Development, 29 January 2018. See: <http://www.fish.wa.gov.au/Fishing-and-Aquaculture/Recreational-Fishing/Recreational-Fishing-Rules/Pages/default.aspx>. Viewed 8 November 2019.

⁷¹³ Recfishwest, 2020. See: <https://recfishwest.org.au/about-us/>. Viewed 7 April 2020.

⁷¹⁴ Submission 72 from Recfishwest, 31 July 2019, p 2.

⁷¹⁵ *Fish Resources Management Act 1994*, s 4(1).

his or her family and not for a commercial purpose'. Sustainability of fish and aquatic resources is a priority in this sector, as in the other sectors.⁷¹⁶

The Department of Primary Industries and Regional Development

- 7.42 DPIRD manages fishing in WA, including in the commercial, recreational, and customary sectors.
- 7.43 DPIRD assists the Minister for Fisheries in the administration of numerous Acts (and related subsidiary legislation), including:
- FRM Act and Fish Resources Management Regulations 1995
 - Pearling Act and Pearling (General) Regulations 1991
 - *Fisheries Adjustment Schemes Act 1987* (FAS Act) and Fisheries Adjustment Schemes Regulations 2009
 - FRICMR Act and Fishing and Related Industries Compensation (Marine Reserves) Regulations 1998
 - *Fishing Industry Promotion Training and Management Levy Act 1994* and Fishing Industry Promotion Training and Management Levy Regulations 2016
 - ARM Act.
- 7.44 DPIRD also assists with conducting:
- research, management, surveillance, enforcement and education in the marine parks and reserves established under the *Conservation and Land Management Act 1984* (CALM Act)
 - compliance activities at sea, on behalf of the Department of Transport
 - compliance activities in waters adjacent to WA in Australia's Exclusive Economic Zone, in accordance with the *Fisheries Management Act 1991* (Cth), on behalf of the Commonwealth.⁷¹⁷
- 7.45 The FRM Act and Pearling Act legislative frameworks are supported by DPIRD's administrative guidelines, fisheries management papers, fisheries management publications, fisheries research and research contract reports, and state of the fisheries reports.⁷¹⁸
- 7.46 DPIRD advises that it takes a holistic approach by considering the combined effects of all fishing sectors in accordance with ESD and Ecosystem Based Fisheries Management (EBFM). This involves making decisions on the best use of the fish resource within a total and sustainable catch for each fishery or fished stock. This may involve allocation or reallocation of fish resources to either the recreational or commercial fishing sectors.⁷¹⁹
- 7.47 DPIRD divides WA into six separate *bioregions* which are geographical areas with ecosystems with common environmental conditions and by climate/rainfall characteristics in inland river

⁷¹⁶ Department of Primary Industries and Regional Development, 30 September 2015. See: <https://www.fish.wa.gov.au/Fishing-and-Aquaculture/Customary-Fishing/Pages/Customary-Fishing-FAQ.aspx>. Viewed 7 April 2020.

⁷¹⁷ The Department of Primary Industries and Regional Development manages the majority of fishing activities in Western Australia in the Australian Fishing Zone under Part 5 of the *Fisheries Management Act 1991* (Cth) and Part 3 of the *Fish Resources Management Act 1994*. See: <http://www.fish.wa.gov.au/About-Us/Legislation/Pages/default.aspx>. Viewed 8 November 2019.

⁷¹⁸ Department of Primary Industries and Regional Development. See: <http://www.fish.wa.gov.au/About-Us/Publications/Pages/default.aspx>. Viewed 8 November 2019.

⁷¹⁹ Department of Primary Industries and Regional Development, 23 August 2018. See: <http://www.fish.wa.gov.au/Fishing-and-Aquaculture/Pages/default.aspx>. Viewed 4 November 2019.

systems. The bioregions are then divided further into ecological assets, which include ecosystems, habitats, captured fish, and protected species.⁷²⁰ The six bioregions are shown at Figure 8:

Figure 8. *The six bioregions of Western Australia*

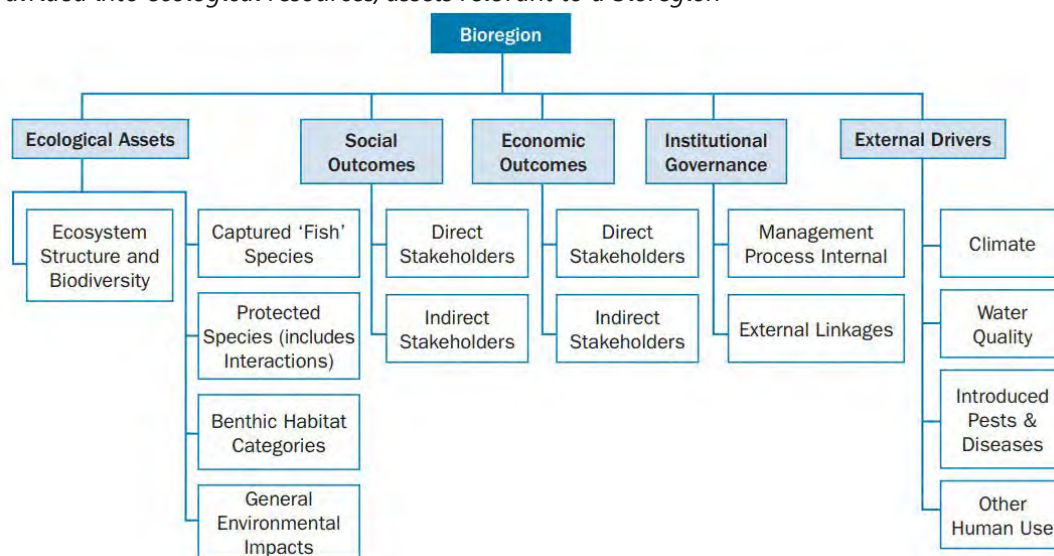


[Source: Department of Primary Industries and Regional Development. See: <https://www.fish.wa.gov.au/Sustainability-and-Environment/Fisheries-Science/Pages/default.aspx>. Viewed 25 September 2020.]

7.48 Each bioregion has a tailored EBFM component tree in which the ecological components have been subdivided into the set of ecological resources/assets relevant to that bioregion. Seen in Figure 9, these ecological components are balanced against community values to help deliver better community outcomes.

⁷²⁰ Department of Primary Industries and Regional Development, 23 August 2018. See: <http://www.fish.wa.gov.au/Sustainability-and-Environment/Sustainable-Fisheries/Pages/Sustainable-Fisheries-Management.aspx>. Viewed 4 November 2019.

Figure 9. *Ecosystem Based Fisheries Management component-tree showing ecological components divided into ecological resources/assets relevant to a bioregion*



[Source: Department of Primary Industries and Regional Development. See https://www.fish.wa.gov.au/Documents/new_legislation/next_generation_fisheries_ARM_Act.pdf. Viewed 25 September 2020.]

Current state/health of Western Australia's fisheries

- 7.49 DPIRD publishes a report, *State of the Fisheries*, of the status or health of fisheries and aquatic resources in WA. The report outlines the most recent assessments of the cumulative risk status for each of the aquatic resources.
- 7.50 These reports were published annually, however the latest report is for the period 2017-18.⁷²¹ It shows that 97 percent of fish stocks were assessed as not being at risk or vulnerable through fishing.⁷²² The data is now three years out of date.
- 7.51 The report includes several resources that were previously classified as *sustainable – recovering*, indicating that management actions taken to date have resulted in those resources recovering at acceptable rates.
- 7.52 Only two resources were classified as *inadequate*, namely the West Coast whitebait stock and the snapper stock of the Gascoyne Demersal Scalefish Fishery.⁷²³

FINDING 38

The most recently available data from the Department of Primary Industries and Regional Development indicates that a majority of Western Australia's fish stocks are being managed sustainably and are not at risk or vulnerable through fishing.

RECOMMENDATION 38

The Department of Primary Industries and Regional Development publish an updated *State of the Fisheries* report as a matter of urgency, and continue to publish such reports on an annual basis.

⁷²¹ Prior to the 2017-18 report, reports were published for periods including 2016-17, 2015-16, 2014-15, 2013-14.

⁷²² Department of Primary Industries and Regional Development, *Status reports of the fisheries and aquatic resources of Western Australia 2017/18*, report prepared by Fisheries Science and Resource Assessment and Aquatic Resource Management Branches, Perth Western Australia, 2018, p 1.

⁷²³ *ibid.*

Commercial fishing under the *Fish Resources Management Act 1994* and the *Pearling Act 1990*

Introduction

- 7.53 The FRM Act regulates fishing and aquaculture in WA in the various fishing sectors. Whilst the FRM Act regulates a range of fishing activities, it is not a code for the creation of fishing rights, and some fishing activities are still carried out in reliance on the public's common law right to fish.⁷²⁴
- 7.54 The objects of the FRM Act are listed in section 3 of the Act and include management of fisheries and aquaculture in a sustainable way.
- 7.55 Commercial fishing and aquaculture is managed through a range of licences, leases, and authorisations issued under the FRM Act.
- 7.56 The Pearling Act regulates the use of pearl oyster resources in WA.
- 7.57 The Pearling Act does not contain an objects section; however, its long title includes that the Act is to provide for the conservation and management of pearl oyster fisheries.
- 7.58 Pearling is managed through a range of licences, leases, and permits issued under the Pearling Act. Licences authorise pearling activities.

Commercial fishing and related licences and authorisations issued under the *Fish Resources Management Act 1994* and the *Pearling Act 1990*

- 7.59 The licences, leases, and authorisations relating to commercial fishing currently issued under the FRM Act are:
- Commercial Fishing Licence—this is a personal licence which permits the holder to engage in commercial fishing and to sell fish
 - Managed Fishery Licence—this authorises operation in a Managed Fishery
 - Interim Managed Fishery Permit—this authorises operation in an Interim Managed Fishery
 - Fishing Boat Licence—this authorises a boat to be used for or in connection with commercial fishing
 - Carrier Boat Licence—this authorises a boat to be used to transport fish taken by another boat for a commercial purpose
 - Fish Processing Licence—this authorises processing of fish for a commercial purpose
 - Permit to Construct a Place to Process Fish—this is a one-off requirement for approval to construct or establish a place where fish will be processed for a commercial purpose
 - Exemption for a Commercial Purpose—this is an authority which may be granted by the CEO for a commercial purpose
 - Section 43 Order—this is a prohibition order which may make exceptions to the prohibition. The exceptions may be defined by reference to certain licences
 - Fishing Tour Operator's Licence and Restricted Fishing Tour Operator's Licence—these permit fishing tours to be undertaken for a commercial purpose

⁷²⁴ Government of Western Australia, (then) Department of Fisheries, Fisheries Management Paper No. 195, *Nature and Extent of Rights to Fish in Western Australia, Final report*, June 2005, p 19.

- Aquaculture Licence—this authorises aquaculture activities and the sale of aquaculture product
 - Aquaculture Lease—the Minister for Fisheries may grant an aquaculture lease over WA land or waters and provides the exclusive right to undertake aquaculture in the leased area, but does not provide exclusive access to the area.
- 7.60 An aquaculture lease has proprietary characteristics in that it gives the leaseholder the exclusive right to:
- keep, breed, hatch and culture fish within the leased area
 - take the species of fish from the leased area.
- 7.61 Further, an aquaculture farm lease confers ownership of all fish in the leased area as specified in the lease. A holder of an aquaculture lease is also required to hold an aquaculture licence to engage in aquaculture activities within the leased area.
- 7.62 The licences relating to pearling currently issued under the Pearling Act are:
- Pearling (Wildstock) Licence—this permits pearling activities to be undertaken in the form of fishing for pearl oysters and seeding those pearl oysters
 - Pearling (Seeding) Licence—this permits pearling activities to be undertaken in the form of seeding hatchery produced pearl oysters
 - Pearl Oyster Hatchery Licence (for Propagation)—this authorises propagation of pearl oyster spat at land-based sites
 - Pearl Oyster Hatchery (Nursery) Licence—this permits the grow-out of spat on a nursery site
 - Pearl Oyster Hatchery (including Hatchery Nursery) Licence—this authorises propagation and grow-out of pearl oysters
 - Pearl Farm Licence—this may be issued by the CEO for pearling activities
 - Pearl Diver’s Licence—this is a personal licence which authorises a person to dive while undertaking pearling or hatchery activities
 - Pearl Boat Licence—this authorises a boat to be used to carry out pearling or hatchery activities
 - Pearl Boat Master’s Licence—this authorises a person to be in control of a boat used to carry out pearling or hatchery activities.
- 7.63 There is wide scope and variety in the licences, leases, authorisations, and permits issued under the FRM Act and the Pearling Act (as applicable) which shows the significant controls DPIRD uses to manage the sector so as to ensure sustainability. Refer to paragraph 7.37 for further discussion regarding management under the current legislative scheme.
- 7.64 Commercial fishing, aquaculture, and pearling access rights in licences and permits are not property rights in the traditional sense. However, they include features which are proprietary in nature, which in some circumstances include exclusivity, perpetuity, and transferability.⁷²⁵

⁷²⁵ Aquaculture leases are exclusive, not perpetual (however are more enduring than a mere revocable licence), and not expressly transferrable under the *Fish Resources Management Act 1994*. Exclusive licences are exclusive, not perpetual (however are more enduring than a mere revocable licence), and not expressly transferrable under the *Fish Resources Management Act 1994*. Authorisations are not exclusive, not perpetual (however include a limited guarantee of renewal, subject to exceptions), and include a limited guarantee of transferability under the *Fish Resources Management Act 1994*, subject to exceptions. See: Department of Fisheries, *Fisheries Management Paper No. 195: Nature and Extent of Rights to Fish in Western Australia*, June 2005.

7.65 Appendix 11 contains, in table form, a summary of commercial fishing and related licences and authorisations under the FRM Act and Pearling Act, and includes whether these confer a property right and whether compensation is available.

Integrated Fisheries Management

7.66 The former Department of Fisheries' Integrated Fisheries Management (IFM) Government Policy 2009 was developed due to growth in WA's population and coastal development, and increasing interest in recreational fishing.⁷²⁶

7.67 The IFM Government Policy 2009 contains:

- guiding principles for integrated fisheries management
- guidance on how harvest levels for fisheries will be determined
- guidance on how each fishing sector will be managed effectively
- the process for allocation of entitlements and optimal resource use
- information on compensation.

7.68 IFM is a process that determines how fish and aquatic resources can be shared between the various fishing sectors to ensure resource sustainability, including in relation to allocation of access and entitlements.⁷²⁷

7.69 The process involves setting an allowable and sustainable harvest level for a fish or aquatic resource for each sector, determining allocations between user groups, and managing each sector's take of the fish or aquatic resource within their allocation. The process also includes a method of reallocation of catch share between user groups.⁷²⁸

7.70 The Committee considers that the principles of IFM are a useful tool for various aspects of fish and aquatic resource management, including the setting of sustainable harvest levels.

FINDING 39

Integrated Fisheries Management sets a sustainable harvest level for a fish or aquatic resource for each sector, determining allocations between sectors, and managing each sector's take of the fish or aquatic resource within their allocation.

FINDING 40

Integrated Fisheries Management is an appropriate tool for determining how fish and aquatic resources may be sustainably shared between the commercial, recreational, and customary fishing sectors.

⁷²⁶ Department of Primary Industries and Regional Development, 8 August 2013. See: <https://www.fish.wa.gov.au/Sustainability-and-Environment/Sustainable-Fisheries/Sharing%20our%20fisheries/Pages/default.aspx>. Viewed 7 April 2020.

⁷²⁷ *ibid.*

⁷²⁸ *ibid.*

The precautionary approach

7.71 The precautionary approach was adopted by Australia in the *National Strategy for ESD* in 1992 and subsequently, has been incorporated into a range of environmental legislation as one of the guiding principles.⁷²⁹ It has been incorporated into the FRM Act:

4A. Precautionary principle, effect of

In the performance or exercise of a function or power under this Act, lack of full scientific certainty must not be used as a reason for postponing cost-effective measures to ensure the sustainability of fish stocks or the aquatic environment.

7.72 In the context of aquatic resource management, the precautionary principle provides that where there is a high degree of scientific uncertainty, high potential cost of error, and low reversibility of impacts, then the management methods appropriate in these circumstances may include bans and moratoria. Conversely, where there is a low degree of scientific uncertainty, less onerous management methods in the form of preventative measures are appropriate. Further, corrective measures may be appropriate management methods in low risk circumstances.⁷³⁰

FINDING 41

Long-term sustainability of fish and aquatic resources is a paramount consideration in managing these resources.

Management of fisheries and determination of Total Allowable Catch

7.73 A report by the former Integrated Fisheries Allocation Advisory Committee (IFAAC) to the former Minister for Agriculture, Forestry and Fisheries considered that data is required on two levels to support management decisions:

- biological and stock assessment information for sustainable management
- wider economic and social information to assist with allocation decisions.⁷³¹

7.74 Fisheries science aims to establish the status of each stock of fish and aquatic resource and the rate of exploitation, to ensure sustainable use of the resource.⁷³²

7.75 Sustainable management of fish and aquatic resources involves determination of a sustainable harvest level, commonly known as a Total Allowable Catch (TAC), and the allocation of entitlements.

7.76 TAC is not defined in the FRM Act, however at section 3(1) of the ARM Act it is defined as the quantity of a managed aquatic resource that may be taken by the commercial and recreational fishing sectors in a fishing period for the resource.

⁷²⁹ Government of Western Australia, (then) Department of Fisheries, Fisheries Occasional Publication No. 79, *A Sea Change for Aquatic Sustainability: Meeting the Challenge of Fish Resources Management and Aquatic Sustainability in the 21st Century*, June 2010, p 8.

⁷³⁰ *ibid.*, p 5.

⁷³¹ Government of Western Australia, (then) Department of Fisheries, Fisheries Management Paper No. 165, *Report to the Minister for Agriculture, Forestry and Fisheries by the Integrated Fisheries Management Review Committee*, November 2002, p 41.

⁷³² Government of Western Australia, (then) Department of Fisheries, Fisheries Occasional Publication No. 79, *A Sea Change for Aquatic Sustainability: Meeting the Challenge of Fish Resources Management and Aquatic Sustainability in the 21st Century*, June 2010, pp 8-9.

7.77 DPIRD collects data regarding breeding stock status, and catch and effort range, for WA's major commercial and recreational fisheries.⁷³³ DPIRD advises that it uses this data to monitor the success of its management arrangements (for example, in Management Plans), specifically in relation to:

- Ensuring the sustainability status of the State's aquatic resources
 - The success of keeping fish catches (or effort) at appropriate levels for
 - Commercial and
 - Recreational fisheries and
 - Ensuring that sustainably managed commercial fisheries provide benefits to the State as a result of significant local sales and export earnings from fish and fish products.⁷³⁴

7.78 The level of information and certainty about breeding stock status and catch and effort ranges will vary between fisheries and a precautionary approach to management should be adopted where there are limitations to available data.⁷³⁵

7.79 DPIRD advises that its research is conducted as follows:

Our researchers collaborate with other researchers and fisheries' managers providing support with statistical design and analysis, population dynamics and stock assessment, data management, monitoring of fishery catch and effort, and recreational fishing and community surveys.

The researchers provide preliminary analysis and assessment of the data collected during routine monitoring of commercial and recreational fisheries. They also undertake leading-edge research into the development of fisheries stock assessment models and sustainability reporting techniques. Results from major recreational fishing and community and stakeholder attitude surveys are added to the comprehensive fisheries databases.

Most research projects take between three and ten years, with planning often starting at least five years ahead. Sometimes we carry out shorter-term projects, such as assessing a new type of fishing gear, the status of a fish population or surveying the habitat of a particular area.⁷³⁶

7.80 Sustainable management of fish and aquatic resources and determination of TAC are interrelated in quota-managed fisheries. If the majority of the TAC is able to be achieved using an acceptable amount of fishing effort, then this indicates that the TAC has been set at an acceptable level in terms of sustainability. Conversely:

If an unusually large expenditure of effort is needed to take the TAC, or fails to achieve the TAC by a significant margin, this may indicate that the abundance of the stock is significantly lower than anticipated.⁷³⁷

⁷³³ Department of Primary Industries and Regional Development *Annual Report 2019*, p 233.

⁷³⁴ *ibid.*

⁷³⁵ Government of Western Australia, (then) Department of Fisheries, Fisheries Management Paper No. 165, *Report to the Minister for Agriculture, Forestry and Fisheries by the Integrated Fisheries Management Review Committee*, November 2002, pp 55-6.

⁷³⁶ Department of Primary Industries and Regional Development, 6 January 2016. See: <https://www.fish.wa.gov.au/Sustainability-and-Environment/Fisheries-Science/Stock-assessment-and-data-analysis/Pages/index.aspx>. Viewed 7 April 2020.

⁷³⁷ Department of Primary Industries and Regional Development *Annual Report 2019*, p 179.

- 7.81 In its latest annual report, DPIRD has published a table with details of the fish or aquatic resource, the relevant fishery, assessment of breeding stock sustainability, and annual quotas for catch and effort of that fish or aquatic resource for the commercial and recreational sectors.⁷³⁸
- 7.82 The Committee considers that accurate data regarding fish and aquatic resource stock levels, and catch and effort range, is crucial to determining an appropriate TAC for each resource. In turn, an appropriate TAC is fundamental to ensuring the resource remains sustainable.

FINDING 42

Accurate data regarding fish and aquatic resource breeding stock status, and catch and effort range, is critical to determining an appropriate Total Allowable Catch for each resource.

FINDING 43

Determining accurate and appropriate Total Allowable Catch for fish and aquatic resources is fundamental to ensuring sustainability of the resource.

Management of commercial fishing

- 7.83 Part 6 of the FRM Act deals with the management of fisheries in WA. A fishery is defined in the FRM Act as follows:

fishery means —

- (a) one or more stocks or parts of stocks of fish that can be treated as a unit for the purposes of conservation or management; and
- (b) a class of fishing activities in respect of those stocks or parts of stocks of fish;⁷³⁹

- 7.84 The FRM Act allows the Minister for Fisheries to make most decisions and to use a number of management tools, including Management Plans, regulations, notices, orders, and CEO notices and determinations,⁷⁴⁰ which are all forms of subsidiary legislation and therefore subject to disallowance in Parliament under the *Interpretation Act 1984*.⁷⁴¹

- 7.85 Management of fisheries under the FRM Act occurs in an incremental manner, from:
- a “developmental” status involving controlled resource exploration, through an interim management phase which allowed the performance of the fishery to be assessed and the scientific assessment methods to be appraised, to a “managed” status for a mature fishery where the controls and assessment were largely settled and longer term access rights could be established with confidence.⁷⁴²

- 7.86 In summary, Part 6 of the FRM Act operates as follows:

- section 54 allows the Minister for Fisheries to determine, amend, or revoke a Management Plan

⁷³⁸ *ibid.*, Appendix 2.

⁷³⁹ *Fish Resources Management Act 1994*, s 4(1).

⁷⁴⁰ Notices and orders may, for example, prohibit fishing by certain methods, by species, in particular locations, or by a person or class of person.

⁷⁴¹ *Interpretation Act 1984*, s 42.

⁷⁴² Government of Western Australia, (then) Department of Fisheries, Fisheries Occasional Publication No. 102, *Improving Commercial Fishing Access Rights in Western Australia: Access Rights Working Group Report to the Hon Norman Moore, MLC, Minister for Fisheries*, April 2011, p 14.

- section 55 provides that instruments made under section 54 are subsidiary legislation
 - section 56 specifies the content of Management Plans
 - section 58 specifies that Management Plans may provide for authorisations (which, are either Managed Fishery Licences for a Managed Fishery, or Interim Managed Fishery Permits for an Interim Managed Fishery, as defined in section 53)
 - section 59 provides that a Management Plan may specify the capacity of a fishery, by reference to matters such as the quantity of fish, fishing gear, boats, persons, or any other thing
 - section 60 specifies that a Management Plan may provide for entitlements under authorisations
 - section 61 provides that a Management Plan may prohibit fishing
 - section 63 provides how an Interim Managed Fishery may become a Managed Fishery
 - section 64 specifies how Management Plans are determined. Relevantly, it requires the Minister for Fisheries to consult with any advisory committee established in respect of the fishery, and any other advisory committees or persons, if any, as the Minister thinks appropriate. A draft plan must be published in the Government Gazette and invite representations on the draft plan to the Minister
 - section 65 contains a procedure for amendment of Management Plans and provides that an advisory committee/s or persons must be consulted before the plan is amended or revoked.
- 7.87 The majority of WA's commercial fisheries are managed under Management Plans issued under the FRM Act.
- 7.88 Management Plans for managed fisheries are developed by DPIRD in conjunction with industry, peak bodies, associations, and community groups. Management controls used in the management of commercial fisheries are primarily:
- input controls which control what goes into the water—such as licensing, fishing gear restrictions, fishing boat restrictions, limits on time available to fish, spatial closures, seasonal closures
 - output controls which control what comes out of the water—such as limits on the quantity of fish that may be taken.⁷⁴³
- 7.89 Where necessary, additional controls may also be used, namely:
- permanently closing areas to fishing to protect habitats
 - specific measures to protect juvenile or breeding fish (such as size limits and seasonal and area closures).⁷⁴⁴
- 7.90 Where commercial fishing activities occur in an area that is not a Managed Fishery pursuant to a Management Plan, these activities may be regulated through a range of other permissions, including:

⁷⁴³ Department of Primary Industries and Regional Development, 18 May 2012. See: <http://www.fish.wa.gov.au/Fishing-and-Aquaculture/Commercial-Fishing/Pages/Commercial-Fishing-Guide.aspx>. Viewed 7 April 2020.

⁷⁴⁴ *ibid.*

- section 7 of the FRM Act exemptions—which allow the Minister for Fisheries to grant a specified person or class of persons an exemption from all or any of the provisions of the Act, including for commercial purposes
- section 43 of the FRM Act orders—which allow the Minister for Fisheries to prohibit a specified person or class of persons from engaging in any fishing activity of a specified class, and further allow the Minister to amend or revoke such an order
- regulation licences under section 257 of the FRM Act—which are licences relating to matters which can be provided for in the regulations.⁷⁴⁵

7.91 The Committee notes that the FRM Act is highly prescriptive with regard to management of fish and aquatic resources, however considers that the possibility of significant ministerial discretion may undermine the certainty of various aspects of management and sustainability, and in turn, fishing access rights.

FINDING 44

The *Fish Resources Management Act 1994* provides for significant ministerial discretion in the management of the fish and or aquatic resources. Ministerial Orders and other instruments are subsidiary legislation for the purposes of the *Interpretation Act 1984*, subject to scrutiny and disallowance in the Parliament.

Management of aquaculture

7.92 Part 8 of the FRM Act deals with management of aquaculture in WA.

7.93 In summary, this Part operates as follows:

- section 90 provides that a person must not engage in aquaculture without a licence, and section 91 provides exceptions to this requirement
- section 92A requires licence applicants to have a Management and Environmental Monitoring Plan in place which identifies how the applicant will manage any risks to the environment and public safety in relation to the proposed aquaculture activity
- section 92 provides circumstances in which an aquaculture licence may be granted by the CEO of DPIRD
- section 93 provides that an aquaculture licence remains in force for 12 months from the date of grant or renewal, unless otherwise provided in the FRM Act or in the licence
- section 94 relates to renewal of an aquaculture licence
- section 95 provides that conditions may be imposed on an aquaculture licence
- section 97 relates to the grant of an aquaculture lease, to occupy or use an area of land or waters, for the purposes of aquaculture
- section 99 specifies the relationship between an aquaculture licence and aquaculture lease.

Management of pearling

7.94 Part 2 of the Pearling Act deals with pearling and hatchery activities, including pearling licences, hatchery licences, hatchery permits, and pearl oyster farms. Part 3 of the Pearling Act deals with pearl farm leases, licences, and permits.

⁷⁴⁵ Government of Western Australia, (then) Department of Fisheries, Fisheries Occasional Publication No. 102, *Improving Commercial Fishing Access Rights in Western Australia: Access Rights Working Group Report to the Hon Norman Moore, MLC, Minister for Fisheries*, April 2011, p 18.

7.95 Pearling is by nature, an integrated industry, meaning it includes 'pearl culture activities, transport, seeding operations to induce a pearl, holding oysters in the wild and harvesting'.⁷⁴⁶ The PPA said:

That is problematic for us, in an industry where all the property rights are integrated. We have fishing rights and we have lease rights or real property rights. The diminishment of one of those rights or the lack of integration of one of those rights or recognition has an impact on the other side.

We need to understand that these are kept together. The point I have here is that if we adversely affect one of the integrated activities, the total effect is the undermining of the disposition of the entire property right, from fishing to grow out, and the investment in infrastructure, jobs, property and everything that goes with that investment in that property right.⁷⁴⁷

7.96 The Committee agrees with the position that pearling is an integrated industry and that diminishment of one integrated activity may adversely affect the pearling venture as a whole.

FINDING 45

Pearling is an industry in which activities, and therefore rights, are integrated. As such, an adverse impact on the security of any particular activity or right may adversely affect another activity or right.

How to find which rules apply

7.97 DPIRD, in conjunction with the State Law Publisher, provides an online database called the Fisheries Legislation Service which contains fisheries legislation, consolidated Management Plans, consolidated notices and orders, and CEO notices and determinations.⁷⁴⁸

7.98 DPIRD acknowledges the complexity of the multitude of legislative instruments which affect fishing rules on its webpage for this database as the following note reveals:

Please note: to understand all management 'rules' in place for a particular fishery, it is important to consider all types of subsidiary legislation that may apply as well as consider all relevant Acts.⁷⁴⁹

7.99 The webpage provides that a search may be performed for particular information in relation to a species of fish, a fishery, an area, or an activity. The webpage warns that:

It is important that you refer to all of the above categories, as looking in just one category alone may not contain all of the rules.⁷⁵⁰

7.100 Further, the webpage provides a number of disclaimers regarding the accuracy or currency of the legislative instruments/fishing rules:

It is important to note these the online versions are not the official versions. Although the documents presented online have been carefully collated and

⁷⁴⁶ Submission 65 from Pearl Producers Association, 31 July 2019, p 4.

⁷⁴⁷ Aaron Irving, Executive Officer, Pearl Producers Association, transcript of evidence, 28 October 2019, p 16.

⁷⁴⁸ Available at: <https://www.slp.wa.gov.au/statutes/subsidiary.nsf/Fisheries?OpenPage>.

⁷⁴⁹ Department of Primary Industries and Regional Development, 25 July 2012. See: https://www.fish.wa.gov.au/About-Us/Legislation/Western_Australian_Fisheries_Legislation/Pages/default.aspx. Viewed 7 April 2020.

⁷⁵⁰ *ibid.*

amended as changes to the principle notice were published in the Government Gazette, their accuracy cannot be guaranteed.

Accordingly – (a) no warranty is given that they are free from error or omission nor as to the accuracy of any information in them; and (b) the State of Western Australia and its servants expressly disclaim liability for any act or omission done in reliance on the documents or for any consequences of any such act or omission.⁷⁵¹

- 7.101 The webpage also contains a further, general disclaimer constituting 23 lines and 349 words.⁷⁵²
- 7.102 Persons wishing to proceed to the database must indicate acceptance of the conditions by clicking a link titled 'I agree'.

FINDING 46

The Fisheries Legislation Service is a tool for finding information regarding which rules apply to various commercial fishing activities; however, its utility is diminished by its complexity in that a user must search numerous categories to locate all rules which apply to various commercial fishing activities.

FINDING 47

The Department of Primary Industries and Regional Development does not guarantee the accuracy of the information contained in the Fisheries Legislation Service.

RECOMMENDATION 39

The Department of Primary Industries and Regional Development investigate whether the Fisheries Legislation Service can be simplified so users may avoid searching numerous categories for all rules which apply to various commercial fishing activities.

RECOMMENDATION 40

The Department of Primary Industries and Regional Development reform the Fisheries Legislation Service so as to guarantee the accuracy of the information contained therein.

Allocation of entitlements

- 7.103 The terminology in the FRM Act relevant to entitlements is as follows:
- an 'authorisation' is defined as a 'licence' or a 'permit'
 - 'licence' means: aquaculture licence, commercial fishing licence, fishing boat licence, fish processor licence, managed fishery licence, recreational fishing licence, and any other licence provided for in regulations
 - 'permit' means: interim managed fishery permit, or permit granted under section 80 for a fish processing premises
 - an 'entitlement' is defined as an entitlement that a person has from time to time under a managed fishery licence or an interim managed fishery permit.
- 7.104 The key proprietary characteristics of authorisations and entitlements under the FRM Act are:

⁷⁵¹ *ibid.*

⁷⁵² *ibid.*

- renewability of authorisations up to 60 days after expiry subject to good behaviour and payment of relevant fees
- transferability of authorisations and entitlements under an authorisation
- the ability to temporarily transfer (for a licensing period) entitlements under an authorisation to help facilitate lease arrangements.⁷⁵³

7.105 DPIRD acknowledges that allocation of entitlements is very complex:

I think it is fair to say that access allocations are some of the most difficult, complex, challenging issues in fisheries management.⁷⁵⁴

7.106 Broadly, DPIRD advises that determination of access and allocation of entitlements often occurs by it considering fishers' catch history, and conducting catch history assessments based on statutory fishing returns that fishers are required to provide. Based on that information, DPIRD advises that it is able to gain an understanding of an individual fisher's fishing catch history and often makes use of independent panels to help it provide guidance to the Government (through the Minister for Fisheries) regarding appropriate access criteria.⁷⁵⁵

7.107 DPIRD advises that the independent panels can:

- consider the nature of the aquatic resource
- consider the management objectives
- invite submissions
- provide advice on the most appropriate access criteria.⁷⁵⁶

7.108 As noted at paragraph 7.66, the IFM Government Policy 2009 specifies a number of matters, including the process for allocation of entitlements and optimal resource use.

7.109 Whilst the IFM Government Policy 2009 is in effect, the IFAAC is no longer operational. The Minister for Fisheries advised that the IFAAC ceased to be in effect in 2017.⁷⁵⁷

7.110 DPIRD advised that IFAAC's processes were protracted and complex, and that as the State transitions towards the ARM Act framework, a decision has been made that a formal committee is not the most efficient method for providing advice regarding allocation of entitlements.⁷⁵⁸

7.111 Some fishers are uncertain regarding the status of the IFM Government Policy 2009. WAFIC said:

But people forget it and new ministers and new governments do not quite understand it. It is not in a statutory guideline. What is the status of it? It is unclear.⁷⁵⁹

⁷⁵³ Submission 68 from Department of Primary Industries and Regional Development, 29 July 2019, p 2.

⁷⁵⁴ Ralph Addis, Director General, Department of Primary Industries and Regional Development, transcript of evidence, 17 February 2020, p 1.

⁷⁵⁵ Heather Brayford, Deputy Director General, Sustainability and Biosecurity, Department of Primary Industries and Regional Development, transcript of evidence, 17 February 2020, p 12.

⁷⁵⁶ *ibid.*

⁷⁵⁷ Hon Peter Tinley MLA, Minister for Fisheries, letter, 6 March 2020, p 9.

⁷⁵⁸ Heather Brayford, Deputy Director General, Sustainability and Biosecurity, Department of Primary Industries and Regional Development, transcript of evidence, 17 February 2020, p 5.

⁷⁵⁹ Guy Leyland, MSC Industry Project Leader, Western Australian Fishing Industry Council, transcript of evidence, 28 October 2019, p 7.

- 7.112 DPIRD advised that IFM Government Policy 2009 relates to dealing with the holistic resource, and that it continues to apply this policy as it operates on a resource basis rather than on a sector-type basis.⁷⁶⁰
- 7.113 DPIRD advises that the subsequent WA Government Fisheries Policy Statement March 2012 incorporated elements of IFM from the IFM Government Policy 2009, and although it has not been adopted by the current government, DPIRD still takes its elements into account during fisheries management.⁷⁶¹
- 7.114 The Minister for Fisheries confirms that to date, the Policy Statement 2012 has not been formally adopted by the current government, however:
- It continues to reflect the key management principles underpinning fisheries and aquatic resource management in WA.⁷⁶²
- 7.115 The Policy Statement 2012 deals with the following issues:
- resource management, including the concepts of ESD and EBFM
 - resource access and allocation
 - environmental management
 - marine planning
 - development and growth.
- 7.116 The Policy Statement 2012 notes that commercial fishers experience challenges arising from:
- A combination of declining real prices, escalating fuel and labour costs, increasing competition from imports, fluctuations in the Australian dollar, environmental and biological impacts on fish stocks, and loss of fishing grounds.⁷⁶³
- 7.117 The Policy Statement 2012 also notes the challenges faced by the recreational and customary sectors. It concludes that IFM is required because fishing sectors are not distinct, but rather are intertwined, and that issues relating to each sector may overlap.
- 7.118 The Committee agrees with the former Department of Fisheries that there is a need to develop a clear understanding of the basis on which allocation decisions will be made.⁷⁶⁴ Part of this understanding involves acknowledging that the strength of fishing access rights provided to commercial fishers needs to be balanced against the State's responsibility to provide an adequate return to the community and to share the available resource amongst all users, including those in the recreational and customary sectors.⁷⁶⁵

FINDING 48

Appropriate allocation of entitlements, within a Total Allowable Catch for the resource, is fundamental to sustainable management of fish and aquatic resources.

⁷⁶⁰ Heather Brayford, Deputy Director General, Sustainability and Biosecurity, Department of Primary Industries and Regional Development, transcript of evidence, 17 February 2020, p 5.

⁷⁶¹ *ibid.*, p 6.

⁷⁶² Hon Peter Tinley MLA, Minister for Fisheries, letter, 6 March 2020, p 6.

⁷⁶³ Department of Fisheries, *Western Australian Government Fisheries Policy Statement*, March 2012, p 4.

⁷⁶⁴ Government of Western Australia, (then) Department of Fisheries, Fisheries Management Paper No. 165, *Report to the Minister for Agriculture, Forestry and Fisheries by the Integrated Fisheries Management Review Committee*, November 2002, section 5.4.

⁷⁶⁵ Submission 68 from Department of Primary Industries and Regional Development, 29 July 2019, p 2.

FINDING 49

Decisions regarding allocation of entitlements (both within the commercial sector, and between sectors) may be more readily accepted if there is a clear understanding of the basis on which these decisions are made.

Case study on proposed allocation of entitlements—Western Rock Lobster

- 7.119 The WRLC advised that in November 2018, the former Minister for Fisheries proposed to introduce a policy which would have increased the Western Rock Lobster catch quota by 1 700 tonnes, of which 1 385 tonnes would be allocated to the State at no cost, and which could then be used to generate revenue through an annual lease or future sale.
- 7.120 The WRLC advises that following further discussions, in early-2019, the Government announced it would not proceed with the proposal, and would instead increase the annual quota for the commercial sector by 315 tonnes with most of this being allocated for local supply. The Government also announced it would form a 'Premier's Task Force' with a term of reference focused on improving security of access rights.⁷⁶⁶
- 7.121 The WRLC submits that three months of negotiations between it and the Government ended without agreement and as such, in May 2019, the former Minister for Fisheries announced the cessation of all discussions with industry about the local supply. Further, DPIRD advised that the Premier's Task Force would cease and be disbanded, despite never convening.⁷⁶⁷
- 7.122 The WRLC explained that these Government actions highlight the risk the industry faces through Government intervention with regard to legal rights commercial fishers have to their share of the Western Rock Lobster catch.⁷⁶⁸
- 7.123 The Minister for Fisheries ultimately has discretion regarding allocation decisions.
- 7.124 The WRLC submits that the proposal regarding allocation of entitlements had a significant monetary value:

This seizure of 17.3 per cent of a fully allocated fishery was valued in excess of \$1 billion.⁷⁶⁹
- 7.125 Rabobank, which is a financial institution involved in lending to commercial fishers, advises that it applies lending value to fishing quota, and the reduction in quota value in the case of this proposal would have impacted clients' lending abilities. Rabobank advises that in turn, this would stifle the flow of credit thereby creating further uncertainty:

In today's current modern economy where growth and sustainability are critical, it is unreasonable for the State to burden individual citizens, in this case commercial fishermen (and investors, some of which is investors superannuation), with the costs of loss of property value by government for reasons of public benefit.⁷⁷⁰
- 7.126 Rabobank provided evidence that the Government's proposal led to reduction in unit prices, as confirmed by brokers:

⁷⁶⁶ Submission 13 from Western Rock Lobster Council, 24 July 2019, pp 9-10.

⁷⁶⁷ *ibid.*, p 10.

⁷⁶⁸ *ibid.*

⁷⁶⁹ Matt Taylor, Chief Executive Officer, Western Rock Lobster Council, transcript of evidence, 28 October 2019, p 13.

⁷⁷⁰ Submission 28 from Rabobank, 29 July 2019, p 2.

Figure 10. *Reduction in Western Rock Lobster unit prices*

	Pre announcement	Post announcement
A zone	\$10,000 / unit (July 2018)	\$8,500 / unit (November 2018)
C zone	\$8,050 / unit (November 2018)	\$6,400 / unit (December 2018)

[Source: Submission 28 from Rabobank, 29 July 2019, p 2.]

7.127 Fishing Families WA expressed the view that the proposal would have had an impact on sustainability of the resource. It advises that the addition of approximately 16 700 new deployable pots and quota units would most likely have led to serious sustainability issues.⁷⁷¹

Register of registrable interests

7.128 The register is dealt with in Part 12 of the FRM Act. The Registrar must keep a register of registrable interests,⁷⁷² which must be available for public inspection.⁷⁷³ The registrable interests that are recorded on the register are authorisations, temporary aquaculture permits, aquaculture leases and exemptions.⁷⁷⁴ The holder of an authorisation or aquaculture lease may apply to the Registrar to have noted on the register that a specified person has a security interest in a registrable interest.⁷⁷⁵

7.129 The effect of the register is that it provides some protection to persons who have a security interest.⁷⁷⁶ The Registrar must, as soon as is practicable, provide notice to a security holder if any of the following events occur in respect of the registrable interest:

- the holder of the authorisation or aquaculture lease, or their agent, is convicted of a prescribed offence under the FRM Act
- an application is made to the CEO to vary the authorisation or to transfer the authorisation or the whole part of an entitlement under the authorisation
- an aquaculture lease is to be varied or transferred
- a fisheries adjustment scheme under the FAS Act is established in respect of an authorisation
- the CEO proposes to cancel, suspend, or not renew an authorisation or proposes to terminate an aquaculture lease
- the holder of an authorisation or aquaculture lease gives notice of intention to surrender an authorisation or terminate an aquaculture lease.⁷⁷⁷

7.130 Although the register is available for public inspection at DPIRD's office, and not on the internet, the requirement that the Registrar provide notice to a security holder of the above events nevertheless provides certainty to security holders that their interests may be protected.

7.131 The register is important both for security holders and the industry more broadly. In this regard:

⁷⁷¹ Submission 56 from Fishing Families WA, 31 July 2019, p 1.

⁷⁷² *Fish Resources Management Act 1994*, s 125(1).

⁷⁷³ *ibid.*, s 125(3).

⁷⁷⁴ *ibid.*, s 125(1).

⁷⁷⁵ *ibid.*, s 127.

⁷⁷⁶ A 'security interest' is defined in section 4(1) of the *Fish Resources Management Act 1994* to mean, in relation to an authorisation or aquaculture lease, an interest in the authorisation or aquaculture lease (however arising) which secures payment of a debt or other pecuniary obligation or the performance of any other obligation.

⁷⁷⁷ *Fish Resources Management Act 1994*, s 130.

Banks lend on it. The more you scare them, the less they will lend on it. That is the problem. Instead of being prepared to lend 60 per cent to 70 per cent of market value, they might have dropped down to 20 per cent. That means that capital formation goes down, the efficiency of that industry goes down, long-term investment will reduce, and people's incentives to manage the fishery well and obey the rules, also reduce at the same time.⁷⁷⁸

Compensation for loss in market value and fisheries adjustment

Introduction

- 7.132 Compensation for loss in market value of licences, authorisations, and entitlements⁷⁷⁹ is typically available in three circumstances:
- under the FRICMR Act, which applies following the creation of marine nature reserves and marine parks under the CALM Act,⁷⁸⁰ and provides that those events can lead to holders of various leases, licences, and permits under the FRM Act and the Pearling Act to be entitled to compensation for the loss in market value of those authorisations
 - under the FAS Act, which provides for voluntary and compulsory acquisition by the State of authorisations and entitlements held under the FRM Act in certain circumstances
 - ex gratia, on a case-by-case and merit-based decision made by the Government at the time of the event.
- 7.133 The ARM Act will not repeal the FAS Act and the FRICMR Act; it will make only minor amendments to these Acts which will remain largely in force.
- 7.134 Appendix 12 contains, in table form, a summary of whether compensation is available in relation to various commercial fishing and related licences and authorisations intended to be issued under the ARM Act.
- 7.135 There is a principle of statutory interpretation that legislation should not be regarded as permitting the removal or impairment of a vested property right without compensation unless the contrary intent is clear from the statute.⁷⁸¹
- 7.136 The presumption can be rebutted by statute, and examples of such a rebuttal are:
- where the legislation expressly provides that no compensation is payable for the acquisition
 - where the legislation provides for some compensation.⁷⁸²
- 7.137 In the commercial fishing context, legislation in the form of the FRICMR Act and FAS Act provide for some compensation.

When is compensation available and how is it quantified?

- 7.138 There are competing views regarding reallocation of entitlements and associated compensation, namely:

⁷⁷⁸ George Kailis, Professor Management and Law, Notre Dame University, and Chair of Western Australian Fishing Industry Council Legislation and Policy Subcommittee, transcript of evidence, 28 October 2019, p 8.

⁷⁷⁹ By contrast, the terminology used in the *Aquatic Resources Management Act 2016* is 'resource shares' and associated 'catch entitlements' for a fishing period. Refer to Chapter 8 for further discussion.

⁷⁸⁰ *Conservation and Land Management Act 1984*, s 4.

⁷⁸¹ Government of Western Australia, (then) Department of Fisheries, Fisheries Management Paper No. 195, *Nature and Extent of Rights to Fish in Western Australia, Final report*, June 2005, p 33.

⁷⁸² *ibid.*, p 34; *Durham Holdings Pty Ltd v New South Wales* (2001) 177 ALR 436.

- the commercial sector may consider that if its allocation is reduced for the purpose of reallocating it to recreational or other users, then compensation should be payable
- the contrary view is that if fish are a community resource, and are not owned by any group, then compensation should not be payable for reallocations that are in the community's best interests.⁷⁸³

7.139 The terms of reference for the Law Reform Commission's project (discussed at paragraph 1.19) related to compensation for injurious affection to land. The report notes that outside of the land context, the ordinary meaning of the term 'injurious affection' is to affect in an injurious manner and that a century of use of the term has built an accretion of connotations which vary between jurisdictions.⁷⁸⁴

7.140 In the commercial fishing context, numerous submitters have referred to injurious affection to commercial fishing licences and authorisations. The WRLC compared this to injurious affection to land:

The bottom line is that you have to consider each case on its merits. It is no different from any case of injurious affection or loss of property, even on the land side or on the sea side, in terms of how you approach it.⁷⁸⁵

7.141 The WAFIC submitted that injurious affection may occur where the State reorders priorities of use and access to the marine domain.⁷⁸⁶

7.142 Previous inquiries into fishing access rights have considered that, in relation to compensation:

Where a reallocation of resources from one user group to another results in demonstrable financial loss to an individual, there should, in principle, be an entitlement to compensation.⁷⁸⁷

7.143 Previous inquiries have considered that compensation should not be payable for reasons of sustainability:

However, lest there be any doubt on one matter, we make it clear that the issue of compensation should not arise where allocations are reduced for reasons of sustainability. It is confined to the reallocation of resources between user groups.⁷⁸⁸

7.144 DPIRD's current position is as follows:

The department does not support compensating commercial fishers where changes occur simply through response to sustainability conditions. I think,

⁷⁸³ Government of Western Australia, (then) Department of Fisheries, Fisheries Management Paper No. 165, *Report to the Minister for Agriculture, Forestry and Fisheries by the Integrated Fisheries Management Review Committee*, November 2002, p 67.

⁷⁸⁴ Law Reform Commission of Western Australia, *Project 98: compensation for injurious affection*, 2008, pp 6-7.

⁷⁸⁵ Peter Rogers, Consultant to Western Rock Lobster Council, transcript of evidence, 28 October 2019, p 9.

⁷⁸⁶ Submission 55 from Western Australian Fishing Industry Council, 31 July 2019, pp 7-8.

⁷⁸⁷ Government of Western Australia, (then) Department of Fisheries, Fisheries Management Paper No. 165, *Report to the Minister for Agriculture, Forestry and Fisheries by the Integrated Fisheries Management Review Committee*, November 2002, p 69.

⁷⁸⁸ *ibid.*

broadly, everyone in the industry and community understands that approach and is generally supportive.⁷⁸⁹

- 7.145 Many in the industry support this position, including WAFIC in the commercial sector, which submits that compensation should not be payable for:

Reasons of environmental fluctuation and that reductions [in entitlements, priority of use, and access] in relation to natural changes in stock abundance would not give rise to compensation.⁷⁹⁰

- 7.146 Recfishwest, for the recreational sector, agrees with this position:

It is unreasonable to expect the State to provide compensation as a result of a decrease in the TACC due to environmental conditions.⁷⁹¹

- 7.147 The Committee considers that compensation should not be payable to commercial fishers where adjustments to entitlements (and similar) are made solely due to reasons of fish or aquatic resource sustainability. This is particularly so given that these are community resources not owned by any particular person, and that the State has responsibility to ensure sustainability of the resource for future generations.

FINDING 50

Compensation should not be payable to commercial fishers for the loss in market value of licences, authorisations, entitlements, or resource shares (under the *Fish Resources Management Act 1994*, the *Pearling Act 1990*, and the *Aquatic Resources Management Act 2016* as applicable) where adjustments are made solely for reasons of fish or aquatic resource sustainability.

- 7.148 Prof George Kailis, Professor Management and Law, Notre Dame University, and Chair of WAFIC Legislation and Policy Subcommittee, submits that compensation is not always the core issue, but rather a well-ordered marine domain with long-term secure rights.⁷⁹² Further, he submits that there are deficiencies in the current compensation arrangements:

At the moment, though, it is pretty ad hoc. If you fall within marine reserves, you are under the [FRICMR Act]. If it is a fisheries adjustment, there is the [FAS Act] and systems there. If it falls outside those lines, it is negotiate as best you can.⁷⁹³

- 7.149 Prof Kailis submits that in this regard, the current partial compensation systems should be brought together and integrated, and a guideline about this be issued under the ARM Act.⁷⁹⁴ With respect to how compensation has been quantified:

The bottom line is that you have to consider each case on its merits. It is no different from any case of injurious affection or loss of property, even on the land side or on the sea side, in terms of how you approach it. Generally, the practice has always been looking at cash flow over a long period of time, and either taking a profit approach, a market approach or a calculation both on some sort of multiplier of goodwill. That is normally the way the fisheries adjustment scheme

⁷⁸⁹ Ralph Addis, Director General, Department of Primary Industries and Regional Development, transcript of evidence, 17 February 2020, p 2.

⁷⁹⁰ Submission 55 from Western Australian Fishing Industry Council, 31 July 2019, p 7.

⁷⁹¹ Submission 72 from Recfishwest, 31 July 2019, p 4.

⁷⁹² George Kailis, Professor Management and Law, Notre Dame University, and Chair of Western Australian Fishing Industry Council Legislation and Policy Subcommittee, transcript of evidence, 28 October 2019, p 3.

⁷⁹³ *ibid.*, p 4.

⁷⁹⁴ *ibid.*, pp 4-5.

committee has worked in the past. Other situations have resulted in act-of-grace payments in different circumstances...⁷⁹⁵

7.150 Dr Peter Rogers, consultant to the WRLC, submits that the quantum of compensation should:

Be mindful of the strength of the lost right, catch history, the price paid for rights that are lost, investment warnings that had been issued, the reduction in the relative proportion of the allocated allowable harvest level, the length of time the right has been held, changing community expectations and the subsequent viability of any remaining rights held (if any).⁷⁹⁶

7.151 Dr Rogers submits that the policy framework in the ARM Act is arguably inadequate:

There is a lack of what I call an adequate policy framework to deal with both the process and the reallocation in the instruments. Either you use compensation or you use a market-based approach, or you reach agreement between the parties as a way of going forward.⁷⁹⁷

7.152 In this regard, the WAFIC recommends that:

Existing policies implementing rights-based management, including compensation, be consolidated and published as guidelines under sections 254 to 257 of the ARM Act⁷⁹⁸

7.153 Section 254 of the ARM Act provides that the Minister for Fisheries may issue, amend, or revoke guidelines for any of the following purposes:

- (a) providing practical guidance to persons who have duties or obligations under this Act or any other Act administered by the Minister;
- (b) providing information to industry and the public.⁷⁹⁹

7.154 Section 256 of the ARM Act requires that the Minister for Fisheries consult with any industry body the Minister thinks appropriate prior to issuing, amending or revoking a guideline under section 254 of the ARM Act.

7.155 The effect of a guideline is that it must be taken into account by a person who performs a function under the ARM Act or another Act administered by the Minister for Fisheries.⁸⁰⁰

7.156 The WAFIC stated that currently, compensation is typically paid on an ad hoc basis and in these circumstances, settlements are confidential. WAFIC submits that:

- transparent and systematic compensation mechanisms be introduced
- well-designed compensation mechanisms will not lead to a floodgate of claims.⁸⁰¹

7.157 The WAFIC recommends that a single agency be established to deal with all compensation claims in order to centralise procedural requirements.⁸⁰² The WRLC also makes this recommendation and expands on it by submitting that:

⁷⁹⁵ Peter Rogers, Consultant to Western Rock Lobster Council, transcript of evidence, 28 October 2019, p 9.

⁷⁹⁶ Submission 72 from Recfishwest, 31 July 2019, p 5.

⁷⁹⁷ Peter Rogers, Consultant to Western Rock Lobster Council, transcript of evidence, 28 October 2019, p 9.

⁷⁹⁸ Submission 55 from Western Australian Fishing Industry Council, 31 July 2019, p 6.

⁷⁹⁹ *Aquatic Resources Management Act 2016*, s 254(1).

⁸⁰⁰ *ibid.*, s 257.

⁸⁰¹ Submission 55 from Western Australian Fishing Industry Council, 31 July 2019, p 7.

⁸⁰² *ibid.*, pp 2, 9.

This could take the form of either a tribunal or authority with the power of determination, providing direction, expertise and consistent policy outcomes and transparency across the Western Australian Government sector, overall improving efficiency and consistency of public administration. A judicial role providing appeal rights for non-frivolous claims may also be an appropriate function. The scope of the proposal must include major infrastructure quasi government corporations such as Western Power, the Water Authority, Ports etc., as well as major private infrastructure developments and Local Government.⁸⁰³

- 7.158 The WAFIC submits that funding for compensation could be borne by those who benefit from reallocation of entitlements and shift in priority, rather than the State.⁸⁰⁴ Shifts in priority may include consumptive use to the recreational sector or non-consumptive uses (where non-fishing activities are prioritised over fishing uses) such as industrial development, marine parks, offshore oil and gas exploration and production, and harbour development.⁸⁰⁵ However, WAFIC submits that the State may decide, for public policy or economic reasons, that it should fund compensation.⁸⁰⁶
- 7.159 The Committee suggests that the Minister for Fisheries further explore the option of establishing a single authority to deal with all compensation claims from commercial fishers, as proposed by WAFIC.
- 7.160 The Committee makes the following findings and recommendations about compensation.

FINDING 51

Integrating compensation currently available under the *Fishing and Related Industries Compensation (Marine Reserves) Act 1997*, *Fisheries Adjustment Schemes Act 1987*, and through ex gratia payments, as well as publishing a guideline under section 254 of the *Aquatic Resource Management Act 2016* to provide practical guidance to persons who have duties or obligations under these Acts, will improve the certainty and security of commercial fishing access rights.

RECOMMENDATION 41

The Western Australian Government publish a guideline under section 254 of the *Aquatic Resource Management Act 2016* regarding compensation for commercial fishers, including but not limited to how the quantum of compensation may be determined consistently.

RECOMMENDATION 42

The Minister for Fisheries investigate the utility of amending the *Fishing and Related Industries Compensation (Marine Reserves) Act 1997* and the *Fisheries Adjustment Schemes Act 1987* to allow for compensation to be paid to commercial fishers by entities which benefit from reallocation of entitlements and shift in priority of use of the marine environment and aquatic resource.

Fishing and Related Industries Compensation (Marine Reserves) Act 1997

- 7.161 The FRICMR Act crystallises when certain 'relevant events' occur. These events relate mainly to the creation of marine nature reserves and marine parks under the CALM Act,⁸⁰⁷ and provides that those events can entitle holders of various leases, licences, and permits under

⁸⁰³ Submission 13 from Western Rock Lobster Council, 24 July 2019, pp 14-5.

⁸⁰⁴ Submission 55 from Western Australian Fishing Industry Council, 31 July 2019, p 5.

⁸⁰⁵ *ibid.*, p 7.

⁸⁰⁶ *ibid.*, p 5.

⁸⁰⁷ *Conservation and Land Management Act 1984*, s 4.

- the FRM Act and the Pearling Act to compensation for the loss in market value of those authorisations.
- 7.162 The creation of marine nature reserves and marine parks is another tool used alongside fisheries management contributing to sustainability of the marine environment and the conservation of aquatic biodiversity. Their creation prohibits or limits some activities within the area, including those relating to commercial fishing..⁸⁰⁸
- 7.163 The CALM Act provides that reservation of a marine nature reserve shall be for:
- (a) the conservation of the natural environment; and
 - (b) the protection, care and study of flora and fauna; and
 - (c) the preservation of any feature of archaeological, historic or scientific interest..⁸⁰⁹
- 7.164 In a marine nature reserve, there is a complete prohibition on commercial fishing, aquaculture, pearling, and recreational fishing..⁸¹⁰
- 7.165 The CALM Act provides that reservation of a marine park shall be for:
- the purpose of allowing only that level of recreational and commercial activity which is consistent with the proper conservation of the natural environment, the protection of flora and fauna and the preservation of any feature of archaeological, historic or scientific interest..⁸¹¹
- 7.166 As soon as practicable after the reservation of a marine park, the Minister for Fisheries must classify the park, or areas of the park, as either a general use area, sanctuary area, recreation area, or special purpose area..⁸¹² The effect of these classifications relates to a varying degree of limitation on commercial fishing, aquaculture, and pearling activities.
- 7.167 The people who may be entitled to compensation are holders of 12 various licences, leases, and permits as specified in the Act..⁸¹³ A person who holds an authorisation is entitled to fair compensation for any loss suffered by the person as a result of the relevant event..⁸¹⁴
- 7.168 A person suffers loss if and only if the market value of the authorisation held is reduced because:
- (a) the authorisation will not be able to be renewed;
 - (ba) the authorisation relates to commercial fishing of more than one type or class and will not be able to be renewed in respect of each of those types or classes;
 - (b) the authorisation relates to an area and will only be able to be renewed in respect of a part of that area;

⁸⁰⁸ Department of Primary Industries and Regional Development, 20 July 2018. See: <https://www.fish.wa.gov.au/Sustainability-and-Environment/Aquatic-Biodiversity/Marine-Protected-Areas/Pages/default.aspx>. Viewed 7 April 2020.

⁸⁰⁹ *Conservation and Land Management Act 1984*, s 13A(1).

⁸¹⁰ *ibid.*, s 13A(2).

⁸¹¹ *ibid.*, s 13B(1).

⁸¹² *ibid.*, s 13B(2).

⁸¹³ *Fishing and Related Industries Compensation (Marine Reserves) Act 1997*, s 3(1). The 12 licences, leases, and permits specified in this section are: Aquaculture lease, aquaculture licence, commercial fishing licence, fishing boat licence, fish processor's licence, managed fishery licence, interim managed fishery permit, farm lease, hatchery licence, hatchery permit, pearling licence, and pearling permit.

⁸¹⁴ *Fishing and Related Industries Compensation (Marine Reserves) Act 1997*, s 5(1).

- (c) the authorisation relates to an area and will only be able to be renewed in respect of another area;
- (d) the authorisation relates to an area and will not be able to be renewed in relation to that area without the recommendations of the CALM Minister being taken into account under section 94(3)(d) or 98A(2)(d) of the [FRM Act] or section 27A(2)(d) or 27B(2)(d) of the [P Act];
- (e) an area will not be available for commercial fishing after the renewal of the authorisation; or
- (f) in the case of a fishing boat licence or a fish processor's licence, an area used for fishing under one or more associated or relevant commercial fishing licences, managed fishery licences or interim managed fishery permits (the **related authorisations**) will not be available for commercial fishing after the renewal of the related authorisations.⁸¹⁵

7.169 The WAFIC submits that the FRICMR Act should be expanded further, namely that:

The limited compensation rights under the FRICMR Act also apply to fishers and aquaculturalists whose rights of access are re-allocated to others, or are taken from the industry for other purposes, including where they are reallocated to non-consumptive uses such as marine parks and port development⁸¹⁶

7.170 The Committee refers to its earlier Finding 51 regarding integration of compensation.

RECOMMENDATION 43

The Minister for Fisheries reform legislation regarding compensation for commercial fishing by integrating the *Fishing and Related Industries Compensation (Marine Reserves) Act 1997* and the *Fisheries Adjustment Schemes Act 1987*, and conduct a review of the circumstances in which compensation is available, including when there are reallocations to non-consumptive uses such as marine parks and port development.

RECOMMENDATION 44

The Minister for Fisheries investigate the utility of amending the *Fishing and Related Industries Compensation (Marine Reserves) Act 1997* and the *Fisheries Adjustment Schemes Act 1987* to allow for compensation to be paid to commercial fishers by entities which benefit from reallocation of entitlements and shift in priority of use of the marine environment and aquatic resource.

7.171 In the case of commercial fishers, where an area of water may be closed to that activity due to creation of a marine park, the person must obtain a certificate from the CEO stating that, in the CEO's opinion, the history of the authorisation shows that the area has been fished under the authorisation on a 'long and consistent basis'.⁸¹⁷

7.172 DPIRD advises that it considers 'long term and consistent' to mean:

Fishing at least once a year for five years out of the last seven years that fishing has been permitted⁸¹⁸

⁸¹⁵ *ibid.*, s 5(2).

⁸¹⁶ Submission 55 from Western Australian Fishing Industry Council, 31 July 2019, p 6.

⁸¹⁷ *Fishing and Related Industries Compensation (Marine Reserves) Act 1997*, s 5(5).

⁸¹⁸ Department of Primary Industries and Regional Development, *Marine Reserve Compensation Process Information Sheet*, January 2019, p 3.

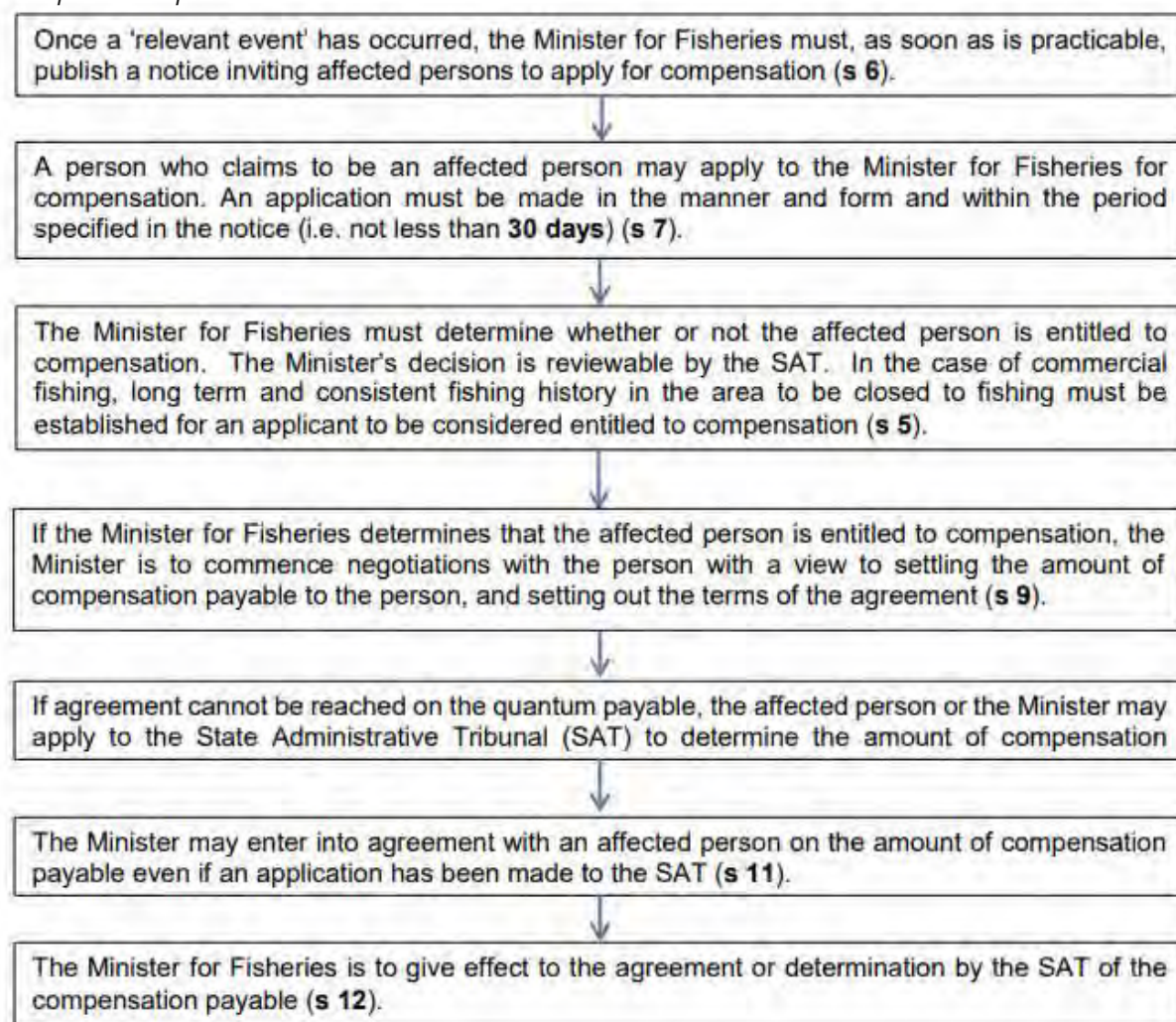
- 7.173 However, the Committee notes there is no definition of ‘long term and consistent’ in either the FRICMR Act or its regulations.
- 7.174 Section 5 of the FRICMR Act provides that the amount of compensation payable is ‘fair compensation’. This is assessed by reference to the reduction in market value of the authorisation and compensation is limited to this amount. Notably, the Act requires consideration of whether the reduction in market value of the authorisation has been offset or mitigated by an increase in the market value of the authorisation as a result of a voluntary or compulsory fisheries adjustment scheme under related legislation, namely the FAS Act.⁸¹⁹
- 7.175 Other forms of loss, including impacts on individual operations arising from the creation of the relevant event, such as increased travel time and fuel costs, are not compensable if not linked to a reduction in market value of the authorisation.⁸²⁰
- 7.176 Ultimately, however, the amount of compensation is determined by negotiation between the person entitled to compensation and the Minister for Fisheries.⁸²¹
- 7.177 Some submitters, including Recfishwest, refer to the concept of ‘just terms’ in the context of compensation. The concept of ‘just terms’ is discussed at paragraph 5.177.
- 7.178 While licences such as commercial fishing licences have proprietary characteristics, they do not constitute property in the traditional sense. As such, the issue of constitutional ‘just terms’ compensation would be of no effect if implemented – unless the rights conferred by licences become recognised as property rights. This primary issue must be addressed before considering whether a Government action has resulted in a commercial fishing access right being ‘acquired’.
- 7.179 The Committee’s view is that a more appropriate solution may be to reform the legislation dealing with commercial fishing compensation rather than considering the concept of ‘just terms’.
- 7.180 At a hearing, DPIRD explained the process of applying for compensation under the FRICMR Act and how it is quantified. DPIRD also referred to its information sheet called ‘Marine Reserve Compensation Process’ dated January 2019 which provides a summary of the process as follows:

⁸¹⁹ *Fishing and Related Industries Compensation (Marine Reserves) Act 1997*, s 5(3).

⁸²⁰ Department of Primary Industries and Regional Development, *Marine Reserve Compensation Process Information Sheet*, January 2019, p 4.

⁸²¹ *Fishing and Related Industries Compensation (Marine Reserves) Act 1997*, s 9.

Figure 11. *Fishing and Related Industries Compensation (Marine Reserves) Act 1997* summary of compensation process



[Source: Department of Primary Industries and Regional Development, Marine Reserve Compensation Process Information Sheet, January 2019, p 5.]

7.181 Since the Marine Reserve Compensation Process Information Sheet was developed (in January 2019), there has been a review of the application of the FRICMR Act, following which the scope of application of the FRICMR Act has been broadened:

Such that any licence holder who suffers a loss in the market value of an authorisation as a result of commercial fishing being prohibited in an area of a marine park is eligible for compensation.⁸²²

7.182 Relevant licence holders have been made aware of the broader interpretation of the FRICMR Act for the present compensation purposes relating to the Ngari Capes marine park, and that they have been provided with a further opportunity to make an application for compensation.⁸²³

⁸²² Ralph Addis, Director General, Department of Primary Industries and Regional Development, letter, 10 March 2020, p 1.

⁸²³ *ibid.*

FINDING 52

The Department of Primary Industries and Regional Development's Marine Reserve Compensation Process Information Sheet, January 2019, provides a useful summary to commercial fishers of the compensation processes under the *Fishing and Related Industries Compensation (Marine Reserves) Act 1997*.

Fisheries Adjustment Schemes Act 1987

7.183 The FAS Act provides for voluntary and compulsory acquisition by the State of authorisations and entitlements held under the FRM Act in certain circumstances. Where this occurs, the State is obliged under the FAS Act to pay compensation as determined in accordance with the Act.⁸²⁴

7.184 The former Minister for Fisheries explained that the objective of the FAS Act is as follows:

Schemes operating under the [FAS Act] look to reduce the number of authorisations or entitlements within a commercial fishery in return for an appropriate amount of compensation, to deliver an identified management objective in the respective fishery.⁸²⁵

7.185 DPIRD advises that the FAS Act provides for two types of adjustment schemes, being voluntary and compulsory, but that a compulsory scheme has not been established in WA. A voluntary scheme is established to:

reduce the size of the fishery, and, in essence, to buy out entitlement. They normally happen in two cases. One is where industry actually wishes to fund a scheme, and that is to, basically, restructure a fishery where it is over-capitalised and they want to look at some economic restructuring... The other one is when the state offers compensation where it wishes to reduce the size of a fishery for a range of purposes, often in respect [of] resource reallocation.⁸²⁶

7.186 In terms of the process applicable under the FAS Act, DPIRD advises that:

A committee of management needs to be established [which] ... normally needs to provide advice to government on, firstly, the desirability of establishing a scheme. Once the scheme is established, the notice establishing that scheme sets out the objectives of the scheme and also can determine who is a person entitled to offer to surrender their authorisation. The minister then calls for invitations to offer authorisations for compensation, and the committee of management provides advice to the minister, and, in essence, it is an offer and acceptance process.⁸²⁷

7.187 DPIRD advises that the ARM Act will alter the circumstances in which compensation may be available for commercial fishers in relation to the FAS Act:

The [FAS Act] will continue to apply to authorisations and entitlements under ARM Act (for example, Fishing Boat Licences or units of entitlement in managed

⁸²⁴ Government of Western Australia, (then) Department of Fisheries, Fisheries Management Paper No. 195, *Nature and Extent of Rights to Fish in Western Australia, Final report*, June 2005, p 35.

⁸²⁵ Hon Dave Kelly MLA, (then) Minister for Fisheries, letter, 18 November 2019, p 1.

⁸²⁶ Heather Brayford, Deputy Director General, Sustainability and Biosecurity, Department of Primary Industries and Regional Development, transcript of evidence, 17 February 2020, p 7.

⁸²⁷ *ibid.*, pp 7-8.

fisheries), it will not be able to be applied to resource shares in a Managed Aquatic Resource.⁸²⁸

7.188 DPIRD explains that this is because:

The [ARM Act] does not expand the scope of the [FAS Act] to include this new type of entitlement for commercial fishers.⁸²⁹

7.189 The Committee notes that the ARM Act provisions which make consequential amendments to the FAS Act⁸³⁰ do not expand its scope to provide an entitlement to compensation relating to resource shares. The Committee's view, which is in line with its earlier Recommendation 43 is that the review of the circumstances in which compensation is available include whether the FAS Act should apply to resource shares issued under the ARM Act.

7.190 The former Minister for Fisheries advised that with respect to the FAS Act, a Committee of Management is approved by Cabinet and its functions include:

Providing advice on the appropriateness of establishing an adjustment scheme, the process that should be followed and the quantum of the compensation payable.⁸³¹

7.191 Further, after an adjustment scheme is established:

- that committee receives a briefing on the subject matter from DPIRD, and then initiates a process that allows for written submissions from applicants.
- applicants can make offers and in some cases counter offers
- applicants may withdraw an application in light of the voluntary nature of the scheme
- the committee must remain independent and provide objective advice free from lobbying
- as such, potential applicants do not meet and take part in the committee's deliberations
- DPIRD's annual reports include details of all adjustment schemes, including committee membership.⁸³²

7.192 Section 14G of the FAS Act provides that the quantum of compensation payable is 'fair compensation' which is 'assessed as the market value of the authorisation or entitlement'.

7.193 The Committee notes the process applicable under the FAS Act includes negotiations and the making of offers and in some cases counter offers. Ultimately, however, the amount of compensation is determined by negotiation between the person entitled to compensation and the Minister for Fisheries.

7.194 The Committee notes that, unlike the FRICMR Act, DPIRD has not produced an information sheet outlining the compensation process applicable under the FAS Act.

⁸²⁸ Heather Brayford, Deputy Director General, Sustainability and Biodiversity, Department of Primary Industries and Regional Development, letter, 3 March 2020, p 1.

⁸²⁹ *ibid.*

⁸³⁰ *Aquatic Resources Management Act 2016*, ss 337-43.

⁸³¹ Hon Dave Kelly MLA, (then) Minister for Fisheries, letter, 18 November 2019, p 1.

⁸³² *ibid.*, p 2.

RECOMMENDATION 45

The Department of Primary Industries and Regional Development produce an information sheet or similar which outlines the compensation processes under the *Fisheries Adjustment Schemes Act 1987*.

Case study—Ocean Reef Marina

- 7.195 John Brindle, President of WCADA, provided a submission⁸³³ claiming that the proposed development of the Ocean Reef Marina will remove at least nine tonnes of the Roei abalone grounds fished by commercial and recreational divers on the reef platform. Mr Brindle said this level of impact is an estimate and there is considerable uncertainty regarding the impact following the development of the marina due to silting and loss of abalone grounds north of the proposed development site and impacts on visibility.⁸³⁴
- 7.196 WCADA submits that Roei abalone licence holders will suffer injurious affection as follows:
- The inability to sell their authorisations to fish due to the uncertainties of future development impacts without significant discounting during the ten or so years the project has been under consideration.
 - The loss of visibility and inability to access the reef north of the development due to sediment plumes associated with the development.
 - The expected direct loss of productive grounds as a result of the development both immediate and consequentially post development silting of reef platform.⁸³⁵
- 7.197 WCADA submits that:
- the proposed construction of the Ocean Reef Marina will cause a reduction of fishing access for the West Coast Roei Abalone Fishery with an associated requirement to reduce harvest levels (quota) to ensure resource sustainability⁸³⁶
 - the Minister for Fisheries has decided that a Voluntary Fisheries Adjustment Scheme under the FAS Act is the appropriate mechanism for compensation due to expected loss of fishing access with the proposed construction of the Ocean Reef Marina⁸³⁷
 - the FAS Act was not designed to deal with this issue as this is not a simple reduction in fishing access similar to what occurs following declaration of a marine park, and notes that the Act does not oblige the State to provide compensation in these circumstances.⁸³⁸
- 7.198 WCADA recommends that the scope of the FAS Act be expanded to provide for where a fishing industry is excluded from access and where injurious affection through loss of resource access can be demonstrated.⁸³⁹ However, WCADA suggests that negotiated compensation may be a better alternative:

⁸³³ In his capacity as President of the West Coast Abalone Divers Association, noting that he is also an abalone fisherman.

⁸³⁴ Submission 26 from West Coast Abalone Divers Association, 29 July 2019, p 1.

⁸³⁵ *ibid.*

⁸³⁶ *ibid.*, p 2.

⁸³⁷ *ibid.*

⁸³⁸ *ibid.*, pp 2-3.

⁸³⁹ *ibid.*

In talking to the fishermen about where we go from here, I would like to investigate, potentially, what was discussed earlier—just about a commercial negotiation, of a compensation to the level that is acceptable to the fishermen to just release themselves from the whole procedure of this marina, because currently, the level of loss, initially, we do not agree with. We think it will be more.⁸⁴⁰

- 7.199 WCADA is of the view that there may be further compensation in future subject to results of stock level monitoring:

It has been committed that there will be a five-year monitoring program to adjust the fishermen, possibly with a further compensation if it is shown that the stock levels are reduced even further.⁸⁴¹

- 7.200 WCADA explains the timeframe is an issue:

But in the case of that [the five-year monitoring program], then you go through another big bunfight about your loss of income over the previous five years, while you have not been able to fish that area because the loss will be pretty well straightaway ... Five years after construction is completed, I think I am going to be nearly 80. It is just too long winded.⁸⁴²

- 7.201 The former Minister for Fisheries advised that a Voluntary Fisheries Adjustment Scheme will seek to reduce (through buy-out/compensation) an appropriate amount of entitlement to compensate for the Roei abalone habitat lost due to the development. Although WCADA's view is that the impacts of the Ocean Reef Marina development will be higher than that estimated, the former Minister notes that this estimate followed a Public Environmental Review conducted by the Environmental Protection Authority.⁸⁴³

- 7.202 Given that the impact of the Ocean Reef Marina development is only an estimate and subject to change, the Minister for the Environment placed a number of conditions on the proponent of the development. One condition is ongoing monitoring of the habitat for at least five years.⁸⁴⁴ The former Minister for Fisheries advises that the proponent could consider providing further compensation at any stage.⁸⁴⁵

- 7.203 This case study provides an example of the inadequacy of current compensation legislation. The Committee considers that these commercial fishers face uncertainty by being required to wait five years for the compensation process to be finalised. This delay fails to have regard to commercial fishers' current situation arising from their business losses. It would be preferable for the entirety of compensation to have been paid at the outset.

Ex gratia payments

- 7.204 DPIRD advises that in addition to the FAS Act and FRICMR Act, compensation in the form of ex gratia payments may be available:

⁸⁴⁰ John Horwood, President, West Coast Abalone Divers Association, transcript of evidence, 28 October 2019, p 2.

⁸⁴¹ *ibid.*, p 3.

⁸⁴² *ibid.*

⁸⁴³ Hon Dave Kelly MLA, (then) Minister for Fisheries, letter, 18 November 2019, p 2. The Public Environmental Review report may be accessed at: http://www.epa.wa.gov.au/sites/default/files/PER_documentation/PUBLIC%20ENVIRONMENTAL%20REVIEW%20NOVEMBER%202016%20.pdf

⁸⁴⁴ Hon Dave Kelly MLA, (then) Minister for Fisheries, letter, 18 November 2019, p 2.

⁸⁴⁵ *ibid.*

There have been incidences where the government has made compensation by way of act of grace payments. That is a case-by-case and merit-based decision for the government at the time of the event.⁸⁴⁶

...

Instances where there is not an entitlement to compensation [under the FAS Act or FRICMR Act] where act-of-grace payments have been made for legitimate policy reasons, but if there is a dispute, which is perhaps where you are going, decisions to settle in the absence of a legal entitlement conversation would be made on the basis of how grey is the area, would have to be a pretty reasonable case to make a settlement.⁸⁴⁷

7.205 DPIRD advised that in general, ex gratia payments are made to commercial fishers where access associated with a licence is diminished, but where other mechanisms provided for in legislation (such as the FRICMR Act or the FAS Act) or otherwise at law cannot be applied.⁸⁴⁸

7.206 DPIRD provided an example as follows:

if an area of a fishery is closed for reasons other than establishment of a marine park, but there is to be no reduction in the number of licences in the fishery (that is, the same number of licences have access to a reduced area), Act of Grace payments may be made in recognition of this loss. Such closures usually occur to address resource sharing issues between commercial and recreational fishers.⁸⁴⁹

7.207 DPIRD advised that between 2010-11 and the current financial year,⁸⁵⁰ five ex gratia payments relating to commercial fishing access were made; each of these was made due to closure of areas to commercial fishing.⁸⁵¹

7.208 WAFIC commented on the lack of transparency around compensation payments, which it claimed are often confidential. It argued that a single authority or agency should be established with responsibilities for assessing compensation, centralising processes, and increasing consistency.⁸⁵²

7.209 DPIRD advised it is open to this possibility:

The ACTING CHAIR: Can a single authority/agency be established with responsibilities for accessing compensation in order to centralise process and increase consistency?

Mr ADDIS: I think plausibly the answer would be yes, but it would require an amendment to the statutory mechanism we deal with.

Ms BRAYFORD: Yes. I do not think there would be [a] practical reason why that would not be possible.⁸⁵³

⁸⁴⁶ Ralph Addis, Director General, Department of Primary Industries and Regional Development, transcript of evidence, 17 February 2020, p 9.

⁸⁴⁷ *ibid.*, p 11.

⁸⁴⁸ Joanne Kennedy, Manager Strategic Projects, Department of Primary Industries and Regional Development, email, 25 June 2020.

⁸⁴⁹ *ibid.*

⁸⁵⁰ Noting that a full archival audit was not possible in the timeframe provided.

⁸⁵¹ *ibid.*

⁸⁵² Submission 55 from Western Australian Fishing Industry Council, 31 July 2019, pp 2, 7.

⁸⁵³ Ralph Addis, Director General and Heather Brayford, Deputy Director General, Sustainability and Biodiversity, Department of Primary Industries and Regional Development, transcript of evidence, 17 February 2020, p 11.

Case study—Ex gratia payment to commercial wetline fisher

7.210 Raymond Yukich is a former commercial wetline fisher who reached a settlement with the former Department of Fisheries regarding his Fishing Boat Licence endorsement.⁸⁵⁴ DPIRD reviewed Mr Yukich’s submission to this Inquiry and advised that there was some confusion as to the validity of the fisher’s Fishing Boat Licence endorsement when a Limited Entry Fishery Notice was implemented. This confusion was not clarified for a number of years. It was subsequently clarified that the endorsement was of no effect and that the fisher therefore did not meet the criteria for access to the fishery.⁸⁵⁵

7.211 This case study provides one example of the circumstances in which an ex gratia payment may be and was made. However, DPIRD’s general position is that:

It is not normal practice to provide compensation or similar payments where a fisher does not meet criteria for access to a fishery.⁸⁵⁶

7.212 The Committee notes its earlier Finding 51 regarding ex gratia payments and Recommendations 43 and 44 regarding reform of compensation for commercial fishing and is of the view that, as part of that reform, consideration be given to the circumstances in which ex gratia payments are made.

FINDING 53

Expanding the scope of the *Fishing and Related Industries Compensation (Marine Reserves) Act 1997* and the *Fisheries Adjustment Schemes Act 1987* may reduce the incidence of ex gratia compensation payments which in turn may lead to more consistent compensation decision making.

RECOMMENDATION 46

The Minister for Fisheries consider the circumstances in which ex gratia payments are made to commercial fishers, with a view to reducing the incidence of such payments and instead providing a clear basis for compensation eligibility in legislation and greater transparency.

7.213 The Committee is of the view that currently available compensation for commercial fishing is multifaceted. Recommendations 41 to 45 seek to redress the complexity around compensation and primarily address reform of the FRICRM Act and the FAS Act, expanding the scope in which compensation is available, and to investigate the utility of establishing a single agency to deal with all compensation claims for commercial fishers.

Conclusion

7.214 Fish and aquatic resources in tidal waters are a community resource, not owned by any person until lawfully caught. These resources are managed for the benefit of the WA community with sustainability as a paramount consideration to ensure the resource may be utilised by future generations. Commercial fishing rights represent a right of access to the resource subject to the requirements of the current legislative scheme under the FRM Act and the Pearling Act. Compensation is available for loss in market value, authorisations, and entitlements, and for adjustment to fisheries, in a range of circumstances.

⁸⁵⁴ Submission 30 from Raymond Yukich, 30 July 2019, p 1.

⁸⁵⁵ Ralph Addis, Director General, Department of Primary Industries and Regional Development, letter, 10 March 2020, p 2.

⁸⁵⁶ *ibid.*

CHAPTER 8

Fishing licences: New legislative scheme regarding commercial fishing

Introduction

8.1 The terms of reference for this Inquiry include that the House:

Recognises the property rights of government-issued licenses and authorities including commercial fishing.

8.2 This Chapter will discuss:

- development of the new legislative scheme
- management of commercial, recreational, and customary fishing
- issues specific to commercial fishing, aquaculture, and pearling, including allocation of entitlements
- transition from the current to the new legislative scheme.

Development of new legislative scheme

8.3 The ARM Act will replace the FRM Act and the Pearling Act and will become the primary legislation under which fishing, aquaculture, pearling, and aquatic resources are managed in WA.⁸⁵⁷

8.4 The ARM Act integrates fisheries and aquatic resource management by considering the impact of fishing activities on the broader ecosystem in accordance with the principles of ESD and EBFM. In contrast, the FRM Act manages fishing activities by reference to specific fisheries.

8.5 The ARM Act's integrated approach focuses on clearly defined aquatic resources and recognises the need to maintain ecological sustainability as well as resource access for commercial, recreational, and customary fishing, research, and other community benefits.⁸⁵⁸

8.6 DPIRD advises that the ARM Act will improve fisheries management for the State as well as providing some improvements in security, certainty, and clarity of access rights for commercial fishers because:

The ARM Act makes it necessary for the minister of the day to make explicit the policy objectives for which the resource is to be managed and to reflect those in an aquatic resource management strategy, or ARMS, which gives everybody,

⁸⁵⁷ The *Aquatic Resources Management Act 2016* (ARM Act) received Royal Assent on 29 November 2016, however it has not yet been proclaimed in its entirety. On 1 May 2018, a proclamation was published in the Government Gazette that on 2 May 2018, the following provisions of the ARM Act come into operation: Part 1 sections 3, 4, 5, and 8; Part 2; Part 3 Division 1, Division 2 sections 14(1) and (4), 15 to 21, and 23 to 27, Division 3 section 32 to 40; and Part 16 sections 253 to 257. Amendments to the ARM Act are currently being progressed through the Aquatic Resources Management Amendment Bill 2020.

⁸⁵⁸ Department of Primary Industries and Regional Development, 23 August 2018. See: <http://www.fish.wa.gov.au/Fishing-and-Aquaculture/Aquatic-resources-management-act/Pages/Management.aspx>. Viewed 8 April 2020.

including commercial fishers, a clear direction as to the purpose for which the resource is being managed.⁸⁵⁹

- 8.7 Discussion regarding development of a new legislative scheme has been occurring for some time.⁸⁶⁰
- 8.8 The former Department of Fisheries considered the FRM Act to be deficient because it does not consider:
- The questions associated with managing aquatic biological resources used by multiple sectors for competing purposes as a biological unit (as opposed to a fishery based on a specified gear type or single stock/single species/single sector) or provide any head powers that would allow this approach to be taken readily.
 - Fishing access rights for non-commercial sectors or how these might be managed, transferred and given continuity at a sectoral, as well as an individual, level.⁸⁶¹
- 8.9 During debate on the motion that the Committee conduct this Inquiry, reference was made to the nature of fishing rights as 'property rights' but was rebutted. The Minister for Environment said:
- Fishing licences issued under the [FRM Act] are statutory rights to take fish. Such fishing licences are not property rights.⁸⁶²
- 8.10 Further to these discussions, during development of the ARM Act, DPIRD advises that it reviewed legislative models for fisheries and oceans management internationally in the United Kingdom, Canada, the United States of America, New Zealand, as well as domestically in South Australia, the Northern Territory, Tasmania, Victoria, and New South Wales.⁸⁶³
- 8.11 As such, DPIRD claims that the new legislative regime has been developed based on best practice concepts drawn from across the world which were modified for a best fit for WA, having regard to the characteristics of many fisheries in the State, which are small-scale and multispecies.⁸⁶⁴

⁸⁵⁹ Ralph Addis, Director General, Department of Primary Industries and Regional Development, transcript of evidence, 17 February 2020, p 2.

⁸⁶⁰ Fisheries Management Paper No. 165 (November 2002) discusses the management framework under the *Fish Resources Management Act 1994* and the requirements of a new management framework. Fisheries Management Paper No. 195 (June 2005) notes that Western Australia is committing significant resources to the analysis and development of a new approach to fisheries management in which the whole of the fish stock is managed. Occasional Publication No. 79 (June 2010) was produced following direction from the Minister for Fisheries to the former Department of Fisheries to investigate and scope the requirements for new fisheries legislation which would ensure sustainable development and conservation of biological resources in the 21st century. Occasional Publication No. 102 (November 2011) is the outcome of work undertaken by the Access Rights Working Group, which was formulated to provide advice on the improvement of commercial fishing access rights, including reference to the development of proposed new aquatic resources management legislation.

⁸⁶¹ Government of Western Australia, (then) Department of Fisheries, Fisheries Occasional Publication No. 79, *A Sea Change for Aquatic Sustainability: Meeting the Challenge of Fish Resources Management and Aquatic Sustainability in the 21st Century*, June 2010, p 13.

⁸⁶² Hon Stephen Dawson, Minister for Environment, Western Australia, Legislative Council, *Parliamentary Debates (Hansard)*, 12 June 2019, p 4019.

⁸⁶³ Submission 68 from Department of Primary Industries and Regional Development, 29 July 2019, p 5.

⁸⁶⁴ *ibid.*

8.12 New fisheries legislation is required to ensure that WA can continue to meet future challenges and demands in the face of increasing pressures on our environment.⁸⁶⁵ The former Minister for Fisheries advised that these pressures include:

Population growth, coastal development, and competition for priority uses in the marine environment from many different interest groups. Rapidly advancing fish finding, fishing and communications technologies are making fish more vulnerable to fishing than ever before, while changing ocean temperatures and climatic conditions that have become evident in the past 15 years appear to be driving changes in the population cycles and abundance of many aquatic species. On top of these factors, an increase in international shipping and transport of live organisms has heightened the severe risk posed to our ecological communities through the introduction of harmful organisms and diseases.⁸⁶⁶

8.13 The former Minister for Fisheries advised that development of the ARM Act occurred in consultation with the commercial fishing industry and that the partially proclaimed Act has the overwhelming support of both the commercial and recreational sectors.⁸⁶⁷

8.14 The WRLC advised that 'we cannot afford not to implement the [ARM Act] legislation', however noted deficiencies in the policy framework relating to the process and the reallocation in the instruments.⁸⁶⁸ It expanded on this point in its submission, including that:

- there must be legislative certainty on agreed principles and processes for determining allocations and reallocations between sectors, and the proportion of the available TAC to be available to each sector
- fishing licences be recognised as 'property' in the ARM Act for the purposes of compensation.⁸⁶⁹

8.15 Further, the WRLC submitted that:

If there was certainty in the [ARM Act] legislation that said fishing access rights were open to compensation and you had appropriate mechanisms to deal with it... a lot of that uncertainty would disappear.⁸⁷⁰

8.16 The WAFIC expressed that the ARM Act 'can improve fisheries management',⁸⁷¹ however also shared similar concerns regarding aspects of the ARM Act, including that:

- there is uncertainty regarding the quality of fishing access rights
- policies regarding allocation, reallocation, and compensation must be formalised

⁸⁶⁵ Department of Primary Industries and Regional Development, 10 December 2018. See: <https://www.fish.wa.gov.au/Fishing-and-Aquaculture/Aquatic-resources-management-act/Pages/default.aspx>. Viewed 8 April 2020.

⁸⁶⁶ Aquatic Resources Management Bill 2015, *Explanatory Memorandum*, Legislative Council, p 1.

⁸⁶⁷ Hon Dave Kelly MLA, (then) Minister for Fisheries, letter, 26 September 2019, p 3; Submission 68 from Department of Primary Industries and Regional Development, 29 July 2019, p 3.

⁸⁶⁸ Peter Rogers, Consultant to Western Rock Lobster Council, transcript of evidence, 28 October 2019, p 9.

⁸⁶⁹ Submission 13 from Western Rock Lobster Council, 24 July 2019, pp 4, 6.

⁸⁷⁰ Peter Rogers, Consultant to Western Rock Lobster Council, transcript of evidence, 28 October 2019, p 9.

⁸⁷¹ George Kailis, Professor Management and Law, Notre Dame University, and Chair of Western Australian Fishing Industry Council Legislation and Policy Subcommittee, transcript of evidence, 28 October 2019, p 6.

- commercial fishers should retain their existing fisheries management arrangements under the FRM Act, and should not be forced under new management arrangements under the ARM Act, until those policies are formalised.⁸⁷²
- 8.17 The WAFIC also submitted that the ARM Act should be amended to recognise fishing rights as property.⁸⁷³
- 8.18 The PPA expressed concerns that the ARM Act does not treat pearling as an integrated industry.⁸⁷⁴
- 8.19 DPIRD advises that the ARM Act strengthens access rights for commercial fishers through the following within a Managed Aquatic Resource:
- the ongoing right of access (resource shares) which are granted in perpetuity for the life of the Aquatic Resource Use Plan (ARUP)
 - separation of resource shares from the (generally) annual right to fish (catch entitlement) arising from shares.
 - requirement to grant share options where an ARUP is revoked, except if shares of an equivalent value will be allocated to the holder under a subsequent ARUP
 - an emphasis on penalties for poor behaviour being directed at the fisher, rather than impacting on the value of resource shares.⁸⁷⁵
- 8.20 DPIRD notes the interrelationship between certainty of access rights, investment, and sustainability and how:
- Providing commercial fishers with certainty regarding their ongoing access to the resource is important for encouraging long-term investment in the industry. This in turn creates an incentive for commercial fishers to support sustainable fishing practices.⁸⁷⁶
- 8.21 In relation to aquaculture, DPIRD advises that the ARM Act provides a clearer understanding of tenure for the purposes of aquaculture.⁸⁷⁷
- 8.22 In relation to pearling, DPIRD advises that the ARM Act provides scope to diversify activities that can be undertaken on leases to encompass other forms of aquaculture.⁸⁷⁸
- 8.23 The Committee notes that there is no uniform agreement by industry stakeholders and DPIRD regarding the ARM Act.

Introduction

- 8.24 This section is based on current legislation as at the time of drafting in June 2020. As noted previously at paragraph 7.8, the entirety of the ARM Act has not yet been proclaimed, almost four years after receiving Royal Assent. The ARM Amendment Bill, introduced in the Legislative Assembly in April 2020, proposes to amend or delete certain relevant provisions of the ARM Act, including:

⁸⁷² George Kailis, Professor Management and Law, Notre Dame University, and Chair of Western Australian Fishing Industry Council Legislation and Policy Subcommittee, transcript of evidence, 28 October 2019, p 5.

⁸⁷³ Submission 55 from Western Australian Fishing Industry Council, 31 July 2019, p 4.

⁸⁷⁴ Aaron Irving, Executive Officer, Pearl Producers Association, transcript of evidence, 28 October 2019, p 16.

⁸⁷⁵ Submission 68 from Department of Primary Industries and Regional Development, 29 July 2019, p 4.

⁸⁷⁶ *ibid.*, p 2.

⁸⁷⁷ *ibid.*, p 4.

⁸⁷⁸ *ibid.*

- amending the definition of 'resource share'
 - amending the definition of 'aquatic resource'
 - amending the content of an 'Aquatic Resource Management Strategy' (ARMS)
 - amending the content of an 'Aquatic Resource Use Plan'
 - deleting the requirement for the CEO to publish notice of certain decisions relating to aquaculture licences.
- 8.25 The Committee is restricted in that the ARM Amendment Bill has not been referred to the Committee, and as such it can comment only on the current legislative scheme.
- 8.26 DPIRD advises that the key principles of ARM Act are that it is:
- resource-based, in that it focuses on the sustainable use of aquatic resources, aquatic organisms, and aquatic ecosystems with outcome-focused resource use planning provisions to ensure transparency and to achieve a balance between resource use and conservation
 - risk-based, in that it provides formal risk-based assessment processes to determine management actions where adequate scientific information is not available
 - rights-based, in that it ensures the long-term business interests of the fishing industry and the community are given structure and security within a legal framework, which facilitates investment, innovation and stewardship.⁸⁷⁹
- 8.27 WAFIC, as the peak body for the commercial sector, advises that it supports the technical amendments made by the ARM Amendment Bill, which will improve and clarify the ARM Act's operation.⁸⁸⁰
- 8.28 Unlike the FRM Act which focuses on fish in fisheries, the ARM Act is framed by reference to an 'aquatic resource' in bioregions, areas, habitats or ecosystems:

4. Meaning of aquatic resource

(1) In this Act, a reference to an aquatic resource is a reference to —

- (c) a population of one or more identifiable groups of aquatic organisms; or
- (d) one or more identifiable groups of aquatic organisms in a bioregion, area, habitat or ecosystem.

(2) Without limiting subsection (1), an identifiable group of aquatic organisms includes —

- (a) a species of aquatic organisms; and
- (b) a species of aquatic organisms limited by reference to sex, weight, size, reproductive cycle or any other characteristic.⁸⁸¹

- 8.29 The core objectives of the ARM Act relate to ecological sustainability of aquatic resources and the benefits flowing from the use of those resources. This is reflected in the objects section of the Act.⁸⁸²

⁸⁷⁹ Submission 68 from Department of Primary Industries and Regional Development, 29 July 2019, p 3.

⁸⁸⁰ Alex Ogg, Chief Executive Officer, Western Australian Fishing Industry Council, email, 22 June 2020.

⁸⁸¹ *Aquatic Resources Management Act 2016*, s 4.

⁸⁸² *ibid.*, s 9.

8.30 The ARM Act expands on the objects specified in the FRM Act by referring to ecological sustainability of aquatic resources rather than fisheries, and by making explicit reference to economic, social, and other benefits that those resources may provide.

8.31 The objects of the ARM Act may be achieved as follows:

10. Means of achieving objects of Act

The objects of this Act are to be achieved in particular by —

- (a) conserving and protecting aquatic resources and aquatic ecosystems and where necessary, restoring aquatic ecosystems; and
- (b) managing aquatic resources and aquatic ecosystems on the basis of relevant scientific data and principles; and
- (c) encouraging the sustainable development of fishing, aquaculture and other activities reliant on aquatic resources; and
- (d) encouraging members of the public to actively participate in decisions about the management and conservation of aquatic resources and aquatic ecosystems; and
- (e) ensuring that the interests of different sectors of the community that use aquatic resources or aquatic ecosystems are identified and considered; and
- (f) managing aquatic resources and aquatic ecosystems in a manner that is as practical, efficient and cost effective as possible.⁸⁸³

8.32 A person or body exercising functions or powers under the ARM Act must have regard to the objects of the Act and the means by which they are achieved.⁸⁸⁴

Protection of commercial fishers' rights under the *Aquatic Resources Management Act 2016*

8.33 DPIRD advises that statutory consultation processes, and numerous instruments of subsidiary legislation (which are subject to scrutiny by the Parliament), are key features of the ARM Act protecting commercial fishers.⁸⁸⁵

8.34 DPIRD advises that the ARM Act provides for a multistage process before commercial fishing entitlements are issued:

First of all, the declaration of the aquatic resource ... is subsidiary legislation.

The ARMS is subject to two months of statutory consultation...

the ARUPs underneath the ARMS are also subsidiary legislation subject to statutory consultation.

Once ... into the ARMS and the ARUP framework, there is an ongoing right to access the resource in the form of resource shares. Those resource shares exist for the life of the ARMS. They do not need to be renewed each year; they simply exist for that period.

⁸⁸³ *ibid.*, s 10.

⁸⁸⁴ *ibid.*, s 11.

⁸⁸⁵ Joanne Kennedy, Manager, Strategic Projects, Department of Primary Industries and Regional Development, transcript of evidence, 17 February 2020, p 10.

At the start of each fishing period, those shares give rise to the annual catch entitlement for the particular resource, which can be registered at the beginning of each fishing period and exists only for the period of that fishing period.⁸⁸⁶

- 8.35 A resource share is defined in section 3(1) of the ARM Act to mean a share in respect of a managed aquatic resource that is made available under the ARMS for the resource.
- 8.36 A fishing period is defined in section 16(1)(e) of the ARM Act to mean a period for which activities in respect of the aquatic resource are to be regulated in accordance with an ARMS for the resource.
- 8.37 DPIRD advises that the ongoing right of access (resource shares) and the associated annual catch entitlement can be transferred independently to another fisher or rights holder which has benefits:
- That means that the holder of the resource shares can be completely separated from the fishing activity on the water and is therefore separated from any kind of compliance activity and any sort of issues that can arise as a result of compliance activity in terms of the value of their share going forward. That provides a greater level of security and certainty than currently under the FRM Act.⁸⁸⁷
- 8.38 The Committee's view is that the prescriptive nature of the ARM Act will enhance resource sustainability and strengthen commercial fishing access rights, particularly due to the proprietary characteristics of resource shares and catch entitlements.

FINDING 54

The resource-based, risk-based, and rights-based nature of the *Aquatic Resources Management Act 2016* will increase sustainability of the aquatic resource and strengthen commercial fishing access rights.

FINDING 55

The statutory regime, including the statutory consultation processes, in the *Aquatic Resources Management Act 2016* has the effect of strengthening the security of commercial fishing access rights.

Commercial fishing and related licences and authorisations intended to be issued under the *Aquatic Resources Management Act 2016*

- 8.39 Licences and authorisations relating to commercial fishing will be issued under the ARM Act. Additional licences will also be created and issued under the associated regulations. However the former Minister for Fisheries advised that these are still in development and details about these licences are not yet available.⁸⁸⁸
- 8.40 The licences and authorisations relating to the commercial sector that are intended to be issued under the ARM Act are:
- Resource Shares – these represent an ongoing right to access a managed aquatic resource, and give rise to a catch entitlement at the commencement of each fishing period

⁸⁸⁶ Joanne Kennedy, Manager, Strategic Projects, Department of Primary Industries and Regional Development, transcript of evidence, 17 February 2020, p 10.

⁸⁸⁷ *ibid.*

⁸⁸⁸ Hon Dave Kelly MLA, (then) Minister for Fisheries, letter, 26 September 2019, p 2.

- Catch Entitlement – this is generated from resource shares at the commencement of each fishing period, and represents the quantity of the TAC that the holder of the entitlement can take
- Managed Fishery Licence – this authorises operation in a Managed Fishery
- exemption for a Commercial Purpose – this is an authority which may be granted by the CEO for a commercial purpose
- section 125 Order – this is a prohibition order which may make exceptions to the prohibition. The exceptions may be defined by reference to certain licences
- Aquaculture Licence – this authorises aquaculture activities within an area covered by an Aquaculture Lease
- Aquaculture Lease – this may be granted over WA land or waters and provides the exclusive right to undertake aquaculture activities within the leased area. Currency of the lease is dependent on the currency of an Aquaculture Licence.

8.41 Appendix 12 contains, in table form, a summary of commercial fishing and related licences and authorisations intended to be issued under the ARM Act, and includes whether these confer a property right and whether compensation is available.

Management

Ecologically Sustainable Development and Ecosystem-Based Fisheries Management

8.42 ESD is the concept that seeks to integrate short and long-term economic, social and environmental effects in all decision making.⁸⁸⁹

8.43 The *National Strategy for ESD* is previously referred to in paragraphs 7.71 to 7.72. Adopted by all levels of Australian governments in 1992 it:

Provides broad strategic directions and framework for governments to direct policy and decision-making. The strategy facilitates a coordinated and co-operative approach to ecologically sustainable development and encourages long-term benefits for Australia over short-term gains.⁸⁹⁰

8.44 The strategy defines ESD as:

Using, conserving and enhancing the community's resources so that ecological processes, on which life depends, are maintained, and the total quality of life, now and in the future, can be increased.⁸⁹¹

8.45 The FRM Act explicitly provides for the precautionary principle in section 4A, however this is not reflected in the ARM Act. Rather, section 10(b) of the ARM Act, which provides how the objects of the Act are to be achieved, refers to management of aquatic resources and aquatic ecosystems on the basis of relevant scientific data and principles.

⁸⁸⁹ Government of Western Australia, (then) Department of Fisheries, *Marine Aquarium Fish Managed Fishery report*, October 2010, p 9.

⁸⁹⁰ Department of Agriculture, Water and the Environment. See: <http://www.environment.gov.au/about-us/esd>. Viewed 7 April 2020.

⁸⁹¹ *ibid.*

- 8.46 DPIRD advises that it implements the principles of ESD in the context of managing fishing activities in WA. The ESD National Framework core objectives for sustainable fisheries are to:
- Protect biodiversity and maintain essential ecological processes
 - Enhance individual and community well-being by following a path of economic development that safeguards the welfare of current and future generations
 - Provide effective legal, institutional and economic frameworks for ecologically sustainable development.⁸⁹²
- 8.47 Fish ecosystems are exposed to numerous risks to their sustainability, including:
- the capture of target and non-target species which could reduce their biomass to unviable levels
 - impacts of fishing on the broader ecosystem which directly affect the marine landscape through damage caused by fishing gear
 - possible changes to trophic structure from removals of predators and/or prey.⁸⁹³
- 8.48 EBFM is a holistic approach that takes into account all ecological resources, as well as economic and social factors in deciding how to manage fisheries. This approach recognises that fishing activity inevitably has an impact on ecosystems. Fishing activities can result in significant economic and social benefits to the community. Ecosystem impact is risk-assessed and managed appropriately.⁸⁹⁴
- 8.49 The relevance of EBFM to fisheries management is that it provides a mechanism for assessing and reporting on the regional level risk status of all of WA's aquatic resources and therefore the effectiveness of the aquatic resource management arrangements in delivering community outcomes.⁸⁹⁵
- 8.50 DPIRD advises that it uses a step-wise and risk-based approach to integrate all of the fishery level assessments and management systems into a form that can be used for aquatic resource management planning.⁸⁹⁶

Management of aquatic resources

- 8.51 Part 3 of the ARM Act deals with managed aquatic resources.
- 8.52 Management will occur primarily through an ARMS and an associated ARUP for an aquatic resource.

⁸⁹² Government of Western Australia, (then) Department of Fisheries, Fisheries Management Paper No. 157, *Policy for the Implementation of Ecologically Sustainable Development for Fisheries and Aquaculture within Western Australia*, March 2002, p 25.

⁸⁹³ *ibid.*

⁸⁹⁴ Department of Primary Industries and Regional Development, 23 August 2018. See: <http://www.fish.wa.gov.au/Sustainability-and-Environment/Sustainable-Fisheries/Pages/Sustainable-Fisheries-Management.aspx>. Viewed 8 November 2019.

⁸⁹⁵ Department of Primary Industries and Regional Development, *Status reports of the fisheries and aquatic resources of Western Australia 2017/18*, report prepared by Fisheries Science and Resource Assessment and Aquatic Resource Management Branches, Perth Western Australia, 2018, p 3.

⁸⁹⁶ *ibid.*

- 8.53 An ARMS is defined in section 3(1) of the ARM Act:
- aquatic resource management strategy (ARMS)**, in relation to a managed aquatic resource, means a strategy approved for the aquatic resource under section 20(1) as in force from time to time;
- 8.54 DPIRD advises that an ARMS is a high-level policy document, which must be approved by the Minister for Fisheries, and which establishes the main management objective for the resource and inter and intra sectoral allocations.⁸⁹⁷
- 8.55 An ARUP is defined in section 3(1) of the ARM Act:
- aquatic resource use plan (ARUP)**, in relation to a managed aquatic resource, means a resource use plan made in respect of the aquatic resource under section 24(1) as in force from time to time;
- 8.56 DPIRD advises that an ARUP outlines the management arrangements for each sector including the processes for monitoring each sector's catch and ensuring it remains in line with the amount set out in the ARMS. In most cases, there will be multiple ARUPs under an ARMS potentially applying to different sectors and/or fishing activities.⁸⁹⁸
- 8.57 Section 13 of the ARM Act requires the Minister for Fisheries to ensure that the condition of aquatic resources and the aquatic environment is kept constantly under consideration, and allows for the conducting of a risk assessment of the ecological sustainability of an aquatic resource.
- 8.58 In summary, Part 3 operates as follows:
- section 13 relates to monitoring of aquatic resources
 - sections 15 to 22 relate to an ARMS, and specify the requirement for an ARMS, its content, that the CEO is required to consult on a proposal or draft ARMS, that revision of a proposed ARMS may occur following consultation, and that an ARMS may be approved, amended, or revoked
 - sections 23 to 31 relate to an ARUP, and specify that the Minister for Fisheries is to make an ARUP for a managed aquatic resource, its content, the method for allocating resource shares under an ARUP, the effect of an ARUP on management plans and regulations, and the effect on an ARUP if an ARMS is revoked
 - section 34 specifies how resource shares are allocated
 - section 35 specifies the nature of resource shares
 - section 36 provides how resource shares may be transferred
 - section 37 relates to registration of catch entitlements associated with resource shares
 - section 38 relates to transfer of catch entitlements
 - section 39 relates to sureties for authorisations
 - section 40 allows for registration of sureties
 - section 41 relates to return or substitution of sureties for authorisations
 - section 42 relates to grant of share options

⁸⁹⁷ Submission 68 from Department of Primary Industries and Regional Development, 29 July 2019, p 3.

⁸⁹⁸ Department of Primary Industries and Regional Development, 23 August 2018. See: <http://www.fish.wa.gov.au/Fishing-and-Aquaculture/Aquatic-resources-management-act/Pages/Management.aspx>. Viewed 8 April 2020.

- section 43 relates to entitlements to convert share options.

Aquatic Resource Management Strategy

- 8.59 Section 16 of the ARM Act specifies what must be included in an ARMS.
- 8.60 The section is highly prescriptive and its elements establish the basis for developing the specific management arrangements (such as gear restrictions, quotas, closed seasons and bag limits) that will ensure the ARMS' objectives are met. Specific management arrangements for the resource are set out in ARUPs and associated regulations.⁸⁹⁹
- 8.61 Fishing Families WA recommends that the Minister for Fisheries not be permitted to revoke an ARMS under sections 21(3) and 29 of the ARM Act as once access rights and catch entitlements have been allocated, and that instead the resource can be managed entirely by setting the TAC. Should the resource become very degraded such that fishing cannot occur, then the TAC may be set at zero until the resource recovers.⁹⁰⁰

Aquatic Resource Use Plan

- 8.62 An ARUP is subsidiary legislation which establishes management objectives for each sector, the rules and parameters to achieve these objectives, and the allocation of fishing access rights amongst commercial fishers.⁹⁰¹
- 8.63 For the commercial sector, ARUPs will allocate transferrable shares in the resource, with each share entitling the holder to a proportion of the annual catch available for commercial fishing.⁹⁰²
- 8.64 ARUPs will work alongside regulations and other legislation to deliver robust management controls.⁹⁰³
- 8.65 Section 25 of the ARM Act is also highly prescriptive of what must be included in an ARUP including specifying the number of resource shares (if any) in the aquatic resource available under the ARUP.

Relationship between an Aquatic Resource Management Strategy and an Aquatic Resource Use Plan

- 8.66 As noted above, an ARUP outlines the management arrangements for each specific sector, including the commercial, recreational, and customary sectors, and ensures that it remains in line with the associated ARMS.
- 8.67 The integrated approach also considers non-extractive use plans (for activities such as eco-tourism and recreation), resource protection plans (in key habitats and for vulnerable species), and other sectoral use plans (such as collection of broodstock). The effect of these various uses on an aquatic resource and ecosystem is cumulative and represented visually as follows.

⁸⁹⁹ Department of Primary Industries and Regional Development, 23 August 2018. See: <http://www.fish.wa.gov.au/Fishing-and-Aquaculture/Aquatic-resources-management-act/Pages/Management.aspx>. Viewed 8 April 2020.

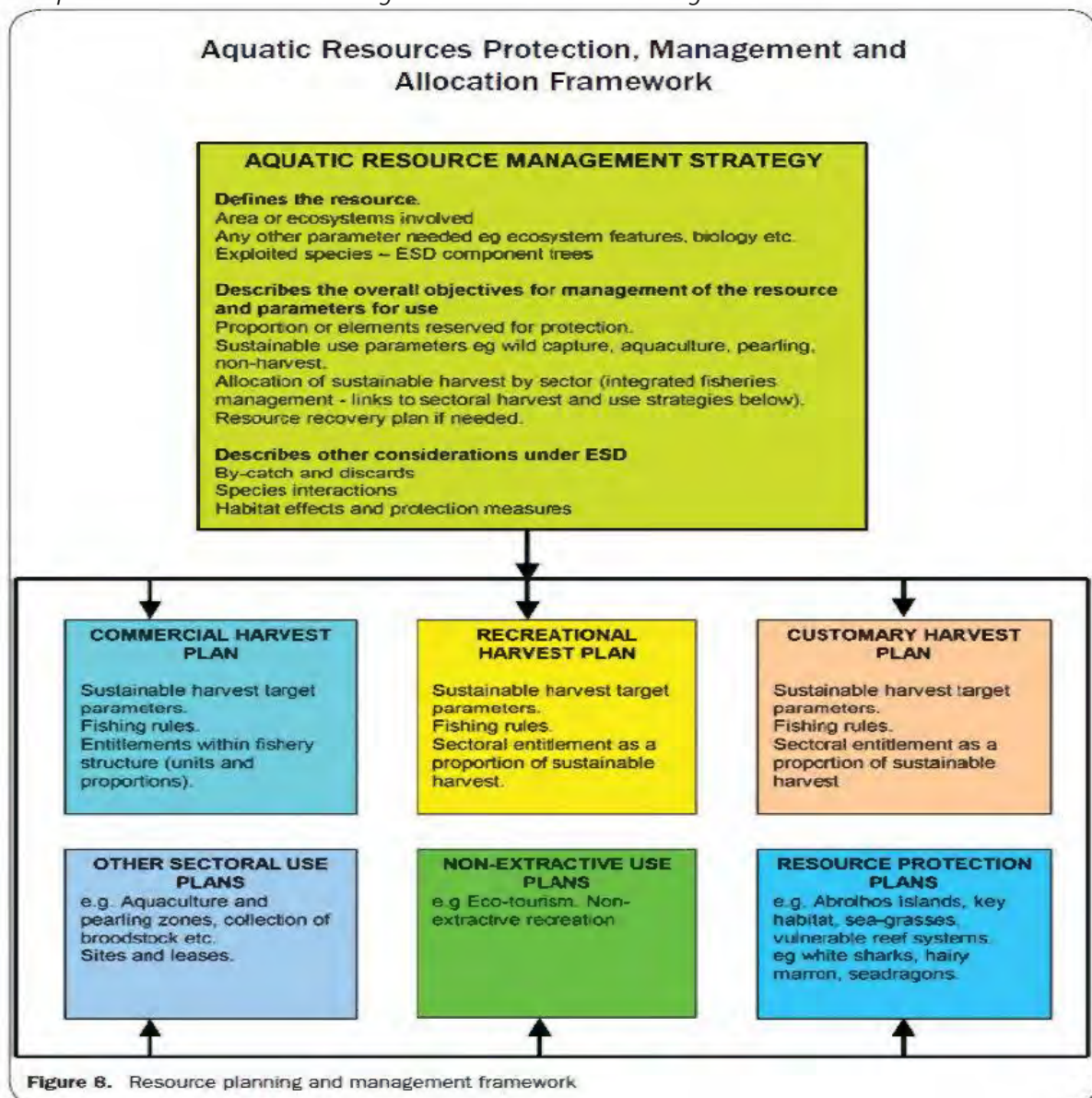
⁹⁰⁰ Submission 71 from Fishing Industry Women's Association of Western Australia, 31 July 2019, pp 1-2.

⁹⁰¹ Submission 68 from Department of Primary Industries and Regional Development, 29 July 2019, p 3.

⁹⁰² Department of Primary Industries and Regional Development, 23 August 2018. See: <http://www.fish.wa.gov.au/Fishing-and-Aquaculture/Aquatic-resources-management-act/Pages/Management.aspx>. Viewed 8 April 2020.

⁹⁰³ *ibid.*

Figure 12. Aquatic resources protection, management, and allocation framework proposed for new Act to replace the Fish Resources Management Act 1994 and Pearling Act 1990



[Source: Fisheries Occasional Publication No 79, June 2010, p 19.]

Management of aquaculture

8.68 Part 5 of the ARM Act deals with aquaculture, separately to managed aquatic resources.

8.69 In summary, this Part operates as follows:

- section 68 clarifies the relationship between an aquaculture licence and an aquaculture lease
- section 69 prohibits the undertaking of aquaculture without an authorisation
- sections 72 to 74 relate to the development of aquaculture
- sections 75 to 87 relate to aquaculture licences, including grant, form, effect, duration, renewal, conditions, and transfer
- sections 88 to 96 relate to aquaculture leases, including grant, effect, duration, conditions, and variation.

Management of pearling

- 8.70 There are 14 licence holders in the pearling industry and the resource is managed using a quota system that sets a maximum number of wild stock pearl oysters that may be taken each year.⁹⁰⁴
- 8.71 DPIRD advises that:
- Controls take the form of a TAC, which ranges from 500,000 pearl oysters to 1.5 million in a good year. The TAC is divided into individual transferable quotas (ITQs). We review wild stocks each year then set the TAC for each of the three pearl oyster fishing zones.⁹⁰⁵
- 8.72 There is a distinction between hatchery-bred pearl oysters and wild-stock pearl oysters in terms of value; DPIRD advises that:
- Hatchery-bred pearl oysters are now a major part of pearl production. The value of a hatchery quota unit stays the same but the value of wild stock quota units varies – in some seasons high wild stock levels means higher quotas.⁹⁰⁶
- 8.73 DPIRD advises that the *Pinctada maxima* pearl oyster resource will be the first aquatic resource to transition to a new management framework under ARM Act when the Act commences.⁹⁰⁷
- 8.74 DPIRD released a draft ARMS in July 2018.⁹⁰⁸ As noted above, the ARM Act requires that an ARMS include certain details about management of an aquatic resource. An example of some of these key points for pearling is as follows.
- 8.75 Pursuant to section 16(1)(a) of the ARM Act, the draft ARMS describes the aquatic resource to be managed as aquatic organisms of the species *Pinctada maxima*.⁹⁰⁹
- 8.76 Pursuant to section 16(1)(b) of the ARM Act, the draft ARMS provides that the main objective to be achieved by managing the ecological sustainability of the pearl oyster resource is to optimise the economic return to the WA community including through the production of high quality pearls and associated products.⁹¹⁰
- 8.77 Pursuant to section 16(1)(c) the ARM Act, the draft ARMS provides that the minimum quantity of the aquatic resource that is considered necessary:
- To maintain ecological sustainability, the spawning stock (spawning potential) of this resource must be maintained above levels where future recruitment should not be materially affected by the current stock size.⁹¹¹

⁹⁰⁴ Department of Primary Industries and Regional Development, 25 November 2019. See: <https://www.fish.wa.gov.au/Fishing-and-Aquaculture/Pearling/Pearling-Management/Pages/default.aspx>. Viewed 8 April 2020.

⁹⁰⁵ *ibid.*

⁹⁰⁶ *ibid.*

⁹⁰⁷ Department of Primary Industries and Regional Development, 10 December 2018. See: <https://www.fish.wa.gov.au/Fishing-and-Aquaculture/Aquatic-resources-management-act/Pages/default.aspx>. Viewed 8 April 2020.

⁹⁰⁸ Department of Primary Industries and Regional Development, *Aquatic Resources Management Paper No. 1: Draft Aquatic Resource Management Strategy: Pinctada maxima Managed Aquatic Resource*, July 2018.

⁹⁰⁹ *ibid.*, p 5.

⁹¹⁰ *ibid.*

⁹¹¹ *ibid.*, p 6.

8.78 The draft ARMS notes the integrated nature of pearling. Pursuant to section 16(1)(d) of the ARM Act, the activities that should be regulated in respect of the aquatic resource are:

Noting the integrated nature of the pearling industry, activities that involve the commercial take of pearl oysters, pearl production and other activities involving the aquaculture and processing of pearl oysters in WA waters should be regulated. Commercial fishing activities will be managed under a commercial ARUP for this resource. All other activities will be managed by the appropriate provisions of the ARM Act, as well as regulations made under the ARM Act and any relevant Administrative Guidelines.⁹¹²

8.79 Pursuant to section 16(1)(f) of the ARM Act, the draft ARMS provides that the quantity of the aquatic resource that is to be available in a fishing period for customary fishing and public benefit uses is 40 000 live pearl oysters.⁹¹³

8.80 Pursuant to section 16(1)(g) of the ARM Act, the draft ARMS provides how the TAC is to be calculated:

Following on from the consideration of quantities required for resource sustainability, customary fishing and public benefit uses, the Harvest Strategy details the constant exploitation approach whereby the TAC is set in proportion to the overall wild stock abundance.

As detailed in the Harvest Strategy, the spawning stock population estimates and recruitment indices are compared to their reference levels and corresponding control rules to allow the Department to recommend Sustainable Harvest Levels (SHL: a range that the TAC is required to be set within). The recommended overall SHL will include particular SHLs for Zone 1, 2 and 3 of the commercial fishery, as described within the commercial ARUP for this resource. The harvest control rules enable the SHL to be adjusted on a regular basis to provide appropriate protection based on the current stock and recruitment levels. When the stock abundance is predicted to be lower, the SHL is adjusted downward. Similarly, the SHL can be raised in years when the available abundance is predicted to be higher.

The Harvest Strategy is reviewed periodically to ensure that it remains relevant, this review may include changes to the reference levels, control rules and any other relevant information.

SHL are discussed through the process outlined within the Harvest Strategy. The CEO will determine the TAC for each zone of commercial fishery for the fishing period based on the above scientific advice and having regard for any additional advice provided by:

- the Department (including any applicable co-management arrangements);
- any relevant advisory group;
- a recognised peak sector body;
- a resource share holders.⁹¹⁴

8.81 Pursuant to section 16(1)(j) of the ARM Act, the draft ARMS provides for the number of shares in the resource that are to be available to the commercial sector:

⁹¹² *ibid.*

⁹¹³ *ibid.*

⁹¹⁴ Department of Primary Industries and Regional Development, *Draft aquatic resource management strategy: Pinctada maxima managed aquatic resource*, July 2018, pp 7-8.

The number of resource shares that are to be available to the commercial sector in this resource will be 572.

Resource shares will be available in the relevant zone as defined by the commercial ARUP for this resource. The number of resource shares available in Zone 1 will be 115, Zone 2 will be 457 and Zone 3 will be 0.⁹¹⁵

8.82 The PPA submits that the pearling industry differs from other commercial fishing ventures in that:

- pearling requires close integration between fishing activities and preliminary culture activities at various stages of the pearl production process, and without integration it is not possible to culture pearls
- the industry has been proven to have a benign impact on the environment.⁹¹⁶

8.83 The PPA recommends that:

- formal processes should be adopted regarding the setting of water lease fees
- compensation should be paid where priorities are re-ordered by the State
- there should be agreed, clear and transparent processes for allocation and re-allocation of rights.⁹¹⁷

8.84 As previously stated at paragraphs 7.94 to 7.95, the Pearling Act emphasised the need for pearling to be recognised as an integrated industry and that an adverse impact on any one interdependent activity will adversely affect all other integrated activities, with the total effect being the undermining of investment, infrastructure, jobs, and property.⁹¹⁸

8.85 The Committee agrees with the position that pearling is an integrated industry and that diminishment of one integrated activity may adversely affect the pearling venture as a whole, and refers to its earlier Finding 37.

Other management methods

8.86 A number of fisheries which are currently managed under the FRM Act will transition to being managed under an ARMS and ARUP, however, not all fisheries will transition in this manner.⁹¹⁹

8.87 Existing arrangements under the FRM Act will continue once the ARM Act comes into operation, and it will also be possible for existing management plans (created under the FRM Act) to be amended under the ARM Act.⁹²⁰

8.88 The ARM Act also allows for rules and licensing arrangements for fishing activities to be introduced without an ARMS or ARUP.⁹²¹

8.89 Further, DPIRD advises that when determining allocation of resource shares, the Minister for Fisheries is required, under section 26 of the ARM Act, to consider the interests of people

⁹¹⁵ *ibid.*, p 8.

⁹¹⁶ Submission 65 from Pearl Producers Association, 31 July 2019, p 2.

⁹¹⁷ *ibid.*, pp 8, 10, and 11.

⁹¹⁸ *ibid.*, p 4.

⁹¹⁹ Department of Primary Industries and Regional Development, 23 August 2018. See: <http://www.fish.wa.gov.au/Fishing-and-Aquaculture/Aquatic-resources-management-act/Pages/Management.aspx>. Viewed 8 April 2020.

⁹²⁰ *ibid.*

⁹²¹ *ibid.*

who have previously taken the resource and any existing rights that people may have before the managed aquatic resource was established.⁹²²

Determination of Total Allowable Catch

- 8.90 As discussed at paragraph 7.73 onwards regarding the current legislative scheme, sustainable management of fisheries (and aquatic resources) is related to TAC.
- 8.91 In the context of the ARM Act, the ongoing right of access in the form of resource shares, the TAC, and annual catch entitlements (which are associated with resource shares) are inter-related. The TAC and the quantity of TAC available for commercial fishing and recreational fishing are calculated in accordance with the ARMS for the resource.⁹²³
- 8.92 Section 16(1)(g) of the ARM Act provides that an ARMS must include details of the method to be used in calculating the TAC for the aquatic resource. An example of this in the pearling context has been discussed at paragraphs 8.791 to 8.8072.
- 8.93 The annual catch entitlement associated with a resource share in the aquatic resource is also calculated in accordance with the ARMS for that resource.⁹²⁴ The catch entitlement allocated to a resource share for a fishing period is the quantity of TAC divided by the number of resource shares in the resource.⁹²⁵
- 8.94 A holder of a resource share is permitted a catch entitlement of an amount that is equal to the allocated catch for the share.⁹²⁶
- 8.95 The holder of a resource share may request that the CEO register them as the holder of a catch entitlement of an amount equal to the allocated catch for the resource share.⁹²⁷
- 8.96 The Minister for Fisheries advises that in relation to the TAC:

ARM Act will require that in Managed Aquatic Resources, the CEO must gazette a notice not less than 30 days before the start of a fishing period which sets out the Total Allowable Catch for the resource.⁹²⁸

Allocation of entitlements

- 8.97 Section 26 of the ARM Act deals with the method for allocating resource shares under an ARUP. If the Minister for Fisheries makes an ARUP that sets out a method for allocating resource shares, the Minister must have regard to:
- (a) the interests of persons who have a history of involvement in taking the resource;
 - (b) the interests of persons who have entitlements to take the resource under this Act immediately before the commencement of the ARUP;
 - (c) any option granted under section 42(2) in respect of the resource or a component of the resource.⁹²⁹

⁹²² Joanne Kennedy, Manager, Strategic Projects, Department of Primary Industries and Regional Development, transcript of evidence, 17 February 2020, p 10.

⁹²³ *Aquatic Resources Management Act 2016*, s 33(2).

⁹²⁴ *ibid.*

⁹²⁵ *ibid.*, s 33(3).

⁹²⁶ *ibid.*, s 37.

⁹²⁷ *ibid.*

⁹²⁸ Hon Peter Tinley MLA, Minister for Fisheries, letter, 6 March 2020, p 9.

⁹²⁹ *Aquatic Resources Management Act 2016*, s 26(1).

- 8.98 The method for allocating resource shares in an ARUP may include:
- (a) allocation based on converting previous entitlement to take the resource to a specified share entitlement; or
 - (b) allocation based on converting options granted under section 42(2) to a specified share entitlement; or
 - (c) grant by the CEO on application, including payment of an application fee if applicable, and on the basis of specified criteria; or
 - (d) sale by public tender or auction.⁹³⁰
- 8.99 If an ARUP provides a method for allocating resource shares other than by sale by public tender or auction, then the ARUP must provide:
- (a) that a decision not to allocate a resource share is a reviewable decision for the purposes of sections 146 and 147; and
 - (b) that a person who is affected by a decision about allocation of a resource share is an affected person for the purposes of those sections.⁹³¹
- 8.100 Sections 34 to 43 of the ARM Act deal with administrative matters for managed aquatic resources in the context of commercial fishing.
- 8.101 Other relevant sections of the ARM Act include:
- Section 34, which provides that when an ARUP comes into operation, any available resource shares under that plan vest in the Minister for Fisheries. The Minister must, as soon as is practicable after the ARUP comes into operation, allocate the resource shares in accordance with the method set out in the ARUP. Further, a person to whom resource shares are allocated may request the CEO register them as the holder, and the CEO must register that holder accordingly if the request is made in an approved form and with payment of the associated fee.
 - Section 35, which outlines the connection between resource shares and catch entitlements. It provides that subject to section 37, a holder of a resource share at the beginning of a fishing period is entitled to be registered as the holder of the allocated catch for the share for that fishing period. In the property rights context, the section provides that a resource share is transferable as provided by the Act, is capable of devolution by will or by operation of law, and is not 'personal property' for the purposes of the PPSR.
 - Section 36, which provides that resource shares may be transferred in accordance with the relevant ARUP or regulations. The CEO must transfer resource shares upon request, unless certain circumstances apply as outlined in section 36(3) of the ARM Act.
 - Section 37, which provides that the holder of a resource share may request that the CEO register them as the holder of a catch entitlement of an amount equal to the allocated catch for the share. The CEO must register the applicant as the holder of catch entitlement unless certain circumstances apply as outlined in section 37(5). Further, the

⁹³⁰ *Aquatic Resources Management Act 2016*, s 26(2).

⁹³¹ *Aquatic Resources Management Act 2016*, s 26(3). Section 146 of the *Aquatic Resources Management Act 2016* requires the CEO to provide written notice to an affected person of a reviewable decision, for example, a decision to refuse to grant an authorization other than an aquaculture licence. Section 147 of the *Aquatic Resources Management Act 2016* provides that an affected person may apply to the State Administrative Tribunal for a review of a reviewable decision.

section provides that a catch entitlement is not 'personal property' for the purposes of the PPSR.

- Section 38, which provides that a person who is registered as a holder of catch entitlement may request the CEO to transfer part or all of the catch entitlement to another person. The CEO must effect the transfer in accordance with the regulations and subject to any conditions set out in the relevant ARUP.
- Sections 39 to 41, which relate to sureties for authorisations in circumstances where the holder of an authorisation to undertake activities regulated under an ARUP is charged with or convicted of an offence under the Act or other aquatic resource-related legislation.
- Section 42, which provides that if an ARUP is revoked, regardless of whether the associated ARMS is also revoked, the resource shares provided for under the ARUP are void, and the registration of any catch entitlement relating to those void shares is cancelled. In these circumstances, the CEO must grant a share option in respect of each resource share under a revoked ARUP to the person who was the holder of the resource share immediately prior to the ARUP's revocation.

8.102 Allocation of entitlements occurs as per an ARMS. The Minister for Fisheries advises that:

An ARMS must include the main management objective for the resource and the associated proportional allocation of the resource between the recreational and commercial sectors.⁹³²

8.103 The Minister for Fisheries advises that as the IFAAC is no longer in effect:

The formal process around allocation decisions is being reviewed as part of the shift to ARM Act. Government is committed to an efficient and transparent process which may include the use of working groups or panels where appropriate.⁹³³

Register of registrable interests

8.104 The register is dealt with in Part 10 of the ARM Act.

8.105 The CEO must keep a register of registrable interests,⁹³⁴ which must be available for public inspection.⁹³⁵ The holder of any of the following may apply to the CEO to have noted on the register that a specified person has a security interest⁹³⁶ in the registrable interest:

- aquaculture lease
- aquaculture licence
- licence granted under the regulations authorising a person to operate fishing tours
- managed fishery licence
- resource share.⁹³⁷

⁹³² Hon Peter Tinley MLA, Minister for Fisheries, letter, 6 March 2020, p 7.

⁹³³ *ibid.*, p 9.

⁹³⁴ *Aquatic Resources Management Act 2016*, s 150.

⁹³⁵ *ibid.*, s 151.

⁹³⁶ 'Security interest' is defined in section 3(1) of the *Aquatic Resources Management Act 2016* to mean, in relation to a registrable interest referred to in section 153, an interest in the registrable interest (however arising) which secures payment of a debt or other pecuniary obligation or the performance of any other obligation.

⁹³⁷ *Aquatic Resources Management Act 2016*, s 153.

- 8.106 The CEO must note a general description of the nature of the security interest, the name and business address of the person who has the security interest, and any other prescribed details.⁹³⁸
- 8.107 The utility of the register is that it provides some protection to persons who have a security interest. The CEO must, as soon as is practicable, provide notice to a security holder if any of the following events occur in respect of the registrable interest:
- the holder of the registrable interest, or their agent, is convicted of a prescribed offence under the ARM Act
 - for a managed fishery licence or an aquaculture licence: an application is made to the CEO to vary or transfer an authorisation or of an entitlement under the authorisation, a fishery adjustment scheme under FAS Act is established, the CEO proposes to cancel suspend or not renew the authorisation, or the holder of the authorisation gives notice of intention to surrender the authorisation
 - for an aquaculture lease: the lease is varied or transferred, the Minister for Fisheries proposes to terminate the lease, or the holder of the lease gives notice of intention to terminate the lease
 - for a resource share: a request is made to the CEO to transfer the share, the holder of the share gives notice of intention to nominate the share as surety for an authorisation, or the Minister for Fisheries proposes to revoke an ARMS or ARUP under which the resource share is held.⁹³⁹

Transition from current legislative scheme to new legislative scheme

Introduction

- 8.108 When Part 17 of the ARM Act is proclaimed, the FRM Act and Pearling Act will be repealed.
- 8.109 The Committee notes the ARM Act may be amended prior to proclamation subject to passage of the ARM Amendment Bill.
- 8.110 The ARM Act allows for some transitional arrangements. For example, current management arrangements (Management Plans) and aquatic resource access rights under the FRM Act to remain in place, where they will continue to operate under the ARM Act until they are transitioned into a Managed Aquatic Resource framework which consists of resource shares and catch entitlements under the ARM Act.⁹⁴⁰
- 8.111 The Minister for Fisheries advises that principles of IFM will continue under the ARM Act:
- [IFM] remains a core element of fisheries and aquatic management in Western Australia. This is underscored by the fact IFM principles are central to the [ARM Act].⁹⁴¹
- 8.112 Transitional provisions are dealt with in Part 18 of the ARM Act:
- Division 2 of Part 18 deals with transitional provisions for the FRM Act.

⁹³⁸ *ibid.*, s 154.

⁹³⁹ *ibid.*, s 156.

⁹⁴⁰ Hon Dave Kelly MLA, (then) Minister for Fisheries, letter, 26 September 2019, p 2; Department of Primary Industries and Regional Development, *Status reports of the fisheries and aquatic resources of Western Australia 2017/18*, report prepared by Fisheries Science and Resource Assessment and Aquatic Resource Management Branches, Perth Western Australia, 2018, p 1.

⁹⁴¹ Hon Peter Tinley MLA, Minister for Fisheries, letter, 6 March 2020, p 1.

- Division 3 of Part 18 deals with transitional provisions for the Pearling Act.
- 8.113 Consequential amendments to other Acts are dealt with in Part 19 of the ARM Act:
- Division 5 of Part 19 deals with consequential amendments to the FAS Act.
 - Division 6 of Part 19 deals with consequential amendments to the FRICMR Act.
- 8.114 Appendix 13 provides a comparison of the characteristics of access rights under FRM Act Management Plans, ARM Act transitioned Management Plans, and ARM Act Managed Aquatic Resources. These characteristics relate to the proprietary nature of each of these access rights in terms of exclusivity, durability, transferability, and security.

Transitional provisions

- 8.115 In summary, Division 2 of Part 18 of the ARM Act relating to the FRM Act operates, relevantly, as follows:
- section 271 provides that an 'FRM Act authorisation' means a lease or authorisation issued under the FRM Act
 - section 272 provides that an exemption under section 7 of the FRM Act continues in force
 - section 273 provides that a Management Plan determined under section 54(1) of the FRM Act that was in effect immediately before commencement continues to have effect for the purposes of the ARM Act until it is amended or revoked by the Minister for Fisheries (following, in most instances, a period of mandatory consultation), or a relevant ARUP takes effect
 - section 274 provides that an FRM Act authorisation that was in effect immediately before commencement is taken to be a lease, permit, or authorisation on the same conditions that applied to that instrument under the FRM Act
 - section 279 provides that the register of registerable interests continues under the ARM Act with the same information that was included in it under the FRM Act.
- 8.116 DPIRD advises that:
- All of the existing FRM Act management plans and other management arrangements will transition under ARM Act either through transitional provisions that are already within ARM Act itself or through transitional arrangements that we will be including in the regulations, which will sit under ARM Act.⁹⁴²
- 8.117 In summary, Division 3 of Part 18 of the ARM Act relating to the Pearling Act operates, relevantly, as follows:
- section 285(1) provides that a 'Pearling Act authorisations' means a lease, licence, or permit issued under the Pearling Act. Section 285(2) provides that a Pearling Act authorisation that was in effect immediately before commencement is taken to be a lease or authorisation on the same conditions that applied to that instrument under the Pearling Act
 - section 286 relates to Management and Environmental Monitoring Plan requirements for transitioned authorisations.

⁹⁴² Joanne Kennedy, Manager, Strategic Projects, Department of Primary Industries and Regional Development, transcript of evidence, 17 February 2020, p 3.

8.118 DPIRD advises that arrangements under the Pearling Act will not transition to the ARM Act under transitional provisions, and instead an ARMS and associated ARUPs will be created for pearling:

Arrangements under the [P Act] will not transition to ARM Act so hence we need, prior to full implementation of AMRA, to have moved pearling into an aquatic resource management strategy with an associated aquatic resource use plan. It is basically envisaged that existing arrangements in terms of those who currently have access to pearling under the Pearling Act and the quantum of their access will be transitioned under ARM Act.⁹⁴³

8.119 Division 5 of Part 19 of the ARM Act makes consequential amendments to the FAS Act. In addition, section 349 of the ARM Act inserts the following section 6A into the FAS Act in relation to compensation for loss suffered in respect of resource shares:

6A. Compensation for loss suffered in respect of resource shares

(1) A person who holds a resource share in a managed aquatic resource is entitled to fair compensation for any loss suffered by the person as a result of a relevant event.

(2) For the purposes of subsection (1) a person suffers loss if, and only if, the market value of the resource share held by the person is reduced because —

(a) an aquatic resource use plan under which the resource share was allocated is amended so that it no longer applies to an area; and

(b) as a result of the amendment the amount of allocated catch for the resource share for a fishing period after the amendment is made will be less than it would have been if the amendment had not been made.

8.120 Division 6 of Part 19 of the ARM Act makes consequential amendments to the FRICMR Act.

8.121 The WAFIC advised that commercial fishers have concerns about transitioning from the FRM Act and the Pearling Act to the ARM Act:

People are not going to want to enter into new management arrangements being uncertain whether in that process they will lose valuable rights.⁹⁴⁴

8.122 The WAFIC clarified that these valuable rights are commercial fishers' allocations in a fishery, and that there is a concern that the new management arrangements may disregard longstanding practice in regard to these allocations. Further, WAFIC submitted that there must be certainty with regard to allocation processes as commercial fishers will not want to transition if they hold concerns they will lose a significant part of their business.⁹⁴⁵

8.123 However, WAFIC submitted that this issue could be addressed:

If the policy is very clear, if it is expressed in a contemporary document—in other words, brought up to date by government—and the rules around that process are very clear to everybody, then there is a lot less anxiety. If those things are not yet that clear, that increases a high level of anxiety, which is a pity, because that act is there because we can improve fisheries management of people—transition to it—

⁹⁴³ *ibid.*

⁹⁴⁴ George Kailis, Professor Management and Law, Notre Dame University, and Chair of Western Australian Fishing Industry Council Legislation and Policy Subcommittee, transcript of evidence, 28 October 2019, p 5.

⁹⁴⁵ *ibid.*, p 6.

but they will not wish to transition to it if they are worried about losing a significant part of their business.⁹⁴⁶

8.124 The Committee is of the view that transition to new management arrangements should not be used as a pretext for adversely affecting commercial fishers' existing rights and entitlements and agrees with WAFIC that:

Moves to new management arrangements should not be used as a pretext for reallocation. Conflating improvements in management with re-allocations to the benefit of only some users will inevitably lead to confusion and conflict. Such actions undermine the credibility of the State as a fishery manager and dilute the benefits Western Australia receives from good quality Rights Based Management.⁹⁴⁷

8.125 DPIRD advises that potential changes to rights may occur only when an ARMS and an ARUP are developed for an aquatic resource, where:

There is a need under the [ARMS] for government to determine the main objective from managing the resource and in association with that, the proportion of the resource that will be allocated to commercial and recreational fishers, as well as allowing for uses such as customary fishing and public benefit uses.⁹⁴⁸

8.126 However, DPIRD advises that this may be addressed through consultation which is required to occur:

The ARMS itself is required to have a statutory consultation period of two months, which allows all relevant stakeholders to provide input into the process. The ARMS then specifies the statutory consultation process that will apply to the [ARUPs] which sit under it. Once the ARMS is in place, in order to effectively operationalise that ARMS, there will need to then be consultation on the [ARUPs] prior to them coming into place. The [ARUPs] are subsidiary legislation so the usual processes of tabling those before Parliament and disallowance then applies. There is quite a rigorous process to go through in terms of actually considering how the resource is allocated both between sectors and within sectors that is associated with that transition.⁹⁴⁹

8.127 The Committee notes the following relevant provisions of the ARM Act with regard to consultation on an ARMS:

- section 17 provides that a draft ARMS must be published and invite submissions on it to the CEO
- section 18 provides that the CEO must consult on the draft ARMS
- section 19 provides that the CEO must consider those submissions, and may revise the draft ARMS.

8.128 Further, the Committee notes that under section 24 of the ARM Act, the Minister is not to make an ARUP unless consultation has been carried out, and in the opinion of the Minister, the ARUP is consistent with:

- the ARMS for the aquatic resource

⁹⁴⁶ *ibid.*

⁹⁴⁷ Submission 55 from Western Australian Fishing Industry Council, 31 July 2019, p 6.

⁹⁴⁸ Joanne Kennedy, Manager, Strategic Projects, Department of Primary Industries and Regional Development, transcript of evidence, 17 February 2020, p 4.

⁹⁴⁹ *ibid.*

- all other ARUPs made for the aquatic resource
 - regulations made in relation to the ARMS for the resource.
- 8.129 DPIRD acknowledges that there may be value in developing a document that provides some guiding principles around how matters such as allocation may occur, however, notes that part of moving to an ARMS is a requirement for government to determine the main objective for managing the aquatic resource. This occurs through development of an ARMS from which allocation decisions will flow.⁹⁵⁰
- 8.130 DRIRD advises that there is no power under the ARM Act to establish *new* Management Plans similar to those under the FRM Act. *Existing* Management Plans (under the FRM Act) may be amended under the ARM Act.⁹⁵¹
- 8.131 WAFIC recommends that allocation processes have integrity and that these should be kept separate from processes regarding reallocation where Management Plans are created under the new ARM Act processes.⁹⁵²
- 8.132 WAFIC recommends:
- until existing policies have been more formally incorporated into the ARM Act, fishers should only be transitioned from existing management plans to management plans and arrangements to new arrangements under the ARM Act where the affected fishers agree that this should occur
 - allocation processes be separated from reallocation processes.⁹⁵³
- 8.133 The Fishing Industry Women’s Association of WA suggested section 16 of the ARM Act be amended to:
- require the Minister for Fisheries, when setting out an ARMS or ARUP, to grant the same fishing rights and sector allocations for each fishery that was a managed fishery under the FRM Act as was provided by the FRM Act, regulations, or as set out in IFM
 - stipulate that once in force, an ARMS shall remain in force.⁹⁵⁴
- 8.134 The Committee is of the view that the ARM Act includes sufficient statutory consultation provisions at numerous stages through development of an ARMS and an ARUP, and should address the preceding concerns.

Proposed amendments to the *Aquatic Resources Management Act 2016* and delay in commencement

- 8.135 DPIRD advises that commencement of the entirety of the ARM Act has been delayed because there is an error in the drafting of the Act which would lead to problems in proper implementation. The drafting has led to doubt around DPIRD’s capacity to allocate access according to zones or specific species under management. Such management tools are currently available under the existing legislation.⁹⁵⁵
- 8.136 Further, DPIRD advises that there are two other issues with the ARM Act which require amendment:

⁹⁵⁰ *ibid.*

⁹⁵¹ *ibid.*

⁹⁵² Submission 55 from Western Australian Fishing Industry Council, 31 July 2019, p 6.

⁹⁵³ *ibid.*, p 7.

⁹⁵⁴ Submission 71 from Fishing Industry Women’s Association of Western Australia, 31 July 2019, p 2.

⁹⁵⁵ Ralph Addis, Director General, Department of Primary Industries and Regional Development, transcript of evidence, 17 February 2020, p 2.

- flexibility around the way 'aquatic resources' are defined, which will lead to more efficient management
- removing a requirement for decisions to grant, transfer, or vary an aquaculture licence to be advertised.⁹⁵⁶

8.137 The Committee notes that, as at the date of drafting, the ARM Amendment Bill has been passed by the Legislative Assembly and is currently before the Legislative Council.

Conclusion

8.138 The transition from the current legislative scheme under the FRM Act and the Pearling Act to the ARM Act will not change the position with respect to the nature of commercial fishing rights; that is, these rights will continue to be a right of access to the resource. Fish and aquatic resources in tidal waters will remain a community resource, not owned by any person until lawfully caught. These resources are managed for the benefit of the WA community and sustainability will remain a paramount consideration. The new legislative scheme will lead to increased security of commercial fishing access rights backed by compensation availability in certain circumstances.



Hon Adele Farina MLC

Chair

⁹⁵⁶ Joanne Kennedy, Manager, Strategic Projects, Department of Primary Industries and Regional Development, transcript of evidence, 17 February 2020, pp 2-3.

APPENDIX 1

SUBMISSIONS RECEIVED AND PUBLIC HEARINGS HELD

Submissions received

Number	From
1	Shire of Chapman Valley
2	Lawrie Bugeja
3	Lee Pritchard
4	Neville Hills
5	Ivan Yujnovich
6	WAFarmers
7	Terrence Ealing
8	Mark Wells
9	Shire of Gingin
10	WA Land Compensation
11	Murray Nixon
12	Bryon and Kay Micke
13	Western Rock Lobster Council
14	Gil Waller
15	Private citizen
16	Law Society of Western Australia
17	Private citizen
18	Steve Milton
19	REIWA
20	Dr Garry Middle
21	Tebco Fishing Company
22	Margaret and Hubert de Haer
23	Wayne Gowland
24	Commercial Egg Producers Association (WA)
25	S Mead

Number	From
26	West Coast Abalone Divers Association
27	Lan Cheng Ng
28	Rabobank
29	Bernie Masters
30	Raymond Yukich
31	Arthur and Linda Williams
32	WA Property Rights Association
33	Western Australian Water Users Coalition
34	Robert White
35A	Combined Zone C Association
35B	Steve Chamarette
36	Sam Winter
37	John Horwood
38	Geraldton Fishermen's Co-operative
39	Leschenault Fisheries
40	Peter Ingall
41	Andy Murphy
42	David Gooch
43	Joondalup Urban Development Association
44	John Horsley
45	Jenny Le-Fevre
46	Melwyn Vaz
47	Lorraine Finlay
48	Peter Swift
49	Patricia West
50	City of Wanneroo
51	Mark Bombara

Number	From
52	Alan, Peta and Shane Miles
53	Australian Institute of Conveyancers
54	Department of Fire and Emergency Services
55	WA Fishing Industry Council
56	Fishing Families WA
57	Seafood Industry Australia
58	Taryn Miller
59	Don Robertson
60	Hon Rick Mazza MLC
61	Pastoralists and Graziers Association of Western Australia
62	Roger King
63	Department of Mines, Industry Regulation and Safety
64	Water Corporation
65	Pearl Producers Association
66	Department of Biodiversity, Conservation and Attractions
67	Susan Down and Francis Trichet
68	Department of Primary Industries and Regional Development
69	Landgate
70	Western Power
71	Fishing Industry Women's Association of Western Australia
72	Recfishwest
73A	Murray Delta Residents and Ratepayers Association
73B	Glen McLeod Legal
74	Trevor and Lawrence Prestage
75	Gail and David Guthrie
76	Mark Ainsworth

Number	From
77	Private citizen
78	Sandra Dennett on behalf of Vincenzo and Isoletta Caruso and family
79	Ray and Ann Forma
80	Michael Dighton
81	Beryl Crane
82	Shire of Serpentine Jarrahdale
83	Kenneth John O'Dea
84	Department of Planning, Lands and Heritage
85	Dr Rupert Johnson

Public hearings held

Date	Participants
16 October 2019	Ivan Yujnovich Robert White Susan Downs Francis Trichet Joondalup Urban Development Association Suzanne Thompson, Vice President Murray Delta Residents and Ratepayers' Association Lindsay Webb, Vice Chairman
21 October 2019	Pastoralists and Graziers Association of Western Australia Gary Peacock, Chairman Private Property Rights and Natural Resource Management Committee Doug Hall, Policy Officer, Private Property Rights and Natural Resource Management Committee Shire of Gingin Wayne Fewster, Councillor Aaron Cook, Chief Executive Officer Gingin Private Property Rights Group Murray Nixon, President Bryon Micke Kay Micke Peter Swift
28 October 2019	Western Rock Lobster Council Matt Taylor, Chief Executive Officer Dr Peter Rogers, Consultant Notre Dame University Professor George Kailis, Professor Management and Law WA Fishing Industry Council Dr Ron Edwards, Chairman Guy Leyland, MSC Industry Project Leader Pearl Producers Association Aaron Irving, Executive Officer West Coast Abalone Divers John Brindle, President Dr Peter Rogers, Consultant John Horwood

Date	Participants
30 October 2019	Western Australian Water Users Coalition Rosslyn Knowling, Chairperson David Wren, Secretary Alan Blakers, Committee Member
	Wayne Gowland
18 November 2019	Glen McLeod Legal Glen McLeod, Principal
	Cornerstone Legal Timothy Houweling, Director
17 February 2020	Department of Primary Industries and Regional Development Ralph Addis, Director General Heather Brayford, Deputy Director General – Sustainability and Biosecurity Joanne Kennedy, Manager Strategic Projects Angela Howie, Acting Principal Legal Officer
	Department of Water and Environmental Regulation Mike Rowe, Director General Sarah McEvoy, Executive Director, Strategic Policy Kelly Faulkner, Executive Director, Regulatory Services Jason Moynihan, Acting Executive Director Regional Delivery
	Department of Planning, Lands and Heritage Gail McGowan, Director General Timothy Hillyard, Chief Property Officer Alison Gibson, Executive Director Sze-Hwei Yen Western Australian Planning Commission David Caddy, Chairman
19 February 2020	Landgate Graeme Gammie, Chief Executive Susan Dukes, Commissioner of Titles Jean Villani, Registrar of Titles Roberto Hofmann, Account Manager, Natural Resource Management and Critical Infrastructure

Date	Participants
20 May 2020	<p>Department of Water and Environmental Regulation</p> <p>Mike Rowe, Director General</p> <p>Kelly Faulkner, Executive Director, Regulatory Services</p> <p>Sarah McEvoy, Executive Director, Strategic Policy</p> <p>Jason Moynihan, Acting Executive Director, Regional Delivery</p> <p>Ben Drew, Acting Director, Water and Ecosystem Planning</p> <hr/> <p>WA Planning Commission</p> <p>David Caddy, Chairman</p> <p>Department of Planning, Lands and Heritage</p> <p>Tim Hillyard, Chief Property Officer</p> <hr/> <p>Department of Biodiversity, Conservation and Attractions</p> <p>Mark Webb, Director General</p> <p>Peter Sharp, Executive Director – Parks and Visitor Services</p> <p>Dr Margaret Byrne, Executive Director - Biodiversity and Conservation Science</p> <p>Gretta Lee, General Legal Counsel</p> <p>Ruth Harvey, Manager Species and Communities</p> <p>Environmental Protection Authority</p> <p>Dr Tom Hatton, Chairman</p>
19 August 2020	<p>Department of Water and Environmental Regulation</p> <p>Mike Rowe, Director General</p> <p>Kelly Faulkner, Executive Director, Regulatory Services</p> <p>Sarah McEvoy, Executive Director, Strategic Policy</p> <p>Stuart Cowie, Executive Director, Compliance and Enforcement</p> <p>Adam Maskew, South West Regional Manager</p>

APPENDIX 2

THE IMPACT OF STATE GOVERNMENT ACTIONS AND PROCESSES ON THE USE AND ENJOYMENT OF FREEHOLD AND LEASHOLD LAND IN WESTERN AUSTRALIA

Overriding principles from WA Government response

The Government agrees with the general thrust of the report and will consider developing and/or adopting policy to give effect to these overriding principles.

- **Principle 1:** The *Land Administration Act 1997* (LA Act) is the principal legislation for compulsory acquisition or taking of interests in land in WA. The Government does not believe that separate stand-alone legislation is required. The ability to voluntarily acquire land is considered a valid method of enabling the Government to plan for the long-term future needs of the State and to consolidate land requirements for public works on a non-urgent or not immediately required basis, without recourse to the full heads of claim or compensation that would apply to a “just in time” or immediate or urgent compulsory acquisition.
- **Principle 2:** The Government considers that due to the complexity and possible impacts on the economic, social and environmental development of the State, a “one size fits all” approach is not appropriate and that the ability for individual agencies with enabling powers to acquire land be maintained but the processes of the LA Act in terms of “taking and compensation” be applied to the greatest possible extent.
- **Principle 3:** Where multiple land requirements exist by public authorities, these should be acquired at the same time with one department, agency or body responsible for the action. In the absence of a particular department, agency or body having specific taking power, acquisition is to be undertaken via the Department for Planning and Infrastructure. The Department for Planning and Infrastructure is the designated central government agency responsible for the acquisition of private interests in land and shall undertake this activity as a service on behalf of Government departments, agencies and bodies as required (excluding independent statutory authorities).
- **Principle 4:** Landowners whose land has been affected by reservations should have an entitlement to financial assistance for valuation and legal advice. Additionally when owner/occupiers, where the land is their principle place of residence, have a measure of uncertainty imposed upon them provision should be made for a premium to be paid on top of fair market value if they decide to enter into a voluntary sale with Government.
- **Principle 5:** A Code of Conduct and a Procedure Manual will be prepared for adoption across government in respect of the use of chemicals on government and privately owned land holdings. The Procedure Manual is to include consultation and notification requirements that specify the chemicals to be used.
- **Principle 6:** The responses to the recommendations of the Report are not intended to apply where the Government is purchasing land in the open market place or the land is not affected by a reservation under planning legislation or a planning instrument.⁹⁵⁷

⁹⁵⁷ Government of Western Australia, *Response of the Western Australian Government to the Western Australian Legislative Council Standing Committee on Public Administration and Finance in relation to the Impact of State Government Actions and Processes on the Use and Enjoyment of Freehold and Leasehold Land in Western Australia*, Perth, July 2004, p 2.

Table 6. *Recommendations, initial government response and current status*

Update on status of recommendations
<p>Recommendation 1</p> <p>The Committee recommends that a brief, plain English, information sheet be developed by the Department of Land Information which summarises the main aspects of land law in Western Australia and explains the rights and obligations of freehold and leasehold landowners. Such a publication should be made available to the public free of charge.</p> <p>Initial Government response</p> <p>The Government supports the recommendation.</p> <p>The Government will ask the Department of Land Information (DLI) to prepare a brief “plain English” information sheet that summarises the main aspects of land law in Western Australia and explains the rights and obligations of freehold and leasehold landowners.</p> <p>The Government also supports the preparation by the DLI of a comprehensive “plain English” document explaining the rights and obligations of freehold and leasehold landowners in relation to voluntary negotiations, compulsory acquisitions and compensation procedures.</p> <p>It is envisaged that such document(s) would be supported by detailed technical documents that include the following, and allow interested parties the choice of a simple general understanding to a detailed technical level including some reference to legislation and case law.</p> <ul style="list-style-type: none"> • an overview • frequently asked questions • an explanation of the compensation processes • a more detailed technical report including external links to case law. <p>The document(s) would be produced in consultation with the legal, property and valuation sectors to ensure a broad consensus. The information would be provided to all landowners at the commencement of voluntary negotiations or compulsory acquisitions.</p> <p>Also supported by the Water Corporation.</p> <p>2019 update from Minister for Lands (Landgate)</p> <p>The Government supported the recommendation and Landgate supports the recommendation. Several “how to” brochures incorporating plain English explanations of the rights and obligations of freehold and leasehold landowners were produced. The various Land Titles Registration Practice Manuals also include plain English explanations of freehold and leaseholder ownership.</p> <p>Landgate provides this information free of charge online via its corporate website www.landgate.wa.gov.au. In addition, there are now a number of helpful “Land Transactions toolkits” online including: “The Land Titles Registration policy and procedure Guides”; Strata Titles Policy and Procedure Guides; “Land transactions forms and fees”; Land transactions reference guides. Customer Self Service videos can be watched online through Landgate’s website free of charge.</p> <p>Recommendation 2</p> <p>The Committee recommends that the DLI liaise with relevant stakeholders and industry bodies to facilitate the distribution of a plain English information sheet on land law in Western Australia, as recommended in Recommendation 1, from the offices of local governments, real estate agents and settlement agents, and to incorporate the information sheet’s contents within relevant standard conveyancing forms.</p> <p>Initial Government response</p>

Update on status of recommendations

The Government supports the recommendation.

The document(s) (with requisite disclaimers) would be made widely available to all landowners free of cost through appropriate government departments, agencies and bodies and would include distribution through local authorities, real estate agents and settlement agents.

The document(s) would also be available initially on the DLI's website and ultimately on the proposed land information platform when operational.

Also supported by the Water Corporation.

2019 update from Minister for Lands (Landgate)

The Government supported the recommendation and Landgate supports the recommendation. The "Land Transactions toolkits" including: "The Land Titles Registration policy and procedure Guides"; Strata Titles Policy and Procedure Guides; "Land transactions forms and fees"; Land transactions reference guides and Customer Self Service videos are available online through Landgate's website free of charge.

These guides are not available on the Shared Location Information Platform (SLIP) as they are not relevant to the operation of the SLIP and it is more appropriate to disseminate this information through the Landgate website. External agencies are free to link to these guides and information through their own websites.

Recommendation 3

The Committee recommends the enactment of a single Act dealing with all aspects of the compulsory acquisition of land in Western Australia.

Initial Government response

The Government endorses the intent of the recommendation.

The LA Act is the single and principle Act under which land is compulsorily acquired in the State of Western Australia. (see overriding Principle One).

Separate enabling legislation that applies to Statutory Authorities and specialist agencies should continue to principally stand-alone and interact with the LA Act when applicable.

Also supported by the Water Corporation.

2019 update from Minister for Lands (DPLH)

The Government endorses the intent of the recommendation. The LA Act is the single and principal Act under which land is compulsorily acquired in the State of Western Australia. Separate enabling legislation that applies to Statutory Authorities and specialist agencies interacts with the LA Act when applicable. The ability to acquire land is considered to be a valid and cost-effective method of enabling Government to plan for the long-term future needs of the State by consolidating land requirements for public works on a non-urgent or not immediately required basis.

The Government does not believe that separate stand-alone legislation is required and this position is supported by the findings of the Law Reform Commission's Compensation for Injurious Affection: Final Report, undertaken in response to Recommendation 12 of the Standing Committee on Public Administration and Finance's report and published in July 2008. The Law Reform Commission stated that "the better means of ensuring continuity, consistency and balance in Western Australia is to ensure that all statutes requiring the acquisition of land apply the provisions of the LA Act".

Update on status of recommendations

It should be noted that compensation under the *Planning and Development Act 2005* (PD Act) does not equate to compulsory acquisition. It is compensation for the interim loss of the use of land by a landowner. Where compensation under the planning system is provided that compensation is then taken into account, when the land is voluntarily purchased or compulsorily acquired. Similarly, where a person's land is reserved in a planning context and they are entitled to compensation but do not claim it, that person would receive the full amount of compensation when the land is eventually voluntarily purchased or compulsorily acquired. Under both scenarios there is no double-dipping of compensation.

Recommendation 4

The Committee recommends that where multiple agencies are involved in the compulsory acquisition of land for significant major public works projects, that a lead agency be appointed to carry out all of the acquisitions.

Initial Government response

The Government supports the recommendation.

The Department for Planning and Infrastructure is the most suitable lead agency to carry out all compulsory acquisitions where multiple agencies are involved. The recommendation is contained within overriding Principle Three.

Where a Statutory Authority or specialist agency is clearly dominant in a multiple agency compulsory acquisition, that authority can be delegated as the lead agency by agreement.

Also supported by the Water Corporation.

2019 update from Minister for Lands (DPLH)

The Government supports the recommendation. Major projects in Western Australia are assigned to one of five lead agencies that work with project proponents to manage all government interactions and statutory approvals. This helps improve efficiency and reduce the time taken to deliver projects while fully considering the public interest. Where multiple land requirements exist, these are acquired at the same time with one agency responsible for the action. In the absence of that particular agency having specific land acquisition power, acquisition is undertaken by the Department of Planning, Lands and Heritage (DPLH).

DPLH is the most suitable agency to carry out all compulsory acquisitions, where multiple agencies are involved. However, where a Statutory Authority or specialist agency is clearly dominant in a multiple agency compulsory acquisition, that authority can be delegated as the lead agency by agreement.

2019 update from the Water Corporation

The Corporation acknowledges that in certain circumstances a joint approach to land acquisition would be appropriate but would reserve the right to deal on all land acquisitions/requirements independently as appropriate.

Recommendation 5

The Committee recommends that all land acquiring State Government departments, agencies and bodies appoint a field officer for each specific land acquisition project and ensure that that field officer remains the primary point of contact for the department, agency or body with each affected landholder for the duration of the project.

Initial Government response

The Government supports the principle of a designated officer as the primary point of contact in each government land acquisition.

Update on status of recommendations

Also supported by the Water Corporation.

2019 update from Minister for Lands (DPLH)

The Government **supports** the principle of a designated primary point of contact in each government land acquisition. When Government embarks on the compulsory acquisition of land, there is a position designated to be the principal and ongoing point of contact for landowners.

2019 update from the Water Corporation

The Corporation's current practice is to appoint directly to each land acquisition a suitably experienced property officer to manage the acquisition process.

Recommendation 6

The Committee recommends that, wherever practical, State Government departments, agencies and bodies use existing easements and service corridors for their infrastructure projects.

Initial Government response

The Government supports the principle of using where possible existing infrastructure corridors, public land generally and existing easements to co-locate new infrastructure. However, it notes that there may be issues of unacceptable societal risk in co-locating some infrastructure elements.

Also supported by the Water Corporation.

2019 update from Minister for Lands (DPLH)

The Government supports the principle of using existing infrastructure corridors, public land generally and existing easements to co-locate new infrastructure where possible. DPLH regularly advises agencies to consider using existing infrastructure corridors, public land and existing easements to co-locate new infrastructure. However, it should be noted that the co-location of certain infrastructure elements may pose an unacceptable risk to the general public and/or the infrastructure itself and is not feasible in every instance.

2019 update from Minister for Energy

The Government at the time expressed support for the principle of using existing infrastructure corridors, public land generally and existing easements to co-locate new infrastructure where possible. However, it also noted that there may be issues of unacceptable societal risk in co-locating some infrastructure elements.

Western Power endeavours to use existing easements and service corridors, wherever practical. Western Power also endeavours, wherever available and practical, to locate its infrastructure in road reserves using standard alignments in accordance with the Utility Providers Code of Practice (link provided in correspondence).

From an energy portfolio perspective this position remains unchanged, noting that transmission infrastructure generally has a minimal impact on land use.

2019 update from the Water Corporation

The Corporation installs infrastructure within its existing easements wherever possible or practical, allowing for construction constraints, landowner consent, operational requirements and constraints, and outlined permitted use within the easement conditions.

2019 update from Western Power

Western Power endeavours to use existing easements and service corridors, wherever practical. Western Power also endeavours, wherever available and practical, to locate its infrastructure in road reserves using standard alignments in accordance with the Utility Providers Code of Practice.

Update on status of recommendations

Recommendation 7

The Committee recommends that Western Power Corporation notify landholders of the intended use of chemicals on electricity transmission line poles on landholders' property. Such notice should:

- be in writing and sent to the landholder
- specify the chemicals to be used
- be provided well in advance of the intended treatment date.

Initial Government response

The Government supports the recommendation.

The Government proposes to develop a code of conduct and procedure manual to be adopted by all government departments, agencies and bodies proposing to use chemicals or any product potentially harmful to humans, livestock or land in terms of notice of intended entry to private land, the activity to be undertaken and details of the chemicals or products to be utilised and for what purpose. (see overriding Principle Five).

Note statutory rights of entry and mining at Recommendation 23.

2019 update from Minister for Energy

The Government at the time expressed support for this recommendation and advised of the intention to develop a code of conduct and procedure manual to be adopted by all government departments, agencies and bodies proposing to use chemicals or any product potentially harmful to humans, livestock or land, in terms of notice of intended entry to private land, the activity to be undertaken and details of the chemicals or products to be utilised and for what purpose.

Western Power acts to ensure that its use of chemicals complies with specific requirements of the Department of Health, the Department of Agriculture and Food, the Department of Water and Environmental Regulation and Worksafe. Western Power complies with all written laws in relation to this process and maintains a register of chemically sensitive properties, using only acceptable substances on such properties.

Energy Policy WA will consult with other relevant State Government agencies to ascertain a whole-of-Government position on this matter.

2019 update from Western Power

The use of chemicals complies with the specific requirement of the Department of Health, the Department of Agriculture and Food, the Department of Water and Environmental Regulation and Worksafe. Western Power complies with written laws in relation to this process and also maintains a register of chemically sensitive properties and only uses acceptable substances on such properties.

Recommendation 8

The Committee recommends that Western Power Corporation arrange, at the request of any landholder and at the expense of Western Power Corporation, for the independent testing of both electricity transmission poles treated with chemicals and any livestock that may have come into contact with such poles.

Initial Government response

The Government supports the recommendation in principle.

Update on status of recommendations

Western Power Corporation currently complies with all written laws and maintains a register of chemical free properties and only uses acceptable substances on such properties. Testing on demand is considered unreasonable.

The current process involves the Department of Agriculture, who determines when testing is appropriate and Western Power Corporation remains prepared to carry out whatever testing is required by the Department of Agriculture. (See also overriding Principle Five).

2019 update from Minister for Energy

The Government at the time expressed in principle support for this recommendation, noting that the then Western Power Corporation complied with all written laws and maintained a register of chemical free properties, using only acceptable substances on such properties. Testing on demand was considered as being unreasonable.

From an energy portfolio perspective this position remains unchanged.

Western Power currently arranges tests for chemicals if there is:

- pollution (spills)
- reason to believe there is contamination
- a reporting requirement under the *Environmental Protection Act 1986* (EP Act); or
- a reporting requirement under the *Contaminated Sites Act 2003*.

No livestock testing is conducted.

2019 update from Western Power

Western Power tests for chemicals if there is:

- pollution (spills)
- reason to believe there is contamination
- a reporting requirement under the EP Act
- a reporting requirement under the *Contaminated Sites Act 2003*.

No livestock is tested.

Recommendation 9

The Committee recommends that the details of all significant communications between Western Power Corporation field officers and landholders be confirmed in writing to the landholder, and that all other communication be confirmed in writing when requested by the landholder.

Initial Government response

The Government supports the recommendation.

This is the general practice of the Western Power Corporation and the current approach is considered adequate. The terms "significant communication" and who would determine that requires clarification.

Western Power Corporation will be required to develop a communication policy for property related dealings with private landowners.

2019 update from Minister for Energy

The Government at the time expressed support for the recommendation, noting that the approach proposed was consistent with the then general practice of the Western Power Corporation. From an energy portfolio perspective this position remains unchanged.

Update on status of recommendations

Western Power currently provides a Notice of Entry each time one of its representatives enters land, except in situations where such entry is:

- for a purpose that Western Power has previously provided a Notice of Entry
- in an emergency situation
- in accordance with specific land entry rights contained in a written legal agreement
- to perform minor or routine maintenance or extension works to Western Power's distribution network located on a street under the control of a local or other statutory authority and where the street is unaffected
- on land that is owned by Western Power or similar
- under statutory rights to enter without notice (e.g. to read the meter).

Western Power provides a written Notice of Entry even in situations where the land owner/occupier verbally agrees or consents to the corporation entering the land. A Notice of Entry can be provided to the landowner and/or the land occupier, with a common-sense approach adopted to determine who the Notice of Entry should be provided to (i.e. the party most affected by the land entry).

2019 update from Western Power

A Notice of Entry is required each time Western Power enters land, except in situations where Western Power enters land:

- for a purpose that Western Power has previously provided a Notice of Entry
- in an emergency situation
- in accordance with specific land entry rights contained in a written legal agreement
- to perform minor or routine maintenance or extension works to Western Power's distribution network located on a street under the control of a local or other statutory authority and where the street is unaffected
- that is owned by Western Power or similar
- under statutory rights to enter without notice (e.g. to read the meter).

Western Power provides a written Notice of Entry even in situations where the land owner/occupier verbally agrees or consents to Western Power entering the land. A Notice of Entry can be provided to the land owner and/or the land occupier, with a common-sense approach adopted to determine who the Notice of Entry should be provided to (i.e. the party most affected by the land entry).

Recommendation 10

The Committee recommends that an appropriate method and level of compensation should be established by legislation for those landholders whose land is subject to an electricity transmission line easement. To achieve that end, the Committee recommends that one of the following two positions be implemented by the State Government:

(a) Section 45(2) of the *Energy Operators (Powers) Act 1979* (EOP Act) be repealed;

and

(b) The LA Act be amended to expressly to provide for compensation to a landholder for injurious affection to the landholder's land arising from the acquisition by a State Government department, agency or body of any interest in that landholder's land. The calculation of injurious affection should also take into account the value of the land covered by the easement.

Update on status of recommendations

Or

Both the EOP Act and the LA Act be amended to provide that the compensation to be paid to a landholder for the acquisition by Western Power Corporation of an electricity transmission line easement must include a component for land value that is equivalent to one hundred per cent of the land value of the land covered by the easement.

Initial Government response

The Government does not support the recommendation.

The current legislative environment is considered to set an effective and appropriate approach in balancing between the public interest in improved electricity supply and the private interests of landowners affected by powerlines.

The Committee's recommendation could potentially have significant financial implications for the State, and should not be considered without a thorough investigation of the public benefits and costs.

It may be that the additional costs imposed from the proposed level of compensation may render the planned implementation of electricity infrastructure to be considered uneconomic thus denying potential users access to supply. Community needs for secure electricity supply need to be balanced in consideration of the proposed legislative changes.

The Minister for Energy has pointed out on previous occasions that additional levels of compensation to private landowners would need to be accounted for through increased tariffs paid by electricity consumers.

Initial response from the Water Corporation

- Currently, section 241(7) of the LA Act only allows for compensation for reduction in value of remaining, adjoining land where a freehold interest is acquired (as opposed to a lesser interest such as an easement).
- The Committee notes the unique nature of an electricity line easement. Accordingly, this recommendation is predominantly aimed at dealing with the injurious affection (i.e. reduction in value) to remaining land resulting from a situation where Western Power takes an easement for the construction of an electricity transmission line.

Two options are proposed. If the second option is adopted, this would have little significance for the Water Corporation as it specifically relates to electricity easements.

If the first option is adopted, an impact on the Water Corporation will be felt whereby the Corporation takes an easement over land. Compensation for reduction in value to remaining land would be payable.

2019 update from Minister for Lands (DPLH)

The Government **does not support** the recommendation. The current legislative environment is considered to set an effective and appropriate approach in balancing the public interest in being able to access an efficient and cost-effective electricity supply with the private interests of landowners affected by powerlines. Western Power is obliged under the EOP Act to acquire land or an interest in land, typically an easement, whenever it is operating network infrastructure at or above 200kV. For all other network infrastructure operating below 200kV, Western Power is not obliged to acquire land or an interest in land, however they may choose to for operational reasons.

As at 2015–16, there were some 67 000 km of overhead powerlines in Western Australia. Any consideration of legislative change as recommended by the Committee could have significant

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financial implications for the State and it may be that additional costs imposed from the compensation required by the proposed change would increase the cost of new electricity infrastructure, which would almost certainly be passed onto consumers. In some areas of the State, it may render the installation of electricity infrastructure uneconomic and prevent potential users from accessing an essential service.

2019 update from Minister for Energy

The Government at the time indicated that it did not support the recommendation on the basis that the legislative environment was considered to set an effective and appropriate approach in balancing between the public interest in improved electricity supply and the private interests of landowners affected by powerlines. It also noted that the recommendation could potentially have significant financial implications for the State and should not be considered without a thorough investigation of the public benefits and costs.

From an energy portfolio perspective this position remains unchanged.

Western Power's current practices for these purposes are aligned with those of other government agencies, with the use of an independent accredited valuer to calculate a valuation in accordance with industry standards and all relevant legislation.

2019 update from Western Power

Western Power is aligned with all other government agencies by getting an independent accredited valuer to calculate a valuation in accordance with industry standards and all relevant legislation.

Recommendation 11

The Committee recommends that the EOP Act be amended to require that Western Power Corporation shall obtain an easement for all electricity transmission lines constructed on freehold land.

Initial Government response

The Government does not support the recommendation.

Western Power Corporation's current policy is to offer to acquire an easement for all new transmission lines below 200kV (66 and 132kV) voluntarily, at the determination of each landowner. Implementation of the recommendation would not necessarily require amendment to the Act.

Western Power Corporation have advised that cost considerations would need to be taken account of and if amendments were enacted and legislated would need to apply retrospectively to pre-existing transmission lines over which no easements have been taken.

Western Power Corporation has indicated that the government would need to seriously analyse the cost implications before proceeding with any amendment of this kind as part of its considerations.

2019 update from Minister for Energy

The Government at the time indicated that it did not support the recommendation, noting the policy of the then Western Power Corporation to offer to acquire an easement for all new transmission lines below 200kV voluntarily (66 and 132kV transmission lines), at the determination of each landowner. It also noted that cost considerations would need to be taken account of, and if amendments were enacted and legislated, would need to apply retrospectively to pre-existing transmission lines over which no easements have been taken.

From an energy portfolio perspective this position remains unchanged.

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Western Power currently complies with relevant legislation, that include an obligation in the case of transmission lines operating in excess of 200kV to have a suitable interest in land (e.g. an easement) acquired.

2019 update from Western Power

Western Power currently complies with relevant legislation. It remains an obligation in the case of transmission lines operating >200kV to have a suitable interest in land (e.g. an easement) acquired.

Recommendation 12

The Committee recommends that the Attorney General, independent of the amendment to the LA Act contained in Recommendation 10, refer the broad issue of compensation for injurious affection to land in Western Australia to the Law Reform Commission of Western Australia for review.

Initial Government response

The Government supports a reference to the WA Law Reform Commission to consider the matter of injurious affection.

However it should be noted, the concept of injurious affection is historically associated with the compulsory acquisition statutes. However, currently there remain only three Australian jurisdictions which utilise the term "injurious affection" in such statutes. The High Court in *Marshall v Director General, Department of Transport* (2001) 205 CLR 603 defined injurious affection as:

"It is a neat, expressive way of describing the adverse effect of the activities of the resuming authority upon a dispossessed owner's land (at [32])."

Western Australia is one of the jurisdictions in which the compulsory taking and compensation statute relating to the carrying out of public works (being those set out in Parts 9 and 10 of the LA Act) does not use the term "injurious affection".

However, the term "injurious affection" has been adopted in WA (and it would appear has now superseded the taking statute) to represent the concept of a diminution of value of land due to certain restrictions on the use of land arising out of the imposition of town planning rules or regulations or the compulsory taking of land.

It is not just any planning restriction that will result in a diminution in value of land giving rise to an entitlement to compensation, but only restrictions that are attributable to a limitation on the use of private land for no purpose other than a public purpose. This occurs by means of the classification of land by "reservation" as distinct from "zoning" under a town planning scheme, region scheme or redevelopment scheme.

However, as some of the issues giving rise to the Standing Committee Report (Report) illustrate, there are a number of other WA statutes which involve the carrying out of works of a public character which affect the value of privately owned land, in the sense that they result in a diminution of the value of abutting land of the same owner for the benefit of the public, even though compensation entitlements vary from statute to statute and from work to work.

What can be described as the reticulated infrastructure statutes, such the EOP Act, *Water Agencies (Powers) Act 1984*, *Dampier to Bunbury Pipeline Act 1997*, and *Petroleum Pipelines Act 1969*, illustrate the different conceptual approaches adopted by the WA Parliament in balancing the importance of public infrastructure and the benefits that it brings to private owners (including a potential betterment or enhancement component in the value of their land by reason of their access to such services) against the limitations imposed by the physical presence of such works on land.

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In general, the trend has been to require the agency to compulsorily acquire the fee simple or a suitable lesser interest in land under the compulsory taking statute for works of a particularly high significance and impact, but to exempt from a requirement to take an interest in land at all in respect of lesser works, such that an owner whose property is affected by the presence of works may have no entitlement to compensation at all. The approach of the statutes to the issue of compensation arising out of the impact of such works is not uniform.

The *Dampier to Bunbury Pipeline Act 1997* contains a slight variation on that position by creating different compensation entitlements, depending on whether an interest in land has been compulsorily acquired or land designated for inclusion in the Corridor is simply restricted from use in a certain manner.

A range of difficulties have been identified in the drafting of that Act, including provisions related to compensation entitlements, which are currently under review by the Department for Planning and Infrastructure (DPI) and the Pipeline Steering Committee.

Another Act which employs the term 'injurious affection' in a manner which is anomalous relative to the other statutes, is the *Country Areas Water Supply Act 1947* (CAWS Act) which uses "injurious affection" to create a compensation entitlement where a landowner is prevented from clearing vegetation from land for the purpose of preserving water catchment.

Annexure 2 is a table setting out the manner in which the concept of injurious affection has been employed in Western Australia in various statutes. It is clear that the central focus of the concept of "injurious affection" in the Report relates to the changes that occurred and complaints arising from the time the compulsory taking provisions were repealed from the *Land Acquisition and Public Works Act 1902* and re-enacted into Parts 9 and 10 of the LA Act.

As the Report observes, section 63(b) of the *Land Acquisition and Public Works Act 1902* as it stood prior to the enactment of the LA Act provided that in determining compensation payable following a compulsory acquisition of any interest in land, regard was to be had to:

"(b) the damage, if any, sustained by the claimant by reason of the severance of such land from the other adjoining land of such claimant or by reason of such other lands being injuriously affected by the taking, but where the value of other land of the claimant is enhanced by reason of the carrying out of, or the proposal to carry out, the public work for which the land was taken or resumed, the enhancement shall be set off against the amount of compensation that would otherwise be payable by reason of such other land being injuriously affected by the taking."

The re-enacted form of the provision in section 241(7) of the LA Act provides:

"(7) if the fee simple in land is taken from a person who is also the holder in fee simple of adjoining land, regard is to be had to the amount of any damage suffered by the claimant

-

(a) due to the severing of the land from that adjoining land; or

(b) to a reduction of the value of that adjoining land,

However, if the value of any land held in fee simple by the person is increased by the carrying out of, or the proposal to carry out, the public work for which the land was taken, the increase is to be set off against the amount of compensation that would otherwise be payable under (b)."

(emphasis added)

The Valuer General's reference at paragraph [4,148] of the Report to a remark of the Court that what was meant by adopting the wording of section 241(7)(b) was "regrettably unclear" was taken from *Cerini v Minister for Transport* [2001] WASC 309. In that case the WA Supreme Court made

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this "regrettably unclear" observation in the context of a discussion about whether the High Court decision in *Marshall* expanded the concept of injurious affection or diminution in value of land in Western Australia, such that compensation could be claimed regardless of whether or not loss or damage to the value of land of the owner adjoining the land taken could be attributed to the portion of the public work standing on the land acquired alone. The *Marshall* case relates to a Queensland statute worded in a manner significantly different to the WA statute in that it does not distinguish between various activities carried out by a constructing authority in the exercise of its statutory powers. Nonetheless, *Cerini* probably dispenses with the previously applicable principle that injurious affection/diminution in value of adjoining land relates to the size and proximity of the land taken, rather than the nature and extent of the impact of the work itself for which the land was taken. It is the generality of the term 'adjoining land' in section 241(7) that still imports a degree of uncertainty.

There is no compensation available to private landowners whose land is adjacent to and its value affected by the presence of a public work, but no interest in such affected land was taken at all. Proximity is still relevant, and represents an ongoing theme in the Report.

The body of the case law will no doubt continue to evolve in each of the jurisdictions that have to consider the nature and extent of the damage sought by way of injurious affection where the fee simple interest has been taken. But that differs from the issue of whether or not an entitlement to claim for such a diminution in value (whether it is termed injurious affection or otherwise) arises at all where some lesser interest is taken, or a work which has the character of a public work is authorised over land by statute, even if no formal interest in land is taken at all.

Where the acquiring authority under the reticulated infrastructure statutes purports to take an interest less than the fee simple (either an easement or, in the case of the Dampier to Bunbury Pipeline legislation "State Corridor Rights"), these are interests which arguably deny any entitlement to compensation for the diminution in land concept under section 241(7) of the LA Act. It may be that this is unobjectionable in some circumstances. For example, in the case of the *Dampier to Bunbury Pipeline Act 1997*, an alternative method of calculating injurious affection is provided for under that statute. However, at present the two statutes do need to be read together in order to clarify when an entitlement claim for diminution in value occurs and the circumstances in which it might be claimed and there are some uncertainties associated with the same.

The WA Parliament has clearly made a distinction between different types of legislation for which an entitlement to compensation for a diminution in land will be recognised, and the distinction is generally one which reflects the nature and degree to which it is perceived an owner may be restricted in the use of his own land by the nature and extent of the work proposed. Two questions also arise. Firstly, whether it is necessary to require a public authority authorising the carrying out of infrastructure works to formally acquire an interest in land at all in order to permit the public work or other authorised activities to occur. Secondly, in such circumstances, whether it is appropriate to define limited compensation rights using injurious affection concepts.

Consequently, any terms of reference designed to examine the matter further should be directed towards an examination of whether "injurious affection" should be more precisely defined for the purposes of certain statutes, or abandoned in its entirety, with the degree to which or circumstances in which a diminution in value to an owner's land would result in an entitlement to compensation in the hands of a landowner.

Section 241(7) of the LA Act also acknowledges that land may be increased in value by reason of a public work, and that such enhancement (also termed 'betterment') may be set off against any asserted injurious affection/diminution in value loss, although this does not extend through to damage of a 'severance' character calculable pursuant to section 241(7)(a). The betterment concept is also reflected in the context of planning controls, in section 11(2) and (4) of the *Town*

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Planning and Development Act 1928. Diminution in value and increase in value are two halves of the same coin and need to be considered in any review of compensation entitlements.

Also supported by the Water Corporation.

2019 update from Minister for Lands (DPLH)

This recommendation has been **implemented**. The Law Reform Commission's *Compensation for Injurious Affection: Final Report* was published in July 2008.

Recommendation 13

The Committee recommends that the State Government review the circumstances of any former landholder who have settled the sale of their properties to LandCorp for the purposes of the *Hope Valley – Wattleup Redevelopment Act 2000* prior to the Cabinet decision introducing a relocation payment, to ascertain whether there is any justification, on equity grounds, for an *ex gratia* payment.

Initial Government response

The Government reviewed the former Coalition Government's decision to close the townships of Wattleup and Hope Valley. The Government ultimately endorsed the proposition and as a consequence, determined to introduce a relocation allowance because of the special circumstances of the situation, where entire townships were being closed down. The Government does not support the principle of retrospective payments where Government policy or taxation settings change.

2019 update from Minister for Lands (Development WA)

The Government reviewed the former Coalition Government's decision to close the townships of Wattleup and Hope Valley. The Government ultimately endorsed the proposition and as a consequence, determined to introduce a relocation allowance because of the special circumstances of the situation, where entire townships were being closed down. The Government does not support the principle of retrospective payments where Government policy or taxation settings change.

As the government response to this recommendation was that the matter was not supported, no further action has been undertaken.

Recommendation 14

The Committee recommends that confidentiality agreements/contract provisions not be entered into between land acquiring State Government departments, agencies or bodies and landholders unless at the express request of the landholder.

Initial Government response

The Government supports the recommendation in principle.

Land transfer details are a matter of public record and should record only the price paid for the land.

Agreements between landowners and Government in respect of property dealing ought not be the subject of confidentiality agreements and that agreements be subject to the statutory provisions and spirit of the *Freedom of Information Act 1993* (FOI Act).

Also supported by the Water Corporation.

2019 update from Minister for Lands (DPLH)

The Government **supports** the recommendation. Agreements between landowners and Government in respect of property dealing ought to not be the subject of confidentiality

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agreements. Land transfer details are a matter of public record and should record only the price paid for the land. It should also be noted that agreements entered into by land acquiring State Government departments, agencies and bodies are subject to the statutory provisions of the FOI Act.

The Information Commissioner has observed that, where government agencies seek to acquire land from private citizens, transparency in the acquisition process serves to achieve the objects of the FOI Act. Those objects include making the persons and bodies that are responsible for State and local government more accountable to the public (section 3(1)(b)). The Commissioner recognised a strong public interest in agencies, which possess extraordinary powers and resources in respect of the acquisition of property that are not available to private citizens, being seen to act fairly and transparently. However, it should be noted that it is often landowners, who request the inclusion of confidentiality clauses in land acquisition agreements.

2019 update from the Water Corporation

The Corporation's standard contract does not contain a confidentiality clause. In some instances a confidentiality clause will be included at the request of the landowner.

The clause is: The purchaser must not disclose the terms of, or any matters relating to, this contract (other than to its officers, employees and advisers on a confidential basis) unless the seller has consented to the terms of disclosure.

2019 update from Western Power

Western Power will comply with relevant legislation.

Recommendation 15

The Committee recommends that all land acquiring government departments, agencies and bodies should accompany their initial offer of compensation to a landholder in a compulsory acquisition of any interest in land with an advance payment of ninety per cent of that offer. Such a payment is not to be regarded as prejudicing in any way the affected landholder's right to continue negotiations as to the final compensation figure.

Initial Government response

The Government supports the intent of the recommendation.

General practice is to make an offer of advance payment of 100 per cent of the offer of compensation on the basis that the payment does not prejudice the landowner's right to continue to negotiate as to a final compensation outcome.

The Government further recommends that the general practice be adopted where appropriate across Government notwithstanding the statutory recommendation of section 248(2) of the LA Act is 90 per cent.

Instances may arise however where an offer of advance payment less than 90 per cent is appropriate where additional information such as financial statements are required to compensate for disrupted business costs and the like.

Also supported by the Water Corporation.

2019 update from Minister for Lands (DPLH)

The Government **supports** the recommendation. The LA Act provides that a land acquiring authority may make an offer of an advance payment not exceeding 90 per cent to a landowner, after an offer of compensation has been made.

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Instances may arise, however, where an offer of an advance payment of less than 90 per cent is appropriate, where additional information such as financial statements are required to compensate for other matters such as disrupted business costs.

2019 update from the Water Corporation

In the event of a compulsory acquisition action being carried out, the Corporation's practice is to pay the landowner an amount equivalent to not less than 90 per cent of the offered amount as compensation pre-payment with negotiations then continuing to establish an agreed final compensation figure.

Recommendation 16

The Committee recommends that any future review by the State Government of the Western Australian constitutional legislation should include detailed consideration as to whether a "just terms" or "fair" compensation provision needs to be incorporated into the legislation with respect to the acquisition by the State Government for public purposes of privately-held property.

Initial Government response

The Government agrees to consider the provision during any future review of the constitutional legislation.

However, as the Report notes, submissions by various State agencies responsible for acquisitions, was that their legislation and the manner in which it was administered already recognised that compulsory acquisition was to be made only where fair compensation, or just terms, was provided to the owner. The provisions of the LA Act are consistent with such a principle.

The amount of compensation is to be determined by reference to the particular considerations identified in the specific legislation that authorises the resumption. A general statement in legislation, such as the LA Act, that an acquisition is to be on just terms, or that compensation is to be fair, would add little to the substantive effect of that legislation.

To have any substantive effect, a "just terms" or "fair compensation" provision would need to operate as a limitation on State legislative power. That is the effect of section 51(xxxi) of the Commonwealth Constitution, which provides that the Commonwealth Parliament may make laws with respect to:

"The acquisition of property on just terms from any State or person for any purpose in respect of which the Parliament has power to make laws."

Section 51(xxxi) operates by abstracting from other heads of Commonwealth legislative power the power to make laws for the compulsory acquisition of property. As Dixon CJ noted in *Attorney-General (Cth) v Schmidt*.

"The decisions of this Court show that if par (xxxi) had been absent from the Constitution many of the paragraphs of S.51, either alone or with the aid of par (xxxi), would have been interpreted as extending to legislation for the acquisition of land or other property for use in carrying out or giving effect to legislation enacted under such powers. The same decisions, however, show that in the presence in S. 51 of par (xxxi) those paragraphs should not be so interpreted but should be read as depending for the acquisition of property for such a purpose upon the legislative power conferred by par (xxxi) subject, as it is, to the condition that the acquisition must be on just terms."

This statement is subject to some qualifications. For example, the limitation in section 51(xxxi) does not apply to a law made under a head of Commonwealth legislative power that clearly authorises the acquisition of property other than on just terms, such as the taxation power (section 51(ii) of

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the Commonwealth Constitution), or to laws of a kind which do not permit acquisition on just terms, such as a penalty or forfeiture of property.

This operation of section 51(xxxi) of the Commonwealth Constitution arises because of the limitation on Commonwealth legislative power by reference to the subject matters contained in section 51 of the Constitution and the conditioning on one of these heads of power of a requirement of just terms.

A simple reproduction of section 51(xxxi) of the Commonwealth Constitution in a State context would not necessarily have the same effect. If such a provision were to be introduced into the State's constitutional structure, it may be necessary to define with some precision the circumstances in which the "just terms" provision operated, to ensure that acquisitions of property by way of taxation, penalty, criminal forfeiture or confiscation of profits were not prevented. Defining in State legislation the scope of a limitation on such a "just terms" acquisition power of this kind would require very careful consideration and drafting.

No such limitation on State legislative power currently exists, either in Western Australia or any other Australian State. This was confirmed by the High Court in *Durham Holdings Pty Ltd v NSW*. In regard to the introduction of such a limitation applying to State acquisitions of property are several matters that would need to be considered.

First, the Court in *Durham Holdings*, recognised that to introduce a limitation on State legislative power requiring that any acquisition of property be on just terms, would involve modification of the arrangements which comprise the Constitutions of the States within the meaning of section 106 of the Commonwealth Constitution. Therefore, in Western Australia this may well have consequences for the manner and form in which such an amendment could be introduced and enacted by the WA Parliament. The introduction and enactment of such a limitation as a matter of State law would affect the expression of State legislative power in section 2(1) of the *Constitution Act 1889* (WA). Such a limitation could only be introduced by a Bill passed with absolute majorities and approved at a referendum in accordance with section 73(2) of the *Constitution Act 1889* (WA).

Secondly, possibly, the only other manner in which a limitation could be introduced would be through an amendment to the Commonwealth Constitution, by way of referendum under section 128 of that Constitution. There was an attempt to effect such an amendment to the Commonwealth Constitution in 1988. The proposal to introduce a section 115A into the Commonwealth Constitution was defeated at referendum both nationally and in each State. In Western Australia this proposal, which was voted on with other proposals for guarantees of trial by jury and religious freedom, attracted a 'yes' vote of only 27.68 per cent.

Thirdly, the LA Act and other related acquisition legislation would be unlikely to contravene a "just terms" requirement in any significant respect. However, there are occasions when the WA Parliament considered that it was appropriate to enact laws that would have contravened a "just terms" provision. Examples of proposed legislation which may contravene such a "just terms" limitation are the *Yallingup Foreshore Land Bill 2002* (WA) and proposals to vest property in Kambalda sewerage works (inadvertently not reserved on sale of the land by WMC) in the Water Corporation.

Fourthly, also, such a "just terms" provision of the kind contemplated could have effects far beyond legislation dealing with the compulsory acquisition of land. For example, Commonwealth legislation dealing with limitation periods has been held to contravene section 51(xxxi) of the Commonwealth Constitution. Those decisions recognise that:

- a right of action can be "property" for the purposes of section 51(xxxi)

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- a law which extinguishes such a right of action will, without providing for just terms, be beyond Commonwealth legislative power.

There are at least two illustrations of the manner in which a "just terms" provision might limit State legislative power:

- *Newcrest Mining (WA) Pty Ltd v Commonwealth*, where the Commonwealth legislated to create, and prevent mining in, Kakadu National Park without providing compensation to the holders of subsisting mining leases in that area. A majority of the High Court held the taking of the right to mine as an acquisition of property which, because it was effected other than on just terms, was invalid. It may be that an analogy could be drawn with recently introduced clearing provisions in the EP Act, so far as they would prevent the clearing or other development on private land, if the State had a similar just terms provision.
- *Georgiadis v AOTC*, where Commonwealth legislation which substituted a workers compensation regime for common laws rights, in a manner which extinguished accrued causes of action, was found to be invalid to that extent.

Fifthly, while the introduction of a just terms provision has the capacity to have these effects outside the area of compulsory land acquisition, its introduction is unlikely to alter the current operation of the LA Act in that area. The introduction of such a clause would not resolve any debate as to the detail of the compensation regime provided for by that Act. The determination of the detail of the manner in which compensation was to be assessed and paid would remain a matter for State Parliament. As Dixon J noted in *Grace Brothers Pty Ltd v The Commonwealth*.

"Under that paragraph [S51 (xxxi)] the validity of any general law cannot, I think, be tested by inquiring whether it will be certain to operate in every individual case to place the owner in a situation in which in all respects he will be as well off as if the acquisition had not taken place. The inquiry rather must be whether the law amounts to a true attempt to provide fair and just standards of compensating or rehabilitating the individual considered as an owner of property, fair and just as between him and the government of the country.

...

In deciding whether any given law is within the power the Court must, of course, examine the justice of the terms provided. But it is a legislative function to provide the terms, and the Constitution does not mean to deprive the legislature of all discretion in determining what is just. Nor does justice to the subject or to the State demand a disregard of the interests of the public or of the Commonwealth."

In view of the above, there are several reasons that suggest that the inclusion of "just terms" provision in the WA Constitution may not be appropriate. For example:

- in the field of compulsory land acquisition, the subject of the Standing Committee's concern, a "just terms" provision does not appear to be necessary
- a "just-terms" provision could have far reaching effects in other areas of State legislation which would limit the ability of the State government to pursue its legislative agenda and the State Parliament to enact legislation
- a "just terms" provision could subvert the public interest to private rights in situations where the compensation payable might be prohibitive

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- the introduction of a “just terms” provision would require a State referendum requiring WA electors to answer the same substantive question as they rejected in 1988; and
- a “just terms” provision would represent a departure from the approach adopted in all other Australian States.

Also supported by the Water Corporation.

2019 update from Minister for Lands (DPLH)

This recommendation has previously been considered and investigated. It was determined that there are several reasons that suggest the inclusion of “just terms” provision in the WA Constitution may not be appropriate. For example:

- in the field of compulsory land acquisition, a “just terms” provision does not appear to be necessary
- a “just terms” provision could have far reaching effects in other areas of State legislation which would limit the ability of the State government to pursue its legislative agenda and the State Parliament to enact legislation
- a “just terms” provision could subvert the public interest to private rights in situations where the compensation payable might be prohibitive
- the introduction of a “just terms” provision would require a State referendum
- a “just terms” provision would represent a departure from the approach adopted in all other Australian States.

In addition, it is generally considered that the LA Act, under which land is compulsorily acquired, is an Act that provides for compensation on just terms. The Law Reform Commission recommended amendments to section 241 of the LA Act in its 2008 *Compensation for Injurious Affection: Final Report*.

In 2014, the Land Acquisition Legislation Amendment (Compensation) Bill 2014 (LALAC Bill) was introduced into Parliament. The Bill’s purpose was to deliver a fairer and more transparent approach for the assessment and determination of compensation for landholders where private property is acquired by the State and to ensure that compensation paid for the compulsory acquisition of a part of a property is assessed not only on the value of the land taken, but also on the greater impact it has on the entire property. The legislation to be amended by the LALAC Bill was the LA Act (section 241), EOP Act, *Water Agencies (Powers) Act 1984*, and the *Water Services Act 2012*. The LALAC Bill did not advance beyond the second reading stage and subsequently lapsed.

The proposed amendments to the LAA have since been integrated into the Land Administration Amendment Bill 2018 (LAA Bill). The drafting of that Bill is progressing, noting the State Government’s ongoing legislative agenda.

Recommendation 17

The Committee recommends that land acquiring State Government departments, agencies and bodies pay the reasonable costs of landholders obtaining independent land valuation and compensation assessment advice (up to the amount determined by the Land Valuers Licensing Board’s Scale of Fees), in relation to both voluntary and compulsory acquisitions of interests in land.

Update on status of recommendations

Initial Government response

The Government supports the principle of the recommendation where land is affected by an acquisition under the LA Act or reservation under a planning instrument.

The general practice of government agencies is to pay the reasonable costs incurred by landowners relating to obtaining valuation and compensation assessment advice in relation to compulsory acquisition only. Payment should be on the basis of:

- being undertaken by a Licensed Valuer
- a minimum of two quotes being obtained and submitted for agency consideration prior to authorising the Valuer to proceed
- agreement to the exchange of valuations
- the valuation being utilised as a means of negotiating a settlement.

The payment of such fees in respect of voluntary purchase is variable across government agencies. In respect to valuation fees for voluntary acquisitions following the creation of a reservation, the Government recommends the reimbursement of up to 90 per cent of the Land Valuers Licensing Board's Scale of Fees with the ability to negotiate beyond that figure in appropriate circumstances. Such payment should be a "one off" reimbursement of a proven cost in the case of a voluntary acquisition enquiry that does not proceed to settlement or paid as part of the total settlement price for the acquisition. (see overriding Principle Four).

Also supported by the Water Corporation.

2019 update from Minister for Lands (DPLH)

The Government supports the principle of the recommendation, where land is affected by an acquisition under the LA Act or reservation under a planning instrument.

The general practice of government agencies is to pay the reasonable costs incurred by landowners relating to obtaining valuation and compensation assessment advice in relation to compulsory acquisition only. Payment should be on the basis of:

- being undertaken by a Licensed Valuer
- a minimum of two quotes being obtained and submitted for agency consideration prior to authorising the Valuer to proceed
- agreement to the exchange of valuations
- the valuation being utilised as a means of negotiating a settlement.

The payment of such fees in respect of voluntary purchase is variable across government agencies.

2019 update from Minister for Energy

The Government at the time expressed in principle support for the recommendation in situations where land is affected by an acquisition under the LA Act or reservation under a planning instrument.

Energy Policy WA will consult with other relevant State Government agencies to ascertain a whole-of-Government position on this matter.

Current practices of Western Power allow a landowner to obtain an independent valuation report during negotiations that is then provided for consideration by the Western Power Valuer. The compensation amount from Western Power will include an allowance for the cost of the report, provided that a receipt is provided for these services and the sum requested is considered reasonable.

Update on status of recommendations

2019 update from the Water Corporation

The Corporation does reasonably include an offer of compensation an amount for consequential losses such as professional fees, where relevant. These include reimbursement to the landowner for reasonable costs associated with an independent valuation on the condition that the valuation is used in negotiations when establishing the final compensation figure and that a copy of the valuation is supplied to the Corporation.

2019 update from Western Power

During negotiations, the landowner can obtain an independent valuation report. This report is then provided to the Western Power Valuer to consider. Western Power's compensation amount will include an allowance for the report so long as a receipt is provided for these services and it is considered reasonable.

Recommendation 18

The Committee recommends that land acquiring State Government departments, agencies and bodies pay the reasonable costs of landholders obtaining independent legal advice on their rights and on any offer and associated documentation in relation to both voluntary and compulsory acquisitions of interests in land.

Initial Government response

The Government supports in part the recommendation where land is affected by an acquisition under the LA Act or by a reservation under a planning instrument.

Recommendations 1 and 2 when implemented will provide landowners with information in such a form as to convey the every day rights and the processes of voluntary and compulsory acquisition.

Where land is the subject of a voluntary acquisition, following the creation of a reservation, it is recommended that a monetary allowance be reimbursed to landowners to source necessary legal advice beyond that provided within the implementation of Recommendations 1 and 2. The allowance should reflect the complexity of the land dealing with the monetary range set at a base of \$1000 to be indexed annually.

In the case of compulsory acquisition, it is current practice to pay for the plaintiff's reasonable costs, as awarded by the Court. Where compulsory acquisition compensation is negotiated, the most reasonable equivalent of costs in the absence of a Court award is to be paid having regard as to the nature of the transaction and its complexity. (see overriding Principle Four).

Also supported by the Water Corporation.

2019 update from Minister for Lands (DPLH)

The Government supports the intent of the recommendation. The DPLH has a Statement of Procedures that is provided to all landowners involved in a voluntary or compulsory acquisition, as per the requirement of section 168(2) of the LA Act. This is a plain English explanation of the procedures for the taking of land, the taking of interests in land, compensation, rights of appeal and rights as to future options for the landowner, if land taken is no longer required.

With regard to compulsory acquisition, the LA Act does not contain an obligation to pay legal costs as a head of claim under section 241 however should an offer of compensation be litigated in the State Administrative Tribunal or the Supreme Court, then costs awarded to the plaintiff are paid.

Update on status of recommendations

2019 update from Minister for Energy

The Government at the time expressed partial support for the recommendation, in situations where land is affected by an acquisition under the LA Act or by a reservation under a planning instrument.

Energy Policy WA will consult with other relevant State Government agencies to ascertain a whole-of-Government position on this matter.

Western Power currently provides an allowance of \$500 to landowners for seeking legal advice, with payment being made on the provision of a receipt evidencing payment for these services.

2019 update from the Water Corporation

The Water Corporation does reasonably include an offer of compensation amount for consequential losses such as professional fees, where relevant. These include reimbursement to the landowner for reasonable costs associated with legal fees pertaining to the landowner's contractual dealings.

2019 update from Western Power

This recommendation has been implemented. An allowance of \$500 is given to landowners for seeking legal advice, with this paid on the provision of a receipt for these services.

Recommendation 19

The Committee recommends that the State Government establish a standard scale of costs in relation to legal advice provided to landholders with respect to their rights and on any offer and associated documentation in relation to both voluntary and compulsory acquisitions of interests in land, to be observed by all land acquiring State Government departments, agencies and bodies when making payments to landholders.

Initial Government response

The Government supports the recommendation where land is affected by an acquisition under the LA Act or by a reservation under a planning instrument in accordance with its response to Recommendations 17 and 18.

Recommendations 1 and 2 when implemented will provide landowners with information in such a form as to convey the everyday rights and the processes of voluntary and compulsory acquisition.

The Government supports the payment of valuation and legal fees in accordance with Recommendations 17 and 18.

Compulsory acquisition compensation under the LA Act is guided by section 241(6) that sets out the types of costs that form portion of the compensation settlement with section 241(6)(e) stating that compensation shall include "any other facts which the acquiring authority or the court considers it just to take into account in the circumstances of the case". (see overriding Principle Four).

Also supported by the Water Corporation.

2019 update from Minister for Lands (DPLH)

The Government supports the recommendation where land is affected by an acquisition under the LA Act. Compulsory acquisition compensation under the LA Act is guided by section 241(6) that sets out the types of costs that form a portion of the compensation settlement with section 241(6)(e) stating that compensation shall include "any other facts which the acquiring authority or the court considers it just to take into account in the circumstances of the case".

2019 update from the Water Corporation

Update on status of recommendations

It is the Water Corporation's position that any reimbursement of costs should be determined on a case by case basis after taking into consideration all of the commercial negotiation outcomes of each dealing.

Recommendation 20

The Committee recommends the establishment of a single, independent, land acquisition agency, with the sole purpose of acquiring interests in land at a fair price, to undertake all land acquisitions on behalf of State Government departments, agencies and bodies.

Initial Government response

The Government supports the recommendation to the extent that a lead agency is responsible in the case of multiple agency involvement (Recommendation 4).

The ability of a single agency to undertake all land acquisition matters would require overriding legislation to empower that agency to utilise the full range of legislative powers currently embodied in the controlling Acts of all government departments, agencies, bodies and statutory authorities.

If a single agency were appointed for this role, it may not be possible to meet deadlines where multiple projects are being undertaken. Current arrangements enable acquiring authorities to deal with landowners directly. Operational requirements such as accommodation works are dealt with in an efficient and expedient manner, however, as set out in Recommendation 4 and overriding Principle Three single agency arrangements will be utilised where possible.

Initial response from the Water Corporation

Not supported.

- Due to varying requirements of Government agencies, one entity could not be expected to understand or accommodate all agencies' needs.
- Benefits would exist with coordination and mediation roles where multiple agencies were involved.
- Establishment of a single authority would arguably achieve consistent application of principles and policy.
- The Water Corporation would, however, lose control of the acquisition process. The Corporation should retain the right to undertake acquisitions on its own behalf, so as to retain some control over the timing and accuracy of the process.
- Under its current legislation, the Water Corporation determines whether it is required to obtain an interest in the land when undertaking works and what is the appropriate interest. The Corporation should retain this power.
- The Water Corporation should retain power to communicate and negotiate directly with the landowner, rather than having to channel negotiations through a third party (i.e. the centralised acquisition agency).
- Consolidation into one Government agency could result in significant backlogs and delays in the process, particularly if the agency was not appropriately funded or staffed.

2019 update from Minister for Lands (DPLH)

The Government supports the intent of the recommendation, to the extent that a lead agency is responsible in the case of multiple agency involvement. However, the ability of a single agency to undertake all land acquisition matters would require overriding legislation to empower that

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agency to utilise the full range of legislative powers currently embodied in the controlling Acts of all government departments, agencies, bodies and statutory authorities.

If a single agency were appointed for this role, it may not be possible to meet deadlines, where multiple projects are being undertaken. Current arrangements enable acquiring authorities to deal with landowners directly and single agency acquisition arrangements are used where possible.

2019 update from the Water Corporation

Not implemented.

The Water Corporations position is to be in control of the acquisition process due to it being critical to allow for the Corporation's capital works infrastructure construction requirements to be at the forefront of all landowner negotiations thus facilitating on-time delivery of future assets and infrastructure related to essential state and community services. Implementation of this recommendation would create delays and implement an additional level of red tape.

2019 update from Western Power

Western Power will comply with relevant legislation.

Recommendation 21

The Committee recommends that the State Government adopt the Committee's model land acquisition procedure (see paragraph 5.151) for all interests in land acquired by State Government departments, agencies and bodies.

Initial Government response

The Government does not support the recommendation.

The model is a substantial departure from current general practice across Government and is considered to unnecessarily expose the Government to a process that could incorporate unrealistic and adversarial valuations and compromise the Government's position to enter into arbitration or court proceedings should a negotiated settlement not be reached.

In addition, a part settlement based on a figure being the average of the government's valuation(s) and a landowner's unrealistic or adversarial valuation (element (h)) could encourage a prolonged negotiation and settlement period, especially where interest accrues.

The model is considered overly simplistic and formulaic, and therefore inappropriate in relation to compulsory acquisitions, although, some elements could be incorporated into the voluntary acquisition process depending on the complexity of the dealing. The avenues/direction of the LA Act and access to the Supreme Court (proposed State Administrative Appeals Tribunal) are considered to be essential for landowners affected by compulsory acquisition.

Compulsory acquisition involves issues such as severance, injurious affection, business disturbance, consequential losses and solatium. These are often complex issues, which require thorough analysis and reference to Court precedent. In such cases the Government may need two or three independent valuations of its own to assist with finalising compensation or in some instances it may be necessary to refer the matter to the Court for direction.

2019 update from Minister for Lands (DPLH)

The Government does not support this recommendation. The model is overly simplistic and formulaic, and not suitable in relation to compulsory acquisitions. The application of the legislative framework provided by the LA Act and access to the State Administrative Appeals Tribunal and the Supreme Court are considered to be essential for landowners affected by compulsory acquisition.

Compulsory acquisition involves issues such as severance, injurious affection, business disturbance, consequential losses and solatium. These are often complex issues, which require thorough

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analysis and reference to Court precedent. In such cases the Government may need two or three independent valuations of its own to assist with finalising compensation or, in some instances, it may be necessary to refer the matter to the Court for direction.

The model would unnecessarily expose the Government to a process that could incorporate unrealistic and adversarial valuations and compromise the Government's position to enter into arbitration or court proceedings should a negotiated settlement not be reached.

In addition, a part settlement based on a figure being the average of the government's valuation(s) and a landowner's unrealistic or adversarial valuation (element (h)) could encourage a prolonged negotiation and settlement period, especially, where interest accrues.

Initial response from the Water Corporation

Not supported in present form.

- Under its legislation, the Water Corporation is required to attempt to acquire land by agreement prior to commencing compulsory acquisition.
- Process at paragraph 5.151 is aimed at setting out steps which an acquiring authority should take in negotiating an acquisition (i.e. prior to progressing to compulsory acquisition).
- Whilst the process set out in paragraph 5.151 may be suitable in the majority of cases and may not, in fact, differ substantially from the Water Corporation's usual practice, there may be situations that require a different process of negotiation.
- It is desirable that the Water Corporation maintain the ability to undertake negotiations in the manner that is appropriate to the particular case at hand, rather than by reference to a strict procedure.
- If strict procedures in relation to acquisition by agreement are implemented, it may be more efficient to simply proceed straight to a compulsory acquisition, following the process that is already provided in the LA Act (in which case the Corporation's legislation would need to be amended to remove the requirement that the Corporation first attempt to acquire by agreement).
- A standard model could incorporate elements of the proposed procedure including A, B, D, F, I and J. The remaining proposals have the potential to frustrate the negotiation process and may incorrectly reflect the fair compensation values.
- There is distinct potential for the process to be distorted by unscrupulous, inexperienced or incompetent valuers and advocate advisers. The acquiring authority may have higher exposure to litigation and increased frequency of negative outcomes. It is inappropriate to average valuations under any circumstance.
- The proposal at C could be utilised where suitable controlling professional bodies such as the API. provide for valuation standards and accreditation of compensation valuers. These valuers could then be placed on a panel for selection by the land owner and acquiring authority.
- Nothing should limit the ability of acquiring authorities to compulsorily acquire land at any time.

Update on status of recommendations

Recommendation 22

The Committee recommends that the State Government amend relevant legislation to provide that any voluntary acquisition of an interest in land for public purposes is on the same terms and level of compensation as if it were a compulsory acquisition under Parts 9 and 10 of the LA Act.

Initial Government response

The Government believes there is some merit in providing some financial premium for voluntary purchases in some circumstances and therefore supports the spirit of the recommendation where land is affected by a reservation under planning legislation or a planning instrument.

The defining factor between a voluntary acquisition and a compulsory taking is the position of the landowner and the resultant principle of a willing seller (voluntary acquisition) and an unwilling seller (compulsory taking).

Voluntary acquisition that is initiated by the landowner or results from the decline of a development application in respect of reservations in Local and Regional Town Planning Schemes does not constitute a compulsory taking.

The responsible authority considers the request and negotiates to purchase on the basis of market value. There is no obligation on the part of the landowner to proceed.

Compulsory taking results from the necessity to undertake a public work within a relatively short time horizon that affords the landowner with little option as to the outcome (i.e. the public work is required immediately and the issue is effectively a "fait accompli"). A taking date is established and that becomes the effective date for valuation.

The two underlying principles that currently define the processes are further discussed at Recommendation 33.

The two-landowner positions are considered completely different requiring the equally significantly different approach that currently exists.

In order to acknowledge the impost to an owner/occupier (that is the principle place of residence) of land that is subject to a reservation, the Government recommends that a 5 per cent premium be paid, in addition to the market value of a property voluntarily purchased either in part or in full.

An amount of up to 10 per cent (solatium) is payable in the case of a compulsory taking of land under section 241(9) of the LA Act. (see overriding Principle Four).

Initial response from the Water Corporation

Not supported.

- The Committee notes that compulsory acquisition in accordance with Parts 9 and 10 of the LA Act is preferable than acquisition by agreement.
- Again, this recommendation is aimed at prescribing the processes that must be applied to acquisition by agreement (by recommending that such acquisitions should be on the same terms as if it were a compulsory acquisition).
- As discussed above, it is desirable for the Water Corporation to retain a level of discretion and flexibility in relation to acquisition by agreement, and not be bound to provide compensation on the same terms as a compulsory acquisition.
- If the Water Corporation was required to do this, it would be preferable to proceed straight to the compulsory acquisition process. As discussed above, this would require amendment to the Corporation's legislation.

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2019 update from Minister for Lands (DPLH)

The Government supports the recommendation, however, it should be noted that the positions of landowners, who are the subject of a voluntary acquisition or a compulsory taking are significantly different.

The defining factor between a voluntary acquisition and a compulsory taking is the position of the landowner in that one is a willing seller (voluntary acquisition) and the other an unwilling seller (compulsory taking).

Voluntary acquisition that is initiated by the landowner or results from the decline of a development application in respect of reservations in Local and Regional Town Planning Schemes does not constitute a compulsory taking. The responsible authority considers the request and negotiates to purchase on the basis of market value. There is no obligation on the part of the landowner to proceed.

Compulsory taking results from the necessity to undertake a public work within a relatively short time horizon that affords the landowner little option and a date for the taking of the land is established, which becomes the effective date for valuation.

In the case of a compulsory taking of land, an amount of up to 10% (solatium) is payable under section 241(9) of the LA Act.

2019 update from the Water Corporation

The Corporation already takes this approach and all acquisitions (other than those when a property is already on the open market for sale) are evaluated taking into consideration the statutory requirements in relation to compensation entitlements under section 241 of the LA Act.

2019 update from Western Power

Western Power will comply with relevant legislation.

Recommendation 23

The Committee recommends that the Department of Industry and Resources publish an updated version of the Great Southern Development Corporation's [sic Commission] *Code of Conduct for the Owners of Farming Properties and Persons Exploring or Mining on Private (Agricultural) Land in the Central Great Southern* and *Guide for the Owners of Farming Properties in Relation to Exploring and Mining on Private (Agricultural) Land in the Central Great Southern* incorporating mining issues affecting all Western Australian landowners.

Initial Government response

The Government supports the recommendation in principle.

The Minister for State Development has indicated that it may be "somewhat presumptuous, inappropriate and probably counterproductive" for the Department of Industry and Resources to assert an "ownership" of the Code for the purpose of publishing an updated version for widespread distribution and application across the State's agricultural regions.

The Code was the result of a successful culmination of lengthy consultation between the stakeholders during which mutual trust was achieved between those involved in agricultural and mineral resource pursuits. The Code was funded and driven by the then Department of Workplace Relations and Small Business and the Great Southern Development Commission. The then Department of Minerals and Energy was only one of the numerous groups involved in the formulation of the Code.

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Recommendation 24

The Committee recommends that as a matter of course the Department of Environmental Protection provide all applicants for a land clearing permit under Part V, Division 2, of the EP Act (as amended by Part 9 of the *Environmental Protection Amendment Act 2003*), with details of the content of all public submissions received on their application from public authorities and persons who have been invited to comment.

Initial Government response

The Government supports the recommendation in broad terms.

The Environmental Protection Authority (EPA) currently summarises issues raised by public submissions and provides these to proponents as a matter of course for assessment under Part IV of the EP Act. The EPA does not provide copies of actual submissions but the names of submitters are provided in its bulletin report. The Department of Environment intends to similarly provide a summary of submissions to proponents. A process for this is being developed.

Also supported by the Water Corporation.

Recommendation 25

The Committee recommends that the Department of Agriculture and the Department of Environmental Protection investigate the feasibility of establishing "limit markers" to monitor land degradation on agricultural properties.

Initial Government response

The Government supports the recommendation in principle.

Schedule 5 of the EP Act contains a set of 10 principles against which clearing of native vegetation must be considered. The Department of Environment has developed a draft assessment methodology based on these principles which in effect uses criteria to set "limit markers" to decide whether clearing of native vegetation would be acceptable. Part V, Division 2 of the EP Act allows the Chief Executive Officer to set conditions for monitoring and auditing the effects of clearing, on the environment.

An extension of the recommendation beyond the present capability of the Departments of Agriculture and Environmental Protection is considered desirable, however would require considerable resources from both government and landowners. Developing meaningful "limit markers" is complex and would be costly and difficult to implement from both technical and political perspectives.

Land degradation is often long term, diffuse, and the impact (either on site or off site) hidden or masked until manifest in the final stages. Base line condition would have to be established on approximately 30 000 rural properties, potentially requiring 1–2 million assessments to establish base line conditions.

Retrospectivity issues that would need to accompany the proposal are unlikely to be accepted by the rural land owning community. Legal challenges are likely to be common.

Also supported by the Water Corporation.

Recommendation 26

The Committee recommends that where private land is required for a public purpose which will alter the existing granted land use (as distinguished from anticipated land use) on that private land, the Crown should either compensate fairly for the downgrading of the permissible land use or acquire the property outright.

Update on status of recommendations

Initial Government response

The Government supports the recommendation.

The scope of the recommendation is to be considered in accordance with the Committee's observations set out in paragraphs 7.375 and 7.376 of the report.

Current legislation (section 11 of the *Town Planning and Development Act 1928* and the *Planning and Development Bill 2004*) provides for the ability to claim compensation in the form of either injurious affection or acquisition where the existing granted land use is altered.

Compensation is also available through the LA Act where pre-existing land use is prevented as a result of the application of the provisions under the *Wildlife Conservation Act 1950*, although voluntary acquisition is the preferred option under government purchase guidelines.

Also supported by the Water Corporation.

2019 update from Minister for Planning

The Government supports the recommendation. The *Planning and Development Act 2005* (Part 11) (PD Act) provides for claims for compensation in the form of either injurious affection or acquisition where the existing granted land use is altered. Under section 173 any person whose land is injuriously affected by the making or amendment of a planning scheme is entitled to obtain compensation in respect of the injurious affection. Section 187 also provides the option for the responsible authority to elect to acquire the affected land instead of paying compensation. Prior to April 2006 when the PD Act came into operation, injurious affection claims were seldom lodged due to the time limit of six months and likely the additional requirements under section 12(2a)(b)(i) of the *Town Planning and Development Act 1928*.

2019 update from Minister for Energy

The Government at the time expressed support for the recommendation.

Energy Policy WA will consult with other relevant State Government agencies to ascertain a whole-of-Government position on this matter.

Western Power currently determines compensation for physical damage to land in accordance with the EOP Act. Compensation for an interest in land (e.g. an easement) is calculated in accordance with the LA Act.

2019 update from the Water Corporation

Implemented.

Valuations of land take into account changes in permitted land use as defined in the LA Act.

2019 update from Western Power

Western Power determines compensation for damages to land under the EOP Act. Therefore, if the line and/or easement diminishes the existing use and operation of land, they are compensated separately for this.

Recommendation 27

The Committee recommends that the State Government examine the feasibility of tax and rate assistance to landholders as an incentive for the preservation of natural vegetation.

Initial Government response

The Government supports the recommendation.

The Government has recently provided relief from land taxes for native vegetation under a legally binding covenant. Local government has expressed a view that land zoned for conservation in

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town planning schemes should be subject to land tax relief. However, there is concern that such schemes do not prevent necessarily inappropriate activities that may degrade native vegetation.

Rate levels are the provinces of local government. It is understood that a number of local governments do provide for rate reductions for local government sponsored schemes that promote conservation of native vegetation.

Any assistance provided should be linked to a requirement to conserve and manage the native vegetation via covenants or town planning scheme controls rather than merely retain native vegetation given that that is already a legal requirement.

Also supported by the Water Corporation.

Recommendation 28

The Committee recommends that the State Government review the operation of Part V, of the EP Act (as amended by Part 9 of the *Environmental Protection Amendment Act 2003*) within two years of its commencement in order to determine whether further statutory timeframes need to be introduced into the land clearing application process to ensure that applications are dealt with expeditiously.

Initial Government response

The Government supports the recommendation.

The Department of Environment has committed to developing administrative guidelines for the assessment process, which will provide benchmarks for time frames for each stage of the assessment process. It is understood the Appeals Convenor's office is also developing procedures for dealing with appeals in a timely manner.

The Government has noted that the extended timeframes that occurred following the introduction of the memorandum of understanding were largely a result of the inadequate legislation under which regulation of clearing occurred. In particular, the *Soil and Land Conservation Regulations 1992* does not provide an approval process and therefore the Commissioner of Soil and Land Conservation did not have the powers of a decision maker following the expiry of the 90 day notification period. In addition, proponents were unable or unwilling to provide the level of information required by the EPA for assessment under Part IV of the EP Act. As a consequence, clearing proposals were commonly held up in the appeals process for lengthy periods of time.

Part V, Division 2 does not provide the capacity for time lines to be prescribed in regulation, nor does the Act itself have this provision. The time taken to assess an application to clear will vary from case to case and will largely depend on the complexity of the environmental issues associated with the application, and whether further information is required from the proponent. However, it is considered that the clearing provisions provide a clear process, which should facilitate efficient decision-making.

Also supported by the Water Corporation.

Recommendation 29

The Committee recommends that the State Government undertake a review of both the administrative process of the Western Australian Planning Commission (WAPC) and existing statutory timeframes within planning legislation in order to address the decline in the percentage of planning applications processed within statutory timeframes.

Initial Government response

The Government supports the recommendation.

Update on status of recommendations

The Department for Planning and Infrastructure has established the Statutory Planning Improvements Review as an internal review to work in collaboration with the Joint Industry–Government Planning Processes Review Study. The study will focus on planning approval processes for Metropolitan Region Scheme (MRS) amendments, Town Planning Scheme amendments, Structure Plans and Development Applications.

Also supported by the Water Corporation.

2019 update from Minister for Planning

The Government supports the recommendation and has progressed several rounds of planning reform since 2004. As part of the Planning Reform Agenda, the *Planning and Development (Local Planning Schemes) Regulations 2015* (LPS Regulations) were introduced in 2015. Among other things, the LPS Regulations introduced three categories of Local Planning Schemes amendments being, basic standard and complex. The categorisation allows for simpler Scheme Amendment proposals to be dealt with more quickly as they are subject to a shorter assessment period. The LPS Regulations also introduced maximum timeframes in which the WAPC is to provide a recommendation to the Minister for Planning with respect to Local Planning Schemes and Local Planning Scheme Amendments. Prior to the introduction of the LPS Regulations, there was no regulated timeframe in which the WAPC was to provide such a recommendation.

The LPS Regulations also introduce and/or specify timeframes for the progression of other planning processes. The DPLH has built electronic workflow systems for progressing planning applications and tracking performance against timelines contained within the LPS Regulations. These statistics are published in the DPLH Annual Report.

In August 2019, the State Government released its Action Plan for Planning Reform. The Action Plan responds to feedback received from stakeholders regarding the need to improve the timeliness of planning decision-making. The Action Plan proposes the expansion of the risk-based processing of planning applications, with simpler proposals subject to a more streamlined assessment process with shorter statutory timeframes. The improvements outlined in the Action Plan will apply to a range of planning proposals that are assessed and determined by both State (i.e. amendments to region schemes, structure plans) and local (i.e. development applications) governments.

Recommendation 30

The Committee recommends that the State Government undertake an investigation into the types of planning applications for which an environmental bond may be practical.

Initial Government response

The Government supports the recommendation in principle.

A bond could be required as a condition of planning approval where necessary, appropriate and reasonable. The purpose of bonds used in these circumstances is to secure performance of a development or land use in the future, after initial construction or undertaking of a proposal. Use of such bonds in relation to regional and town planning scheme amendments requires further consideration and could require legislative amendment to ensure the use of such bonds are valid and enforceable at law.

Also supported by the Water Corporation.

2019 update from the Minister for Planning

The Government supports the principle of the recommendation. A bond can be required as a condition of planning approval where necessary, appropriate and reasonable. The general purpose

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is to secure performance of a development or land use in the future, after initial construction or undertaking of a proposal (i.e. contribution for public open space, crossovers or landscaping).

With specific reference to environmental bonds, this proposal has not been progressed and is contrary to the principles of planning reform which include the streamlining of the planning system. The application of environmental bonds could act or be interpreted as a further layer or impost of the planning system. The introduction of environmental bonds would not likely result in quicker land development approvals as detailed assessments would still be required to establish a bond amount - and the assessment may become more protracted if it led to the imposition of an additional up-front financial cost on development.

The intent of this recommendation is now delivered via existing planning processes which have been introduced since the publication of the report and approval of planning instruments which balance environmental and development outcomes and provide certainty regarding what development can or cannot occur. For example, the model subdivision conditions schedule incorporates a range of model conditions that can be placed on subdivisional approvals for the protection or enhancement of environmental assets. In addition, all scheme amendments are currently referred to the EPA under sections 38 and 81 of the PD Act for consideration. The LPS Regulations also articulate that a local government must amend the local planning scheme documents to incorporate conditions set out in a statement received from the EPA under sections 48F and 48G of the EP Act.

Recommendation 31

The Committee recommends that the State Government review those provisions of the planning legislation relating to the resolution of inconsistencies between local and regional planning schemes so as to establish whether additional/alternative statutory time frames are required to ensure that inconsistencies are resolved in the shortest possible time.

Initial Government response

The Government supports the recommendation.

The issue is addressed in Part 9 of the Planning and Development Bill 2004.

There are occasions where approval under the MRS is required in addition to approval under a local government scheme reflecting the different level of planning issues considered by the determination.

The proposed 2005 review of the MRS text will address further opportunities to realise efficiencies.

Also supported by the Water Corporation.

2019 update from Minister for Planning

This recommendation has been implemented. Refer to response to Recommendation 29. The LPS Regulations classify an amendment to a Local Planning Scheme (LPS) to bring it into alignment with Region Planning Scheme as a Basic amendment. This is the most expedient of the LPS amendment classifications that allows for quick resolution of inconsistencies. Additionally, the PD Act allows for the concurrent LPS amendment of land being zoned Urban under a Region Scheme where appropriate.

Recommendation 32

The Committee recommends that all landholders affected by a proposed reservation or zoning change under a draft region scheme should be contacted in person by the DPI, and provided with copies of all relevant documentation free of charge.

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Initial Government response

The Government supports the general intent of the recommendation in respect of reservations. The recommendation is largely already the general practice but is further addressed by the Planning and Development Bill 2004.

Any proposed reserve shall be notified in writing with an invitation extended to meet with an appropriate government officer(s) on site where practical, to discuss the proposal notwithstanding existing statutory consultation provisions.

Also supported by the Water Corporation.

2019 update from the Minister for Planning

This recommendation has been implemented as the PD Act requires that all landowners affected by a proposed change to Region Scheme zoning/reservation are contacted directly. The WAPC also provides for Hearings to be undertaken for all major region scheme amendments and Departmental Officers are available to meet with affected landowners as required.

Recommendation 33

The Committee recommends that the LA Act and relevant planning legislation be amended to provide that an acquisition of land by the State or local government following a claim for injurious affection under the planning legislation, is to be treated on the same terms and conditions as a compulsory acquisition of land under Parts 9 and 10 of the LA Act.

Initial Government response

The Government supports the principle of the recommendation in part.

Essentially planning legislation is utilised to acquire land not directly associated with an immediate public work, whereas the LA Act is primarily utilised to compulsorily acquire land for a public work where the execution of the public work takes precedent.

Complete adoption of the recommendation would signal a major shift in policy from that which is currently in place and result in a largely unquantifiable additional financial burden on government.

The singular and most defining difference in the application of the Acts is that under planning legislation a claim for injurious affection usually results in the WAPC electing to purchase the land in accordance with the provisions of the Act at "value" (i.e. market value) with a definition well supported in case law. Alternatively, the WAPC may pay injurious affection without acquiring any land, which may be left until the land is required for the public work for which it is reserved. In such circumstances, the landowner retains full use of the land upon the payment of injurious affection.

A claim for injurious affection cannot be treated under planning legislation on the same terms as are available in section 241(7)(b) of the LA Act as it would be effectively the equivalent of a compulsory acquisition allowing landowners to lodge a claim for compensation to include all the heads of claim provided for within the LA Act.

The Government recommends that a 5 per cent premium be paid to owner occupiers of a principle place of residence voluntarily purchased in accordance with principles of Recommendation 22.

In addition, landowners will benefit from monetary assistance provisions detailed in Recommendations 17 and 18. (see overriding Principle Four).

The current gradual acquisition of land at market value affected by long term planning issues (*in good time*) rather than public works (*just in time*) would need to be sacrificed in order to fund the cost of compensating landowners on a compulsory acquisition basis.

Update on status of recommendations

Presently all planning acquisitions are either the result of voluntary action by landowners or as a result of a declined development application resulting in the WAPC electing to purchase.

The subject of injurious affection has been discussed at considerable length within the response document.

Also supported by the Water Corporation.

2019 update from Minister for Planning

The Government supports the principle of this recommendation. The PD Act is generally used to acquire land not directly associated with an immediate public work. Planning acquisitions are the product of voluntary action by landowners or a declined development application resulting in the WAPC electing to purchase.

The LA Act is primarily used to compulsorily acquire land for a public work where the execution of the public work takes precedent. This includes up to an extra 10 per cent of the value of the land, if it is taken without the owner's agreement. These two Acts work together but provide distinct avenues for the compensation for or purchase of affected land.

Under the PD Act, a claim for injurious affection generally results in the WAPC electing to purchase the land at market value, in accordance with the provisions of the Act. Alternatively, the WAPC may pay injurious affection without acquiring any land, which may be left until the land is required for the public work for which it is reserved. In these circumstances, the landowner retains full use of the land upon the payment of injurious affection. A notification is attached to the Certificate of Title identifying the interest that the WAPC has in the land and the amount of compensation paid reflected as a percentage of the unaffected reserved land.

It should be clarified that compensation under the PD Act does not equate to compulsory acquisition. It is compensation for the interim loss of the use of land by a landowner. Where compensation under the planning system is provided, that compensation is taken into account when the land voluntarily purchased or compulsorily acquired. Similarly, where a person's land is reserved in a planning context, and they are entitled to compensation, but do not claim it, that person would receive the full amount of compensation when the land is eventually voluntarily purchased or compulsorily acquired. Under both scenarios there is no double-dipping of compensation.

A claim for injurious affection cannot be treated under planning legislation on the same terms as are available in section 241(7)(b) of the LA Act as it would be the effective equivalent of compulsory acquisition, allowing landowners to lodge a claim for compensation to include all the heads of claim provided for within the LA Act.

Amendments to this approach would result in significant financial burden on government. The pragmatic and strategic gradual acquisition of land (in good time) at market value affected by long term planning issues would be sacrificed in order to fund the cost of compensating landowners on a compulsory acquisition basis. Landowners full use of the land in the interim would also be sacrificed.

In addition to legislative requirements, the DPLH and WAPC comply with the Premier's Instruction 2014/04, which reflects Government's approach in respect to the primacy of private property rights.

2019 update from Western Power

Western Power will comply with relevant legislation.

Update on status of recommendations

Recommendation 34

The Committee recommends that the DLI maintains a comprehensive and publicly available list of all policies, strategies and plans which impact on administrative decision-making pertaining to land use.

Initial Government response

The Government does not support the recommendation.

The DLI has advised the recommendation is impractical from a logistical aspect and secondly landowners would most likely struggle to identify from such an extensive list, the items that would apply to their land.

The DLI land information platform (described in response to Recommendation 35) currently under development will potentially enable landowners to access key interests, policies, strategies and plans that may affect the enjoyment and use of land – with the currency and accuracy of the information being provided and maintained by each source agency. This offers a practical means of addressing the concerns that have resulted in the recommendation.

Supported by the Water Corporation.

2019 update from Minister for Lands (Landgate)

The Government did not support the recommendation and Landgate does not support the recommendation. It is impractical from a logistical perspective and secondly landowners would most likely struggle to identify items that would apply to their land from such an extensive list. It is also important to note that the administration of the land titles system in Western Australia does not involve decisions around land use.

The SLIP, developed and hosted by Landgate, allows landowners to access key interests that may affect the enjoyment and use of land with the currency and accuracy of the information being provided and maintained by each source agency. This offers a practical means of addressing the concerns that have resulted in the recommendation.

Recommendation 35

The Committee recommends that, in the short term, the DLI continue to implement its aim of establishing itself as a “one stop shop” database of all interests affecting land as an urgent priority.

Initial Government response

The Government supports the recommendation in terms of government interests in land.

The priority of the DLI land information platform (when operational) is to integrate land information and provide access to land information held across government. The system will enable interested parties to source a wide range of government land information including key details about rights, restrictions and obligations associated with a land parcel or certificate of title.

The DLI will not be in a position to record all privately created interests in land, such as private agreements and unregistered easements.

Also supported by the Water Corporation.

2019 update from Minister for Lands (Landgate)

The Government supported the recommendation and Landgate supports the recommendation. Landgate has developed the award-winning SLIP to enable data sets from the numerous agencies with interests affecting land to be linked to the title and made publicly available through a Property Interest Report (PIR). The PIR currently covers 76 interests in land and was built with the

Update on status of recommendations

understanding that further interests in land that would exist in the future. The PIR can accommodate these future interests and is an appropriate, effective and inexpensive means by which a landowner or any member of the public can access detailed information relevant to a land parcel.

It is important to note that Landgate is not able to record all privately created interests in land, such as private agreements and unregistered easements on the SLIP and doing so is contrary to the Torrens System.

Recommendation 36

The Committee recommends that, for the long term, the DLI introduce, as soon as practical, an electronic three dimensional certificate of title which records all interests affecting the land described on the certificate of title.

Initial Government response

The Government does not support the recommendation.

The DLI has identified at least 180 interests that affect land. Only portion of the possible range of interests are currently contained on the certificate of title.

In time key interests obtained through the land information platform may include two and three dimensional image references. A certificate of title has the benefit of a State guarantee as to its accuracy. With the recording of all "possible" interests affecting land on the certificate of title, it would not be feasible to extend this guarantee to all items and this may have the effect of eroding the integrity and indefeasibility of the certificate of title.

The significant costs of such a proposal ultimately would need to be passed on and may have the effect that obtaining a copy of an absolute certificate of title would be cost prohibitive.

Supported by the Water Corporation.

2019 update from Minister for Lands (Landgate)

The Government did not support the recommendation and Landgate does not support the recommendation as it is cost prohibitive, unfeasible, and contrary to the legal principles of the WA land titles system. At least 180 interests that affect land have been identified by Landgate and only a small portion of these interests are required by to be contained on the certificate of title by the *Transfer of Land Act 1893* (TL Act).

Whilst a three-dimensional certificate of titles has not been created, an electronic certificate of title has been introduced. A certificate of title has the benefit of a State guarantee as to its accuracy. If all "possible" interests affecting land were recorded on the certificate of title the State would have to extend this guarantee to these interests. This would expose the State to significant compensation payments, may erode the integrity, accuracy and indefeasibility of the registered certificates of title, clutter the title, and may undermine the simplicity and effectiveness of the WA Torrens system.

As noted in Recommendation 35, individuals can obtain information on interests affecting a parcel of land through the SLIP and a PIR. In addition, the Cadastral service, also provided through the SLIP, allows individuals to search and access land interest information using an online map.

Recommendation 37

The Committee recommends that the Government introduce, after a two year phase in period, legislative requirements that:

Update on status of recommendations

- any policy, strategy, plan or other document impacting on administrative decision making with respect to land use that affects one or more specific certificates of title, is to be of no effect unless it is registered with the DOLA
- all policies, strategies, plans or other documents impacting on administrative decision-making with respect to land use that are specific to a certificate of title are to be, upon registration with the DOLA, cross-referenced with the relevant certificate of title.

Initial Government response

The Government does not support the recommendation.

The DLI acknowledges the relevance and intent of the recommendation.

There are an enormous number of Commonwealth, State and Local Government policies, strategies, plans and other documents that may impact on administrative decision-making with respect to land use. It would be impractical to record all of these on the certificate of title and to keep the information current and reliable.

DLI estimates the cost to establish such a system would be in the vicinity of \$50 million with operating costs in the vicinity of \$10 million per annum. These costs would ultimately have to be passed onto consumers (in the main landowners), which in turn would make the cost of obtaining or amending a certificate of title prohibitive.

The land information platform being developed by DLI in consultation and cooperation with other government agencies (see Recommendation 35), will use the certificate of title as a primary reference and access point. This approach is considered to provide a more practical and cost effective means of addressing the main concerns that this recommendation seeks to address and resolve.

Initial response from the Water Corporation

- This recommendation ties in with the comments made in respect to Recommendation 34.
- This also ties in with Recommendation 35 in that, if Recommendation 37 is implemented and achieved, the DLI will truly be a 'one stop shop' database of all interests affecting land.
- The Water Corporation should strongly support this recommendation.

2019 update from Minister for Lands (Landgate)

The Government did not support the recommendation and Landgate does not support the recommendation as it is impractical and cost prohibitive. There are an enormous number of Commonwealth, State and Local Government policies, strategies, plans and other documents that may impact on administrative decision-making with respect to land use.

It would be impractical to record all of these on the certificate of title and impractical and very difficult to keep the information current and reliable. In addition, unlike a certificate of title, none of this information can nor should be guaranteed by the State.

Previous estimates place the cost of establishing such a system in the vicinity of \$50 million (\$68 million adjusted for inflation) with operating costs in the vicinity of \$10 million (\$13.7 million adjusted for inflation) per annum. These costs would ultimately have to be passed onto consumers (in the main, landowners) and would make obtaining or amending a certificate of title cost prohibitive.

Update on status of recommendations

As noted in Recommendation 35, individuals can obtain information on interests affecting a parcel of land through the SLIP and a PIR. However, the certificate of title is the primary reference point. This approach is considered a more practical and cost-effective means of addressing the main concerns that this recommendation seeks to address and resolve.

[Source: Source: Hon Ben Wyatt MLA, Minister for Lands, letter, 1 November 2019, Hon Rita Saffioti, Minister for Planning, letter, 22 October 2019, Hon Bill Johnston MLA, Minister for Energy, letter, Hon Dave Kelly MLA, Minister for Water, letter, 17 October 2019, 22 October 2019, Guy Chalkley, Managing Director, Western Power, letter, 10 November 2019, Government of Western Australia, *Response of the Western Australian Government to the Western Australian Legislative Council Standing Committee on Public Administration and Finance in relation to the Impact of State Government Actions and Processes on the Use and Enjoyment of Freehold and Leasehold Land in Western Australia*, Perth, July 2004, Western Australia, Legislative Council, Standing Committee on Public Administration and Finance, *Report #7, the Impact of State Government Actions and Processes on the Use and Enjoyment of Freehold and Leasehold Land in Western Australia*, May 2004]

APPENDIX 3

PETITION 42–REQUEST TO REPEAL THE ENVIRONMENTAL PROTECTION (ENVIRONMENTALLY SENSITIVE AREAS) NOTICE 2005

Table 7. Recommendations, initial Government response and current status

Update on status of recommendations
<p>Recommendation 1</p> <p>The Committee recommends that the Minister for Environment repeals regulation 6 of the <i>Environmental Protection (Clearing of Native Vegetation) Regulations 2004</i>.</p> <p>Initial Government response</p> <p>Regulation 6 expired (by operation of the <i>Environmental Protection Amendment Act 2003</i> section 110(4)(b)) on 9 April 2005 (i.e. on the expiration of nine months after section 110 came into operation). As regulation 6 has expired, it cannot be repealed.</p> <p>In the electronic version of the regulations, regulation 6 has been removed and replaced with a note "[6. Expired on 8 April 2005 by operation of the <i>Environmental Protection Amendment Act 2003</i> section 110(4)(b)]." The next hard copy reprint will not include the provision.</p> <p>Current status</p> <p>The versions of regulations published in 2015 have removed regulation 6 as per advice in the Government response to the Committee's report.</p>
<p>Recommendation 2</p> <p>The Committee recommends that the Minister for Environment review the <i>Environmental Protection (Environmentally Sensitive Areas) Notice 2005</i> (Notice) and the scope of land declared an Environmentally Sensitive Area (ESA) with a focus on wetland ESAs.</p> <p>Initial Government response</p> <p>Several Environmental Protection Policies (EPPs) are being reviewed to ensure they are appropriate, necessary and not duplicative of existing protections/regulations. This includes EPPs which protect wetlands declared as ESAs (for example, Swan Coastal Plain Lakes and South-West Agricultural Zone Wetlands).</p> <p>Current status</p> <p>The Government is progressing amendments to the <i>Environmental Protection Act 1986</i> (EP Act), including prescribing ESAs in regulations. This will allow consultation to be tailored to the nature of the change, rather than needing to follow a prescriptive approach which will ensure ESAs remain current and relevant. Regulations also remain subject to scrutiny by Parliament.</p> <p>Since the time of the Committee's report, the Swan Coastal Plain Lakes and South-West Agricultural Zone Wetlands Environmental Protection Policies have been repealed following a review by the Environmental Protection Authority (EPA).</p>

Update on status of recommendations

Recommendation 3

The Committee recommends that the Minister for Environment introduce an effective mechanism of Departmental review where a landowner disputes the Department's decision that their land includes an ESA. This should include a Departmental officer visiting the land in question.

Initial Government response

ESAs are based on areas defined in legislation (for example, areas covered by EPPs made under the EP Act, Ramsar convention wetlands or World Heritage properties listed under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth)), or based on policies and mapping such as Bush Forever; conservation category wetlands in the geomorphic wetlands dataset; wetlands mapped in the Busselton-Walpole area; and certain wetlands mapped for Augusta to Walpole.

Where the areas are adopted based on policy or mapping, the custodian for the ESA value is responsible for reviewing and maintaining the accuracy of the data and there are existing processes for this. Understanding the Committee's primary focus on wetlands, I can advise that the Department of Parks and Wildlife as the custodian of wetland mapping has a protocol for updating the boundaries or management category of wetlands. Further information is available at www.dpaw.wa.gov.au/management/wetlands.

Current status

ESAs are based on areas defined in legislation, mapping and policy. In relation to mapping and policy, the Government response in 2015 remains relevant.

Recommendation 4

The Committee recommends that the Minister for Environment amend land clearing laws to provide that the grazing exemption at regulation 5, item 14 of the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004* apply to ESAs declared in the Notice.

Initial Government response

The scheme of the existing legislation provides that exemptions in regulations do not apply in ESAs.

This matter has been addressed through the finalisation of grazing guidelines. This guideline clarifies that sustainable grazing at levels that are consistent with existing, historic grazing practices where such grazing does not result in significant modification of the structure and composition of the native vegetation is not considered to be clearing.

Current status

This recommendation is not supported. It is considered that implementing the recommendation has the potential of resulting in very significant environmental impact. The amendments to the EP Act have proposed an alternative approach.

To ensure that the EP Act can deal with clearing proposals more efficiently, it is proposed to introduce a referral system, which will require that any clearing not exempt under the Act (including that in ESAs) is to be referred to the Chief Executive Officer for a determination of whether a clearing permit is required. In the event that the clearing impact is minor, no clearing permit would be required.

Update on status of recommendations

Recommendation 5

The Committee recommends that the Minister for Environment ensures that the Department of Environment Regulation (DER) conducts broad consultation with the public and Members of Parliament on the draft A guide to grazing, clearing and native vegetation under Part V Division 2 of the EP Act.

Initial Government response

DER released a 'Draft guideline: A guide to grazing and clearing of native vegetation' for public comment between 24 June and 22 July 2015. DER also wrote separately to seek comment from the Pastoralists and Graziers Association, WA Farmers Federation and the Gingin Property Rights Group. Four submissions were received. The submissions received, a consultation summary addressing submissions and a final guideline are available on DER's website and are attached to this response.

Current status

Completed as per advice to the 2015 inquiry.

Recommendation 6

The Committee recommends that the Minister for Environment (in the Government response to this report) advises the Legislative Council of the details of consultation undertaken, or to be undertaken, and the outcome of the public consultation process.

Initial Government response

See comment above.

Current status

Completed as per advice to the 2015 inquiry.

Recommendation 7

The Committee recommends that the Minister for Environment directs the DER to provide a link to the ESA and documents referred to in that Notice on its website.

Initial Government response

DER has included a clearer link on its website for public to view information regarding ESAs. This includes the list of publicly available individual datasets and a link to the State Law Publisher's website which includes the *Government Gazette* containing the ESA Notice.

DER's Clearing Permit System and Landgate's Shared Land Information Platform map the locations of ESAs. In addition, all clearing application decision reports are available on DER's Clearing Permit System.

Current status

Completed as per advice to the 2015 inquiry.

Update on status of recommendations

Recommendation 8

The Committee recommends that section 51C of the EP Act be redrafted to state in positive language the circumstances in which a person is authorised to clear native vegetation.

Initial Government response

The intent of listing areas or classes as ESAs is to ensure that clearing that is allowed by exemption in regulations cannot be undertaken in these areas without consideration through a permit application. It is important to acknowledge that the presence of ESAs does not necessarily preclude clearing from taking place. Since the regulations took effect a total of 924 clearing permits have been granted within ESAs. DER has reviewed its guidance statements relating to native vegetation clearing requirements to ensure clear and consistent advice is available to landholders.

Current status

The Government is progressing amendments to the EP Act following consideration of the outcomes of a number of reviews, appeals, Court outcomes and advice that has been received by the Department of Water and Environmental Regulation.

This includes the report of the expert committee chaired by Associate Professor Garry Middle established to review and report on the clearing provisions and suggest amendments to the EP Act, regulations and policies which would improve the effectiveness and efficiency of the regulation of clearing.

An Exposure draft Bill and discussion paper have been recently released for consultation.

Recommendation 9

The Committee recommends that the Minister for Environment directs the Department of Environment Regulation to write to each affected landowner to advise of the existence of the ESA and its impact.

Initial Government response

Section 51B of the EP Act provides that the Minister for Environment may declare by notice either a specified area of the State, or a class of areas of the State, to be an ESA. The notice must be made after consultation with the EPA and such public authorities, persons and groups as the minister considers to have an interest in its subject matter (section 51B(4)). The current Notice was made by the then Minister for Environment on 8 April 2005. It is not considered necessary or practicable to write to each affected landholder.

The Notice only has effect where clearing that is otherwise exempt under regulations is within an area declared as an ESA, in which case a clearing permit is required. In order to determine whether proposed clearing is within the scope of the *Environmental Protection (Clearing of Native Vegetation) Regulations 2003*, landholders would refer to DER's explanatory material and consult with DER as necessary. This ensures that appropriate advice on ESAs is provided.

DER will however ensure that its guidance statements, guidelines and fact sheets available on its website are prominent and easily accessible.

Current status

Not supported. The amendments outlined above would ensure that appropriately targeted consultation is taken with stakeholders, including landowners, through the making of regulations.

Source: Hon Stephen Dawson MLC, Minister for Environment, letter, 15 October 2019, Western Australia, Legislative Council, Standing Committee on Environment and Public Affairs, Report 41, *Petition no. 42 – request to repeal the Environmental Protection (Environmentally Sensitive Areas) Notice 2005*, August 2015, and Government of Western

Australia, *Response to the Report 41, Petition no. 42 – request to repeal the Environmental Protection (Environmentally Sensitive Areas) Notice 2005*, October 2015.]

APPENDIX 4

FISHERIES MANAGEMENT PAPER NO. 165, NOVEMBER 2002

- 4.1 The former Minister for Fisheries provided a proposed response to the recommendations in this report at the time it was published.
- 4.2 In response to the Committee's request, the current Minister for Fisheries provided an update regarding the current Government's position in respect of the report's recommendations.

Table 8. *Recommendations, former Minister for Fisheries' proposed position at date of report, and the current Government's position*

Update on status of recommendations
<p>Recommendation 1</p> <p>The Western Australian Government introduce an integrated management system for the sustainable management of Western Australia's fisheries.</p> <p>Minister's proposed position as at date of report</p> <p>Agree.</p> <p>Current Government's position</p> <p>Implemented. Note, Integrated Fisheries Management Policy of 2004, 2009, formal allocations for western rock lobster, Metropolitan abalone, west coast demersal scalefish and pearl oyster resources. Integrated Fisheries Management (IFM) principles are central to the <i>Aquatic Resources Management Act 2016</i> (ARM Act).</p>
<p>Recommendation 2</p> <p>The development and funding of a comprehensive research and monitoring program encompassing all user groups is essential to provide the necessary information for sustainability and allocation issues to be addressed under an integrated framework.</p> <p>Minister's proposed position as at date of report</p> <p>Agree.</p> <p>Current Government's position</p> <p>The Department of Primary Industries and Regional Development (DPIRD) monitors fishing by both the commercial and recreational sectors.</p>
<p>Recommendation 3</p> <p>The Department of Fisheries investigate standardising catch information at five nautical mile grids to provide comparative information across all user groups.</p> <p>Minister's proposed position as at date of report</p> <p>I agree to a review aimed at standardising catch information between sectors, however it is important that the scale for data collection and reporting is appropriate for each particular fishery.</p> <p>Current Government's position</p> <p>Implemented in some commercial fisheries. There is an overall trend towards recording catch data at finer spatial scales. Decisions on the scale at which data is recorded depends on factors such as risk and requirements of third parties (e.g. Commonwealth export approvals).</p>
<p>Recommendation 4</p> <p>The integrated management system must be open and transparent, accessible and inclusive, flexible, effective and efficient.</p>

Update on status of recommendations

Minister's proposed position as at date of report

I agree with the general thrust of this recommendation, however because of the complex and time-consuming nature of fisheries management processes and likely disagreement between parties over allocations, it may be difficult to satisfy 'effective and efficient' criteria.

Current Government's position

The Integrated Fisheries Allocation Advisory Committee (IFAAC) process achieved this. Going forward, ARM Act establishes statutory consultation requirements for an Aquatic Resource Management Strategy (ARMS). An ARMS must include the main management objective for the resource and the associated proportional allocation of the resource between the recreational and commercial sectors.

Recommendation 5

The following nine principles be recognised as the basis for integrated management decisions and, where appropriate, incorporated into fisheries legislation. More specific principles to provide further guidance around allocation decisions may also be established for individual fisheries.

Minister's proposed position as at date of report

I am in general agreement with the nine principles. A number of minor changes may however provide greater clarity around some principles.

A review of the recommendations against the current legislation is required to determine if they are already embraced in the head powers contained in the *Fish Resources Management Act 1994* (FRM Act). In particular, Part 6 of the FRM Act requires review to ensure it adequately embraces the principles of integrated management and its application across all sectors.

Some of these principles may be better incorporated into Ministerial Policy Guidelines rather than legislation because of the uncertainty and risks of enshrining what will be an 'evolving process' into legislation.

Current Government's position

All of these principles are central to management of fisheries in Western Australia. Some, they are included in legislation and or policy Principles reviewed and amended in 2009 to reflect practicalities of IFM. See: <http://www.fish.wa.gov.au/Documents/ifm/IFMGovtPolicy2009.pdf>

Recommendation 5(i)

Fish resources are a common property resource managed by the Government for the benefit of present and future generations.

Minister's proposed position as at date of report

Agree.

Current Government's position

As per current Government's position in Recommendation 5 above.

Recommendation 5(ii)

Sustainability is paramount and ecological requirements must be accounted for prior to any allocation to user groups.

Minister's proposed position as at date of report

Agree. There may be benefit in amending the objects of the FRM Act to make the application of Ecologically Sustainable Development (ESD) principles clear.

Current Government's position

As per current Government's position in Recommendation 5 above.

Recommendation 5(iii)

Update on status of recommendations

Decisions must be made on best available information and where this information is uncertain, unreliable, inadequate or not available, a precautionary approach adopted to minimise risk to fish stocks. The absence of, or any uncertainty in, information should not be used as a reason for delaying or failing to make a decision.

Minister's proposed position as at date of report

Agree, however I believe the required approach to management may be better defined as a cautionary or low risk approach, i.e. "... a cautious approach adopted to minimise risk to fish stocks".

Current Government's position

As per current Government's position in Recommendation 5 above.

Recommendation 5(iv)

A sustainable target catch level must be set for all fisheries and explicit allocations designated to each user group.

Minister's proposed position as at date of report

While a target catch level should be set against a backdrop of sustainability objectives, it may also be set against a number of other management objectives. This may be compounded because of factors such as definition around measurement, determination of imputed catch levels in some fisheries, stock recovery, et cetera. Therefore I suggest this principle should be amended to read "A target catch level must be set where practical ..." I see merit in including an additional principle as follows: "In setting allocations for commercial and recreational sectors, recognition must be given to existing customary and passive use of the resource and possible aquaculture requirements".

Current Government's position

As per current Government's position in Recommendation 5 above.

Recommendation 5(v)

Allocations to user groups should account for the total mortality on fish resources resulting from the activities of each group, including bycatch and mortality of released fish.

Minister's proposed position as at date of report

Agree.

Current Government's position

As per current Government's position in Recommendation 5 above.

Recommendation 5(vi)

The total catch across all user groups should not exceed the sustainable target catch level. If this occurs, immediate steps should be taken to reduce the take within prescribed levels. Management arrangements for each user group should aim to contain their catch within the level set for that group.

Minister's proposed position as at date of report

Agree. (delete 'sustainable' as per (iv)).

Current Government's position

As per current Government's position in Recommendation 5 above.

Recommendation 5(vii)

Allocation decisions should aim to maximise the overall benefit to the Western Australian community from the use of fish stocks and take account of economic, social, cultural and environmental factors.

Minister's proposed position as at date of report

Update on status of recommendations
<p>Agree, however the words “maximise the overall” should be replaced by “achieve the optimal” to make it consistent with the FRM Act.</p> <p>Current Government’s position</p> <p>As per current Government’s position in Recommendation 5 above.</p>
<p>Recommendation 5(viii)</p> <p>Allocations to user groups should generally be made on a proportional basis to account for natural variations in fish populations. This general principle should not however preclude alternative arrangements in a fishery where priority access for a particular user group(s) may be determined.</p> <p>Minister’s proposed position as at date of report</p> <p>Agree.</p> <p>Current Government’s position</p> <p>As per current Government’s position in Recommendation 5 above.</p>
<p>Recommendation 5(ix)</p> <p>Allocations are notional – they are not “owned” by a group – however management arrangements must provide users with the opportunity to access their allocation.</p> <p>Minister’s proposed position as at date of report</p> <p>Agree, however I suggest an additional sentence should be added: “There should be limited capacity for transferring un-utilised shares into future years, as such a process may not be sustainable.” This is to confirm that, in general, un-utilised shares should not be able to be carried over from a given year because of sustainability reasons, while making allowance that there may be the potential for some limited transfer of capacity in effort managed fisheries.</p> <p>Current Government’s position</p> <p>As per current Government’s position in Recommendation 5 above.</p>
<p>Recommendation 6</p> <p>A working group comprised of representatives from the Department of Fisheries and relevant interest groups be established for each fishery, to undertake widespread consultation and develop a draft sustainability report for each fishery.</p> <p>Minister’s proposed position as at date of report</p> <p>Disagree. The existing ESD policy framework meets this requirement. While ESD processes are currently focussed on commercial components of fisheries in order to meet export requirements, the future application of ESD will incorporate wider information across all users. The ESD reports with adjustments will meet reporting requirements.</p> <p>Current Government’s position</p> <p>Recommendation was not supported by the then Minister. Resource reports were produced for the four resources which have been formally allocated. The information envisaged to be included in these reports is available in documents such as the annual State of the Fisheries and Aquatic Resources Report. Resource Assessment Reports, Ecological Risk Assessment Reports and Harvest Strategies.</p>
<p>Recommendation 7</p> <p>The Executive Director, Department of Fisheries, approve a Sustainability Report for each fishery, which includes a clear statement on the sustainable target catch level.</p> <p>Minister’s proposed position as at date of report</p>

Update on status of recommendations

As resources allow, this will occur over time. To date applications for six fisheries have been submitted to Environment Australia and a further nine are under ESD assessment. There are still some 30 fisheries requiring assessment in the future.

Current Government's position

Formal reports have been produced as part all formal allocation processes to date. For those resources that have not been allocated, formal reports have not been produced, but as part of the annual management cycle for a number of fisheries, advice on the allowable harvest level is provided to the Minister, particularly where subsidiary legislation needs to be amended. ARM Act will require that in Managed Aquatic Resources, the Chief Executive Officer must gazette a notice not less than 30 days before the start of a fishing period which sets out the Total Allowable Catch for the resource.

Recommendation 8

An Integrated Fisheries Allocation Council be established by statute and be responsible for investigating resource allocation issues and making recommendations on optimal resource use to the Minister for Fisheries including:

- (i) broad allocations between groups within the sustainable catch limits determined for each fishery
- (ii) strategies to overcome temporal and spatial competition at a local/regional level
- (iii) allocation issues within a sector as referred by the Minister for Fisheries
- (iv) more specific principles to provide further guidance around allocation decisions for individual fisheries
- (v) other matters concerning the integrated management of fisheries as referred by the Minister for Fisheries.

Minister's proposed position as at date of report

I agree with the general thrust of this recommendation. I recognise that the system must be flexible due to the differing aspirations of users. I suggest a Ministerial Advisory Committee, with clear terms of reference, be established under section 42 of the FRM Act which incorporates points (i)–(v) in the recommendation. In the longer term, the FRM Act can be amended and the committee established as a formal body under Part 4 of the FRM Act. A review of Part 4 of the FRM Act may be required to examine the role and relationship of various committees to reflect a more flexible committee structure and changing processes under integrated management.

A number of minor amendments are suggested:

R8(i) - Delete word "broad".

R8(ii) after "... overcome" insert "allocation and access issues arising from"

An additional principle should be added:

(vi) Allocation principles and processes will be developed in the context of Ministerial Guidelines under section 246 of the FRM Act. These Guidelines will need to cover process of allocation, mediated outcomes and recommendations on allocations based on catch history, or reallocations utilising methodologies incorporating net economic worth calculations with supporting socio-economic data.

Current Government's position

The IFAAC was established as a Ministerial Advisory Committee under the FRM Act. It operated until 2017. The formal process around allocation decisions is being reviewed as part of the shift to

Update on status of recommendations
ARM Act. Government is committed to an efficient and transparent process which may include the use of working groups or panels where appropriate.
<p>Recommendation 9</p> <p>The Integrated Fisheries Allocation Council comprise a chairperson and four members, not representing sectoral interests in any fishery.</p> <p>Minister's proposed position as at date of report</p> <p>Agree in part. An expertise-based committee of three members should be appointed, who bring legal, economic/social, fishery science or management knowledge and experience.</p> <p>Current Government's position</p> <p>The IFAAC comprised an independent Chair, a representative from the recreational sector, a representative from the commercial sector, a Department representative and an independent member.</p>
<p>Recommendation 10</p> <p>The Minister for Fisheries be required to explain publicly any departure from the Integrated Fisheries Allocation Council's recommendations or advice. This obligation should extend to any matter referred to it by the Minister.</p> <p>Minister's proposed position as at date of report</p> <p>Disagree. This process should occur in a similar manner to that of other committees in which the Minister advises stakeholders of his decision following consideration of the committee's advice. There should be no constraint on the Minister's discretionary powers.</p> <p>Current Government's position</p> <p>Ministerial decisions arising from consideration of IFAAC's recommendations were published.</p>
<p>Recommendation 11</p> <p>The Integrated Fisheries Allocation Council be responsible for determining the process and timeframes for resolving allocation issues in each fishery.</p> <p>Minister's proposed position as at date of report</p> <p>Disagree. The terms of reference and timeframes for fishery reviews should be determined by the Minister.</p> <p>Current Government's position</p> <p>As an advisory committee to the Minister the Fisheries to be allocated which were considered by IFAAC were in accordance with Government priorities. A broad process for the development of allocation advice was established, but IFAAC largely determined its own timeframes.</p>
<p>Recommendation 12</p> <p>The Integrated Fisheries Allocation Council's recommendations or advice to the Minister for Fisheries should become public at the time it is submitted to the Minister.</p> <p>Minister's proposed position as at date of report</p> <p>Disagree. The committee should report directly to the Minister and the appropriate release of information determined on a case-by-case basis.</p> <p>Current Government's position</p> <p>IFAAC's recommendations were published, but as an advisory committee to the Minister, publication was required to be approved by the Minister.</p>
Recommendation 13

Update on status of recommendations

Where a reallocation of resources from one user group to another results in demonstrable financial loss to an individual, in principle there should be an entitlement to compensation. Compensation may take various forms and does not necessarily involve the payment of money. No compensation should be payable where allocations are reduced for sustainability reasons.

Minister's proposed position as at date of report

Agree. Cases for compensation should be assessed on their merits on a case-by-case basis. I believe priority needs to be given to investigating the potential development of market-based systems to achieve reallocations, along with due consideration of social equity considerations, as soon as practical.

Current Government's position

None of the formal allocation decisions have resulted in this scenario.

Recommendation 14

Appropriate management structures should be introduced for each user group which will allow for the catch of each group to be contained within its prescribed allocation.

Minister's proposed position as at date of report

Agree. This is a Ministerial/Departmental responsibility to administer. I suggest the words "and processes" should be inserted after "structures".

Current Government's position

The range of management tools available under the FRM Act and which will be available under ARM Act enable this to occur.

Recommendation 15

Management arrangements for each user group should incorporate pre-determined actions which are invoked if that group's catch increases above its allocation.

Minister's proposed position as at date of report

Agree in principle.

Current Government's position

This is occurring through the development of harvest strategies.

Recommendation 16

In recognition of the need for more effective management of finfish fisheries:

- (i) Regional recreational plans for the West Coast and Gascoyne regions be implemented as soon as possible, and planning commence for the North and South Coast regions, to provide a more effective framework within which to control the recreational catch
- (ii) Specific management arrangements be introduced for the commercial wetline fishery, based on the four regions adopted for recreational fisheries, which provide a framework in which the commercial catch can be contained. One of the key access criteria for the wetline fishery should be fishing history prior to the benchmark date of 3 November 1997.

Minister's proposed position as at date of report

- (i) Agree. It should be noted these plans will need review in the future to include target catch levels.
- (ii) Agree, noting that the department is seeking clarification on legal issues around benchmark dates given possible National Competition Policy considerations.

Current Government's position

Regional Recreational Fishing Strategies were implemented and helped shape elements of the *Fish Resources Management Regulations 1995* (FRM Regulations). There has since been a shift from a

Update on status of recommendations

bioregional based approach to a resource based approach to recreational fishing management. This is a central element of ARM Act.

The major components of what was then the commercial wetline fishery have been, or will in the coming months be, under formal management.

Recommendation 17

Each user group within a fishery should continue to be managed within existing catch ranges until a formal assessment under the new allocation process is undertaken.

Minister's proposed position as at date of report

Disagree. I believe we need to be more timely in dealing with allocation issues. I am considering the merits of establishing a benchmark date to formalise existing allocations, possibly consistent with the announcement of this Review in March 2000.

Current Government's position

This principle has been adopted.

Recommendation 18

A baseline of existing catches should be determined for each fishery by the Department of Fisheries based upon the best information available.

Minister's proposed position as at date of report

Agree. However the lack of data should not be used as basis for not achieving the resolution of resource sharing issues.

Current Government's position

The department collects data in the form of commercial fishing returns and recreational surveys for this purpose.

Recommendation 19

For integrated management to proceed, the State Government must ensure that sufficient additional funding is made available to:

- Provide the necessary levels of research, management and compliance for the sustainable management of fisheries; and
- Ensure the effective operation of an integrated management system

Minister's proposed position as at date of report

Agree. Clearly this will affect timeframes for implementation, however this is a matter for State Government and availability of funds.

Current Government's position

Department budgets and structures have undergone various shifts since publication of this recommendation. A risk-based approach is used to determine how available resources can best be used to achieve required outcomes.

Recommendation 20

To embrace the principles of integrated management, the required funding package should take a multi-tiered and multiuser approach and be equitable across user groups and include:

- (i) increased contributions from commercial users, including an increase in the level of contribution to the Development and Better Interest Fund
- (ii) increased contributions from recreational users, including the introduction of a general recreational fishing licence

Update on status of recommendations

- (iii) additional State Government contribution from the Consolidated Fund to ensure required funding levels are met, in acknowledgement of the significant social and economic values associated with sustainable fisheries.

Minister's proposed position as at date of report

The issue of greater contributions from users is a matter for Government policy. In this regard it should be noted the Government's current policy is:

- it will not increase the level of fees paid by industry to the Development and Better Interest Fund above the level in the Cole/House agreement unless the industry support an increase.
- it will not seek to introduce a licence for recreational line fishing in salt water.

Current Government's position

Significant change has occurred in commercial fishing access fees and recreational licensing which has resulted in a greater contribution by both sectors.

Recommendation 21

The State Government establish a separate review to determine the basis for the introduction of a general recreational fishing licensing system. This review should include an analysis of social equity considerations (such as applicability, cost, concessions and exemptions) and applicability of the system to provide information on recreational effort, and possibly catch.

Minister's proposed position as at date of report

Existing bodies and consultative processes are already in place to undertake such a review if required.

Current Government's position

Recreational fishing licensing has been the subject of reviews over time which has resulted in reforms, including the introduction of the Recreational Boat Fishing Licence in 2010. There are currently no plans to implement a general recreational fishing licence.

[Source: Integrated Fisheries Management Review Committee, *Fisheries Management Paper No. 165*, November 2002 and Hon Dave Kelly MLA, Minister for Fisheries, letter, 6 March 2020.]

APPENDIX 5

FISHERIES OCCASIONAL PUBLICATION NO. 102, NOVEMBER 2011

- 5.1 In response to the Committee's request, the Minister for Fisheries provided an update regarding the current Government's position in respect of the report's recommendations.

Table 9. *Recommendations, and the current Government's position*

Update on status of recommendations
<p>Recommendation 1</p> <p>That relevant management plans be amended, in line with the department's (then-Department of Fisheries, now-Department of Primary Industries and Regional Development) proposals, to provide for the grant of managed fishery licences at levels of unit entitlement of one or more units and that complementary amendments be made to enable active and inactive fishing licences to be given effect.</p> <p>Current Government's position</p> <p>Relevant legislation changes to enable this to occur have been implemented. Many management plans for specific fisheries allow for this arrangement. The required amendments have been made as requested by industry and/or when it has been necessary to amend plans for other purposes or implement new plans.</p>
<p>Recommendation 2</p> <p>That section 60 be amended, in line with the Department of Fisheries' proposals, to expressly provide for a minimum entitlement to fish in a management plan.</p> <p>Current Government's position</p> <p>Implemented.</p>
<p>Recommendation 3</p> <p>That section 141 be amended in line with the Department of Fisheries' proposals, to permit the transfer of part or all of an entitlement and that relevant amendments be made to management plans where necessary.</p> <p>Current Government's position</p> <p>Implemented.</p>
<p>Recommendation 4</p> <p>That section 140 be amended to permit the transfer of all or part of an entitlement and that relevant amendments be made to management plans where necessary.</p> <p>Current Government's position</p> <p>Not implemented in this form, but the same effect is achieved as an outcome of Recommendation 1. That is, a person who wants to transfer all of their entitlement can surrender their licence and the Chief Executive Officer can then grant a new licence and equivalent entitlement (or increase the entitlement of an existing licence).</p>
<p>Recommendation 5</p> <p>That the Act be amended, in line with the Department of Fisheries' proposals, so that an authorisation can continue after the death of the individual holding the authorisation as an individual or as a tenant in common and can be transferred as part of the estate.</p> <p>Current Government's position</p> <p>Implemented.</p>

Update on status of recommendations
<p>Recommendation 6</p> <p>That the Act be amended, in line with the Department of Fisheries' proposals, so that when an individual who is a joint tenant dies, the authorisation is able to be held by remaining joint tenants.</p> <p>Current Government's position</p> <p>Implemented.</p>
<p>Recommendation 7</p> <p>That in line with the Department of Fisheries' proposals, amendments be made to enable infringement notices to be issued by Fisheries and Marine Officers for management plan offences and that provide for 45 days for the issue of infringement notices.</p> <p>Current Government's position</p> <p>Implemented.</p>
<p>Recommendation 8</p> <p>That Landgate be required to review the Department of Fisheries Register of Licences and report on how to improve administration and security of interest holder aspects.</p> <p>Current Government's position</p> <p>This review was completed.</p>
<p>Recommendation 9</p> <p>That the Department of Fisheries be required to notify the rights owner if prosecution action in relation to the exercise of those rights is proceeding.</p> <p>Current Government's position</p> <p><i>Aquatic Resources Management Act 2016 (ARM Act)</i> will separate the ongoing right of access from the annual right to fish. This will largely insulate the access rights holder from prosecution action.</p>
<p>Recommendation 10</p> <p>That administrative sanctions in Part 13 that relate to the cancellation of authorisations be modified to suspension only in relation to managed fishery licences, particularly where these have schemes of entitlement.</p> <p>Current Government's position</p> <p>Implemented.</p>
<p>Recommendation 11</p> <p>The State Government should legislate to establish stronger statutory fishing access rights that are recognised across government and statutory planning provisions that can deliver a better integrated approach to marine resource use and management.</p> <p>In particular, the Government should ensure better recognition of existing fishing rights and co-ordination across agencies and Acts of Parliament which grant or affect rights in the aquatic environment.</p> <p>Specifically -</p> <p>The proposed Aquatic Resources Management Act have a section that describes its relationship to other Acts.</p> <p>That the Wildlife Conservation Act specifically exclude fish as defined in <i>the Fish Resources Management Act 1994 (FRM Act)</i>.</p> <p>That the Conservation and Land Management Act 1985 (CALM Act) is amended to recognise resource management strategies and other plans under the FRM Act (or the proposed new Act) as evidence of proper conservation and protection of fish. (CALM Act Division 3, section 13B). Other</p>

Update on status of recommendations

provisions of the Act not to affect the operation of the FRM Act, except in Marine Nature Reserves (s 4) or other negotiated areas.

That the *Fishing and Related Industries Compensation (Marine Reserves) Act 1997* (FRICMR Act) includes compensation in relation to the removal or reduction in the quality fishing access rights (as considered in the property rights model) through the operation of any Act of Parliament.

Current Government's position

ARM Act is the result of significant negotiation within Government. It provides a strengthened access right, but as described in the Department's submission, fish resources are common property and while the right to access them has many property-like characteristics, they are not a property right. The FRICMR Act will be consequently amended by ARM Act to enable it to apply to resource shares under ARM Act.

Recommendation 12

The proposed Aquatic Resources Management Act should be structured around the concept of rights-based fisheries management, and make specific provision for establishing and managing these rights in a robust and integrated manner. Specifically, the new Act should provide for:

- a) A separate Part or Division which describes the rights of resource users and their degrees of exclusivity, durability, transferability and security.
- b) Power to establish the maximum level to which a given resource or set of resources should be harvested.
- c) Power to set and enforce sectoral and individual harvest levels (allocations) for all sectors.
- d) Clear objectives for resource and sector use plans.
- e) How fishing access rights can be dealt with and how they are to be managed.
- f) Provision for continuity of fishing rights as a plan is revoked.
- g) Penalty provisions should focus on the perpetrator/operator and not unfairly penalise rights owners.
- h) Review the need for and effectiveness of administrative penalties (section 224) in addition to court imposed penalties.

Current Government's position

These elements are central to ARM Act and are dealt with either explicitly or implicitly.

Recommendation 13

For the purpose of developing a new Act, consideration should be given to the replacement or modification of the owner operator model for rights management inherent in the FRM Act, with a new system for the creation, trading and administration of fishing access rights (fishery shares) discrete from fishing activity (fishing permits). A new system could facilitate rights trading by improving rights ownership and reducing the degree of unnecessary administrative intervention in transactions concerning fishing access rights.

Consideration should also be given to the flow of liability as provided in FRM Act Part 17 and its impact on compliance and the property right elements of the licence.

The Department should work closely with WA Fishing Industry Council and other stakeholders to develop options for inclusion in the new Act as a matter of priority, noting the intention to have a new Act before Parliament in 2011.

Current Government's position

Under a Managed Aquatic Resource, the ongoing right of access (share) will be separate from the annual right to fish (catch entitlement). This will result in compliance action being focussed on the operator rather than the shareholder.

Implemented.

Update on status of recommendations

Recommendation 14

That the current licensing requirements of the FRM Act be rationalised to better reflect rights-based management and focus on resource use. Specifically, the multi-tiered requirements to hold managed fishery licences, fishing boat licences, commercial fishing licences and fish processing licences concurrently be streamlined to focus on resource use.

Within the current owner-operator framework, the working group suggested that only three licence types, each with explicit rights and permissions attached are required:

A managed fishery (resource) licence. This provides access and sub-units of entitlement to a sustainably managed resource. A commercial fishing master's licence (fishing permit). This provides permission to fish commercially, and to run a commercial fishing operation. It provides no right of access without assigned entitlement in a resource.

A licence created by regulation: This provides permission to fish commercial and access to unmanaged resources i.e. those without a management plan. It is temporary in nature and allows for exploratory or short-term fishing for a range of purposes.

Any need to identify boats, gear or crew should be implemented as a registration against the fishing permit.

Current Government's position

ARM Act provides significant flexibility with respect to licensing arrangements by providing the capacity for various types of licence to be legislated in the regulations, rather than establishing the requirement at Act level (with a few exceptions). It is anticipated that licensing requirements (e.g. the requirement to hold a commercial fishing licence) will be rationalised under ARM Act.

Recommendation 15

The working group recommends that the proposed Entitlement Management System be scoped and constructed in a manner which will facilitate future models of management, including rights trading within and between sectors, as well as within and between fisheries.

Current Government's position

There has been a trend towards digital solutions to entitlement monitoring and licensing functions since the working group report. This is an ongoing, evolutionary process as technology and management arrangements change. It should be noted that the rights framework under ARM Act does not contemplate free trading of entitlement between sectors, so systems in place focus on the commercial sector.

Recommendation 16

That as a matter of priority WA negotiates more robust and clear jurisdictional arrangements with the Commonwealth in relation to the management of all aquatic biological resources out to the boundaries (200 nm) of the AFZ.

Current Government's position

Under the Offshore Constitutional Settlement (OCS) agreement with the Commonwealth, the State has jurisdiction over the vast majority of resources out to the 200 nautical mile limit of the AFZ. This has been enhanced recently with the shift in jurisdiction of the southern demersal gillnet and demersal longline fishery from the Commonwealth to the State.

Recommendation 17

The settlement of these arrangements should give particular regard to ensuring the continuity of fishing access rights of all fisheries sectors which operate within a recognised ecologically sustainable management framework, as provided for in the EPBC Act, and provide for a consistent

Update on status of recommendations

approach to integrated management of marine resource use under either wholly State or wholly Commonwealth jurisdiction depending on the specific nature of the resources in question

Current Government's position

This reflects usual principles in any OCS arrangement.

Recommendation 18

WA should open discussions with the Commonwealth with a view to developing a national fisheries policy which sets out Commonwealth/State intentions at a national level on the position of sustainable fishing in the context of ecologically sustainable development and the conservation of diversity.

Current Government's position

While there is no national fisheries policy statement, there are regular forums, such as the Australian Fisheries Management Forum, where representatives of relevant State and Commonwealth authorities meet to share and coordinate management activities. There is also a productive relationship between DPIRD and relevant Commonwealth Government departments.

Recommendation 19

That the State Government develop a policy statement on the long-term place of sustainable fishing by all sectors as a key use of WA's living aquatic resources, and underwrite the fishing access rights created as a component of ecologically sustainable development.

Current Government's position

The most recent WA fisheries policy statement was released in 2012. To date, this has not been formally adopted by the current Government, but it continues to reflect the key management principles underpinning fisheries and aquatic resource management in WA.

[Source: Department of Primary Industries and Regional Development, *Fisheries Occasional Publication No. 102*, November 2011 and Hon Dave Kelly MLA, Minister for Fisheries, letter, 6 March 2020]

APPENDIX 6

ENVIRONMENTAL PROTECTION (ENVIRONMENTALLY SENSITIVE AREAS) NOTICE 2005

Western Australia

Environmental Protection Act 1986

Environmental Protection (Environmentally Sensitive Areas) Notice 2005

1. **Citation**

This notice is the *Environmental Protection (Environmentally Sensitive Areas) Notice 2005*.

2. **Commencement**

This notice comes into operation on the day on which it is published in the *Gazette*.

3. **Terms used in this notice**

In this notice —

defined wetland means —

- (a) a wetland included in the List of Wetlands of International Importance kept under the Ramsar Convention;
- (b) a nationally important wetland as defined in “A Directory of Important Wetlands in Australia” (2001), 3rd edition, published by the Commonwealth Department of the Environment and Heritage, Canberra;
- (c) a wetland designated as a conservation category wetland in the geomorphic wetland maps held by, and available from, the Department;
- (d) a wetland mapped in Pen, L. “A Systematic Overview of Environmental Values of the Wetlands, Rivers and

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Estuaries of the Busselton-Walpole Region” (1997), published by the Water and Rivers Commission, Perth; and

- (e) a wetland mapped in V & C Semeniuk Research Group “Mapping and Classification of Wetlands from Augusta to Walpole in the South West of Western Australia” (1997), published by the Water and Rivers Commission, Perth;

ecological community means a naturally occurring biological assemblage that occurs in a particular type of habitat;

maintenance area, of a stretch of road or railway, means any area in the reserve for that stretch of road or railway that is lawfully cleared;

Ramsar Convention means the Convention on Wetlands of International Importance especially as Waterfowl Habitat done at Ramsar, Iran, on 2 February 1971, as in force for Australia in accordance with the *Environment Protection and Biodiversity Conservation Act 1999* of the Commonwealth, and set out in Australian Treaty Series 1975 No. 48;

rare flora means flora that is declared to be rare flora under section 23F of the *Wildlife Conservation Act 1950*;

threatened ecological community means an ecological community that —

- (a) has been determined by the Minister to be a threatened ecological community; and
- (b) is referred to in the list of threatened ecological communities maintained by the chief executive officer of the department of the Public Service principally assisting in the administration of the *Conservation and Land Management Act 1984*.

4. Declaration of environmentally sensitive areas

- (1) Subject to this clause, the following areas are declared to be environmentally sensitive areas for the purposes of Part V Division 2 of the Act —
- (a) a declared World Heritage property as defined in section 13 of the *Environment Protection and Biodiversity Conservation Act 1999* of the Commonwealth;
 - (b) an area that is included on the Register of the National Estate, because of its natural heritage value, under the *Australian Heritage Council Act 2003* of the Commonwealth;
 - (c) a defined wetland and the area within 50 m of the wetland;
 - (d) the area covered by vegetation within 50 m of rare flora, to the extent to which the vegetation is continuous with the vegetation in which the rare flora is located;
 - (e) the area covered by a threatened ecological community;
 - (f) a Bush Forever site listed in “Bush Forever” Volumes 1 and 2 (2000), published by the Western Australia Planning Commission, except to the extent to which the site is approved to be developed by the Western Australia Planning Commission, as described in subclause (3);
 - (g) the areas covered by the following policies —
 - (i) the *Environmental Protection (Gnangara Mound Crown Land) Policy 1992*;
 - (ii) the *Environmental Protection (Western Swamp Tortoise) Policy 2002*;
 - (h) the areas covered by the lakes to which the *Environmental Protection (Swan Coastal Plain Lakes) Policy 1992* applies;

cl. 4

- (i) protected wetlands as defined in the *Environmental Protection (South West Agricultural Zone Wetlands) Policy 1998*;
 - (j) areas of fringing native vegetation in the policy area as defined in the *Environmental Protection (Swan and Canning Rivers) Policy 1998*.
- (2) For the purposes of subclause (1)(d), an area of vegetation is continuous with another area of vegetation if any separation between the areas is less than 5 m at one or more points.
 - (3) For the purposes of subclause (1)(f), an area of a Bush Forever site is approved to be developed by the Western Australia Planning Commission if —
 - (a) the Commission has made a decision with respect to the area that, if implemented, would have the effect that development or other works can take place in the area;
 - (b) that decision is not under assessment under Part IV of the *Environmental Protection Act 1986*; and
 - (c) where an assessment under Part IV of the *Environmental Protection Act 1986* has been made — the decision may be implemented.
 - (4) An area that would otherwise be an environmentally sensitive area because of this clause is not an environmentally sensitive area to the extent to which the area is within the maintenance area of a stretch of road or railway.
 - (5) An area that would otherwise be an environmentally sensitive area because of this clause is not an environmentally sensitive area unless —
 - (a) the determination of the flora, ecological community, site or area has been made public; or
 - (b) in the case of an area referred to in subclause (1)(d) or (e) — the owner, occupier or person responsible for the care and maintenance of the land has been notified of the area.

- (6) In this clause, unless the contrary intention appears or the context otherwise requires, a reference to the determination of flora, an ecological community, a site or an area is a reference to the determination of the flora, ecological community, site or area as in force or effect immediately before the day on which this notice comes into operation.
- (7) In subclauses (5) and (6) —
determination, in relation to flora, an ecological community, a site or an area, means the declaration, determination, designation, registration, listing, mapping or other description of the flora, ecological community, site or area;

APPENDIX 7

REGISTRABLE INTERESTS

The Registrar may only register those interests where there is a head of power and statutory authority under the *Transfer of Land Act 1983* or other relevant legislation or law. These currently include:

- Transfer of Land (fee simple), Transfer by Power of Sale, Transfer by Foreclosure, Transfer of Lease, Transfer for Non-payment of Rates, Transfer of Mortgage, Transfer of Charge, Transfer of Carbon Covenant, Transfer of Carbon Right, Transfer of (Tree) Plantation Interests, Transfer by Sheriff of Court, Transfer of Profit a Prendre
- Fee simple, life estates
- Easements – Statutory and non-Statutory
- Trustee in Bankruptcy
- Mortgages of Land, Mortgage of Lease, Mortgage of Planation Interests, Mortgage of Carbon Covenant
- Charges – for example, under the *Bankruptcy Act 1966* (Cth)
- Leases – sub-leases, leases – transfer of leases
- Profit a prendre
- Carbon Right – *Carbon Rights Act 2003*
- Carbon Right form - *Carbon Rights Act 2003*
- Carbon Covenant - *Carbon Rights Act 2003*
- Carbon Covenant form - *Carbon Rights Act 2003*
- Tree Plantation Agreements – *Tree Plantation Agreements Act 2003*
- Change of Name
- Change of Address
- Strata Titles Schemes
- Memorial – *Agriculture & Related Resources Protection Act 1976*
- Memorial – *Country Areas Water Supply Act 1947*
- Memorial – *Metropolitan Redevelopment Authority Act 2011*
- Memorial – *Environmental Protection Act 1986*
- Memorial – *Criminal Property Confiscation Act 2000*
- Memorial – *Land Administration Act 1997*
- Memorial – *Heritage of Western Australian Act 1990*
- Memorial – *Industrial Lands Development Authority Act 1966*
- Memorial – *Legal Aid Commission Act 1976*
- Memorial – Miscellaneous
- Memorial – *Local Government Act 1960*
- Memorial – *Local Government Act 1995*
- Memorial – *Proceeds of Crime Act 1987* (Cth)
- Memorial – *Proceeds of Crime Act 2002* (Cth)
- Memorial – Rural Reconstruction and Adjustment
- Memorial – *Taxation Administration Act 2003*
- Memorial – *Retirement Villages Act 1992*
- Memorial – *Soil and Land Conservation Act 1945*
- Memorial – *Land Tax Assessment Act 1976*
- Memorial – *Fines, Penalties and Infringement Notices Enforcement Act 1994*

- Memorial – *Town Planning and Development Act 1928*
- Memorial – *Planning and Development Act 2005*
- Memorial – *Metropolitan Water Supply, Sewerage and Drainage Act 1909*
- Memorial – *Water Services Act 2012*
- Memorial – *First Home Owners Grant Act 2000*
- Memorial – *Contaminated Sites Act 2003*
- Memorandum of Common Provisions
- Stay Order
- Transmission
- Survivorship
- Crown Grants
- Crown land positive covenants
- Crown land – reserves, leases
- Taking Orders for Land
- Taking Order for Interests in Land
- Notices of Intention to Take Land
- Notices of Intention to Take Interests in Land
- Vesting Order
- Adverse Possession.⁹⁵⁸

⁹⁵⁸ Landgate, Answer to question on notice 5 asked at hearing held 19 February, dated 3 March 2020, pp 4-5.

APPENDIX 8

INTERESTS CURRENTLY AVAILABLE IN PROPERTY INTEREST REPORT

Table 10. *Interests currently available in Property Interest Report*

No	Types on Interest	Date Added
91	Environmentally Sensitive Areas	15/07/2020
90	City of Perth Plot Ratio (City Planning Scheme No. 2)	28/05/2020
89	Water Corporation – Water service is supplied by an Agreement	21/11/2019
88	Water Corporation – Sewer System	21/11/2019
87	Water Corporation – Special Agreement – Non-potable	21/11/2019
86	Water Corporation – Saline Water	21/11/2019
85	Water Corporation – Reserve Sewer, Water and Drainage Infrastructure Contribution Charge	21/11/2019
84	Water Corporation – Private Pressure Sewer System	21/11/2019
83	Water Corporation – Pressure Exempt	21/11/2019
82	Water Corporation- Water, Sewer and/or Drainage	21/11/2019
81	Water Corporation – Farmlands Service Conditions	21/11/2019
80	Water Corporation – Effluent Discharge Scheme	21/11/2019
79	Water Corporation – Brighton Non-Drinking Water	21/11/2019
78	Water Corporation – Beneficiary Lot Water and/or Sewer	21/11/2019
77	State Planning Policy 5.4 Road and Rail Noise	28/08/2019
76	Notices on Properties under the Soil and Land Conservation Act 1945	11/11/2016
75	Notices on Properties under the BAM Act 2007	11/11/2016
74	Water Corporation Non-Standard Services (Private Fire Service)	09/09/2016
73	European House Borer	11/07/2016
72	Sprinkler Restrictions & Bans	19/04/2016
71	Local Government Municipal Inventory	10/12/2015
70	Bush Fire Prone Areas	08/12/2015
69	State Underground Power Program	14/09/2015
68	Jandakot Airport – Aircraft Noise	06/07/2015
67	Jandakot Airport – Land Use Planning	06/07/2015
66	Western Power Infrastructure	05/05/2015
65	Intensive Agricultural Industries	02/04/2015
64	ATCO Gas Australia Infrastructure	25/03/2015

No	Types on Interest	Date Added
63	Perth Airport – Aircraft Noise	15/01/2015
62	Australian Natural, Indigenous and Historic Heritage	10/11/2014
61	APA Group Owned/Operated Gas Transmission Pipeline	23/10/2014
60	Water Resource License	24/09/2014
59	Waterways Conservation Act Management Areas	24/09/2014
58	Mosquito-borne Disease Risk	24/09/2014
57	Water Corporation infrastructure (above and below ground)	31/07/2014
56	Environmental Protection Policies	23/07/2014
55	Lands owned or managed by the Department of Parks and Wildlife	23/07/2014
54	Possible Road widening (Department of Planning)	02/05/2014
53	Future State Roads	26/02/2014
52	Marine Harbours Act Areas	12/12/2013
51	Marine Navigation Aids	12/12/2013
50	Navigable Water Regulations	12/12/2013
49	Shipping and Pilotage Port Areas	12/12/2013
48	Smoke Alarm	28/11/2013
47	Threatened Fauna	28/11/2013
46	State Forest and Timber Reserve	28/11/2013
45	Threatened Flora	28/11/2013
44	Threatened Ecological Communities	28/11/2013
43	Protected Areas - Collaborative Australian Protected Area Database	29/11/2013
42	National Park, Conservation Park and Nature Reserve	28/11/2013
41	Heritage Council - Assessment Program	02/10/2013
40	Heritage Council - Agreement	02/10/2013
39	Residue Management Notice	26/07/2013
38	Liquor Restriction Areas	26/07/2013
37	Metropolitan Regional Improvement Tax	25/07/2013
36	Dampier to Bunbury Natural Gas Pipeline	19/07/2013
35	Commercial Building Disclosure	10/07/2013
34	Perth Parking Policy	19/06/2013
33	Ramsar Wetlands	13/05/2013
32	Titanium Zircon Mineralisation	29/04/2013
31	Water Corporation Infrastructure Buffer Areas	01/04/2013
30	Wetlands	27/03/2013

No	Types on Interest	Date Added
29	Harvey Water Infrastructure	14/01/2013
28	Clearing Control Catchments	06/12/2012
27	Garden Bore Suitability	06/12/2012
26	Groundwater Salinity	06/12/2012
25	Iron Staining Risk	06/12/2012
24	Perth Airport – Land Use Panning	06/12/2012
23	Proclaimed Groundwater Areas	06/12/2012
22	Proclaimed Surfacewater Areas	06/12/2012
21	Heritage Council - Conservation Order	27/09/2012
20	Heritage Council - State Register of Heritage Places	27/09/2012
19	Region Planning Schemes	19/07/2012
18	Local Planning Schemes	18/07/2012
17	Aboriginal Heritage Places	12/03/2012
16	Aboriginal Lands Trust Estate	12/03/2012
15	Contaminated Sites (Contaminated Sites Database)	09/08/2011
14	Residual Current Device	20/05/2011
13	Bush Forever Areas	18/05/2011
12	Former Military Training Area (Unexploded Ordnance)	29/04/2011
11	Basic Raw Materials	14/04/2011
10	Native Vegetation	10/11/2010
9	Public Drinking Water Source Area	04/08/2010
8	1 in 100 AEP Floodplain Development Control Area	05/05/2010
7	Development Control Area (Swan and Canning Rivers)	16/10/2009
6	Petroleum Tenure	16/04/2009
5	Mining Titles	15/04/2009
4	Acid Sulfate Soil Risk	30/09/2008
3	Native Title and Indigenous Land Use Agreements	12/05/2008
2	Control of Access on State Roads	28/02/2008
1	Emergency Services Levy	29/11/2007

[Source: Landgate, Interests currently available in Property Interest report:

https://www0.landgate.wa.gov.au/data/assets/pdf_file/0017/11645/NewInterestsUpdatePIR.pdf, accessed 2 June 2020.]

On 21 November 2019, the following interests were added to the PIR:

- Water Corporation Water service is supplied by an Agreement
- Water Corporation Sewer System
- Water Corporation Special Agreement - Non-Potable
- Water Corporation Saline Water
- Water Corporation Reserve Sewer, Water and Drainage Infrastructure Contribution Charge
- Water Corporation Private Pressure Sewer System
- Water Corporation Pressure Exempt
- Water Corporation Infrastructure Contribution - Water, Sewer and /or Drainage
- Water Corporation Farmlands Service Conditions
- Water Corporation Effluent Discharge Scheme
- Water Corporation Brighton Non-Drinking Water
- Water Corporation Beneficiary Lot Water and/or Sewer

[Source: Landgate, answer to question on notice 4 asked at hearing held on 19 February 2020, dated 6 March 2020, p 4.]

APPENDIX 9

PLANNING AND DEVELOPMENT ACT 2005

176. Questions as to injurious affection etc., how determined

- (1) A claimant or responsible authority may apply to the State Administrative Tribunal for determination of any question as to whether land is injuriously affected.
- (2) Any question as to the amount and manner of payment (whether by instalments or otherwise) of the sum which is to be paid as compensation under this Division is to be determined by arbitration under and in accordance with the Commercial Arbitration Act 2012, unless the parties agree on some other method of determination.

179. Injurious affection due to land being reserved, amount of compensation for

- (1) Subject to this Division, the compensation payable for injurious affection due to or arising out of the land being reserved under a planning scheme, where no part of the land is purchased or acquired by the responsible authority, is not to exceed the difference between —
 - (a) the value of the land as so affected by the existence of such reservation; and
 - (b) the value of the land as not so affected.
- (2) The values referred to in subsection (1)(a) and (b) are to be assessed as at the date on which —
 - (a) the land is sold as referred to in section 178(1)(a); or
 - (b) the application for approval of development on the land is refused; or
 - (c) the approval is granted subject to conditions that are unacceptable to the applicant.

184. Betterment; compensation for expenses rendered abortive by amendment or repeal of scheme

- (4) A question as to the amount and manner of payment (whether by instalments or otherwise) of the sum which —
 - (a) the responsible authority is entitled to recover under this section from a person whose land is increased in value; or
 - (b) is to be paid as compensation under this section, is to be determined by arbitration in accordance with the Commercial Arbitration Act 2012 or by some other method agreed by the parties.

192. Land etc. to be acquired under s. 191, valuing

- (1) Despite Part 10 of the Land Administration Act 1997, the value of any land or improvements on land which is compulsorily acquired by a responsible authority under section 191 is, for the purpose of assessing the amount of compensation to be paid for the land and improvements to be assessed —
 - (a) without regard to any increase or decrease in value attributed wholly or in part to any of the provisions contained in, or to the operation or effect of, the relevant planning scheme; and
 - (b) having regard to values current at the time of acquisition, but in assessing the amount of compensation regard is to be had to any amounts of compensation already paid, or payable, by the responsible authority in respect of the land under Division 2.

APPENDIX 10

LICENCES AND PERMITS CONNECTED WITH WATER OR DAMS

Table 11. List of licences and permits that may be issued by the Department of Water and Environmental Regulation in relation to or connected with water and/or dams, and the cost of lodging an application.

Licence or permit	Purpose	Cost
Licence under section 26D of the Rights in Water and Irrigation Act 1914	To commence, construct, enlarge, deepen or alter a well	No cost*
Licence to take groundwater under section 5C of the Rights in Water and Irrigation Act 1914	To take groundwater	No cost*
Permit to interfere with the bed and banks under section 11,17 or 21A of the Rights in Water and Irrigation Act 1914	To interfere or obstruct the bed and banks of a watercourse or wetland	No cost*
Licence to take surface water under section 5C of the <i>Rights in Water and Irrigation Act 1914</i>	To take surface water	No cost*
Application for approval of transfer of a licence, water entitlement or agreement referred to in clause 30 of Schedule 1 to the Act	Transfer of licence	\$200
Remove or vary a security interest		\$70
Obtain a certified copy of a water licence		\$50
Obtain an extract from the water register		\$25 fee for first page and \$1 per page for any additional pages
Testing of a water meter		\$500

[Source: Additional questions from Department of Water and Environmental Regulation, September 2020, q 2, p 2.]

*Fees for water licence and permit applications were introduced for the mining and public water supply sectors on 13 November 2018. The fees apply to the assessment of:

- New licences to take water
- Renewals for existing licences to take water
- Amendments of licences to take water
- Licences to construct or alter wells
- Permits for beds and banks.

The fees are based on the level of assessment undertaken by the Department which is determined by the type of application, the volume of water being applied for and the allocation status of the water resource.

For applications that are for a volume of 1500 kilolitres or less per annum, an exemption exists within the Regulations and the fee payable is \$200. Department initiated amendments do not incur an application fee.⁹⁵⁹

⁹⁵⁹ Anthea Wu, Section Manager, Ministerial Liaison Unit, Department of Water and Environmental Regulation, email, 1 September 2020, attachment 1, p 2.

APPENDIX 11

COMMERCIAL FISHING LICENCES AND AUTHORISATIONS ISSUED UNDER THE *FISH RESOURCES MANAGEMENT ACT 1994* AND THE *PEARLING ACT 1990* PROPERTY RIGHTS AND COMPENSATION

*Attachment B:

Commercial Fishing and Related Authorisations and Licences Issued Under the *Fish Resources Management Act 1994* and the *Fish Resources Management Regulations 1995*

Licence	Description	Property Right	Compensation	
			<i>Fisheries Adjustment Scheme Act 1987</i>	<i>Fishing and Related Industries Compensation (Marine Reserves) Act 1997 (FRICMA)</i>
Exemption for a commercial purpose	Authority which may be granted by the Chief Executive Officer for a commercial purpose, including commercial fishing.	No property right. Exemptions are not licences and cannot be renewed or transferred.	No	No
Section 43 Order	These are orders which prohibit activities. They may provide exceptions to the prohibition, including by reference to holders of certain licences.	No	Associated licences may be subject to this Act which provides a discretionary power for the Minister to establish a compulsory or voluntary scheme to reduce the size of a fishery(ies). Compensation payable under a voluntary scheme is determined by the Minister on advice from a committee of management. Compensation with respect to a compulsory scheme (which has never occurred) is based on the market value of the licence/entitlement.	Compensation may be payable with respect to associated licences, based on the reduction in market value of the authorisation arising from relevant events (see FRICMA s.4).
Managed Fishery Licence	Authorises operation in a	No. Managed Fishery Licences confer a right of	Provides a discretionary power for the Minister to	Compensation payable, based on the reduction in

	Managed Fishery.	access to a common-property resource.	establish a compulsory or voluntary scheme to reduce the size of a fishery(ies). Compensation payable under a voluntary scheme is determined by the Minister on advice from a committee of management. Compensation with respect to a compulsory scheme (which has never occurred) is based on the market value of the licence/entitlement.	market value of the authorisation arising from relevant events (see FRICMA s.4).
Interim Managed Fishery Permit	Authorises operation in an Interim Managed Fishery.	No. Interim Managed Fishery Permits confer a right to access a common-property resource.	Provides a discretionary power for the Minister to establish a compulsory or voluntary scheme to reduce the size of a fishery(ies). Compensation payable under a voluntary scheme is determined by the Minister on advice from a committee of management. Compensation with respect to a compulsory scheme (which has never occurred) is based on the market value of the licence/entitlement.	Compensation payable, based on the reduction in market value of the authorisation arising from relevant events (see FRICMA s.4).
Permit to Construct a Place to Process Fish	One off requirement for approval to construct or establish a place where fish will be processed for a	No property right. This is a one off administrative approval requirement.	No	No

	commercial purpose.			
Fish Processing Licence	Authorises processing of fish for a commercial purpose.	No	No	Compensation payable, based on the reduction in market value of the authorisation arising from relevant events (see FRICMA s.4).
Aquaculture Licence	Authorises aquaculture activities and the sale of aquaculture product.	No	No	Compensation payable, based on the reduction in market value of the authorisation arising from relevant events (see FRICMA s.4).
Aquaculture Lease	Minister may grant an aquaculture lease over WA land or waters.	The lease provides the exclusive right to undertake aquaculture in the leased area and ownership of the aquacultured fish. It does not provide exclusive access to the area.	No	Compensation payable, based on the reduction in market value arising from relevant events (see FRICMA s.4).
Fishing Boat Licence	Authorises a boat to be used for or in connection with commercial fishing.	Fishing Boat Licences do not confer a property right, but they confer a degree of access to common-property fish resources.	Provides a discretionary power for the Minister to establish a compulsory or voluntary scheme to reduce the size of a fishery(ies). Compensation payable under a voluntary scheme is determined by the Minister on advice from a committee of management. Compensation with respect to a compulsory scheme (which has never occurred) is based on the market value of	Compensation payable, based on the reduction in market value of the authorisation arising from relevant events (see FRICMA s.4).

			the licence/entitlement.	
Carrier Boat Licence	Authorises a boat to be used to transport fish taken by another boat for a commercial purpose.	No.	No	No
Commercial Fishing Licence	Personal licence which permits the holder to engage in commercial fishing and to sell fish.	No property right. In some circumstances, these licences are associated with a right to access a specific fishery.	Provides a discretionary power for the Minister to establish a compulsory or voluntary scheme to reduce the size of a fishery(ies). Compensation payable under a voluntary scheme is determined by the Minister on advice from a committee of management. Compensation with respect to a compulsory scheme (which has never occurred) is based on the market value of the licence/entitlement. Note, these licences rarely confer access to a specific fishery, so application of this act is largely irrelevant in a practical sense.	Compensation payable, based on the reduction in market value of the authorisation arising from relevant events (see FRICMA s.4). Note, these licences would generally have no market value as they are non-transferrable and only rarely confer access to a specific fishery.
Fishing Tour Operator's Licence and Restricted Fishing Tour Operator's Licence	Permits a fishing tour or a restricted fishing tour to be undertaken for a commercial purpose.	No	No	No

Licences and Authorisations Issued Under the *Pearling Act 1990*

Licence	Description	Property Right	Compensation
			<i>Fishing and Related Industries Compensation (Marine Reserves) Act 1997 (FRICMA)</i>
Pearling (Wildstock) Licence	Permits pearling activities to be undertaken in the form of fishing for pearl oysters and seeding those pearl oysters.	No property right. The licence confers access to a common-property resource.	Compensation payable, based on the reduction in market value of the authorisation arising from relevant events (see FRICMA s.4).
Pearling (Seeding) Licence	Permits pearling activities to be undertaken in the form of seeding hatchery produced pearl oysters.	No property right.	Compensation payable, based on the reduction in market value of the authorisation arising from relevant events (see FRICMA s.4).
Pearl Oyster Hatchery Licence (for Propagation)	Authorises propagation of pearl oyster spat at land-based sites.	No property right.	Compensation payable, based on the reduction in market value of the authorisation arising from relevant events (see FRICMA s.4)
Pearl Oyster Hatchery (Nursery) Licence	Permits the grow-out of spat on a nursery site.	No property right.	Compensation payable, based on the reduction in market value of the authorisation arising from relevant events (see FRICMA s.4)
Pearl Oyster Hatchery (including Hatchery Nursery) Licence	Authorises propagation and grow-out of pearl oysters.	No property right.	Compensation payable, based on the reduction in market value of the authorisation arising from relevant events (see FRICMA s.4)
Pearl Farm Lease	May be issued by the Chief Executive Officer for pearling activities.	Pearl oysters, pearls, and pearl oyster spat on the lease used for pearling or hatchery activities are the property of the lease holder. The Chief Executive Officer can authorise the holder to exclude persons from the lease.	Compensation payable, based on the reduction in market value of the authorisation arising from relevant events (see FRICMA s.4)
Pearl Diver's Licence	Personal licence which authorises a person to	No property right	No

	dive while undertaking pearling or hatchery activities.		
Pearl Boat Licence	Authorises a boat to be used to carry out pearling or hatchery activities.	No	No
Pearl Boat Master's Licence	Authorises a person to be in control of a boat used to carry out pearling or hatchery activities.		No

*Note, Pearling Permits and Hatchery Permits are technically compensatable under the FRICMRA, but are only currently issued for research purposes and not commercial fishing.

[Source: Letter from the (then) Minister for Fisheries, 26 September 2019.]

APPENDIX 12

COMMERCIAL FISHING AUTHORISATIONS INTENDED TO BE ISSUED UNDER THE AQUATIC RESOURCES MANAGEMENT ACT 2016: PROPERTY RIGHTS AND COMPENSATION

Commercial Fishing and Related Licences and Authorities Intended to be Issued Under the *Aquatic Resources Management Act 2016*

Licence	Description	Property Right	Compensation	
			<i>Fisheries Adjustment Scheme Act 1987</i>	<i>Fishing and Related Industries Compensation (Marine Reserves) Act 1997 (FRICMA)</i>
Exemption for a commercial purpose	Authority which may be granted by the Chief Executive Officer for a commercial purpose, including commercial fishing.	No property right. Exemptions are not licences and cannot be renewed or transferred.	No	No
Resource Shares	Resource shares represent an ongoing right to access a managed aquatic resource. They give rise to catch entitlement at the commencement of each fishing period.	No property right. Resource shares will confer an ongoing right to be allocated a quantity of the Total Allowable Catch of a common-property resource.	No	Compensation payable for reduction in the market value of a resource share because of loss of access to an area and a resultant reduction in the allocated catch for the resource share following a relevant event (see FRICMRA s.4).
Catch Entitlement	Catch entitlement is generated from resource shares at the commencement of each fishing period. It represents the quantity of the Total Allowable Catch that the holder of the entitlement can take.	No property right. Catch entitlement is a quantity of the Total Allowable Catch that can be taken in a fishing period.	No	No
Managed Fishery Licence	Authorises operation in a Managed Fishery	No. Managed Fishery Licences confer a right of access to a common-	Provides a discretionary power for the Minister to establish a compulsory or voluntary scheme to	Compensation payable, based on the reduction in market value of the authorisation arising

		property resource.	reduce the size of a fishery(ies). Compensation payable under a voluntary scheme is determined by the Minister on advice from a committee of management. Compensation with respect to a compulsory scheme (which has never occurred) is based on the market value of the licence/entitlement.	from relevant events (see FRICMRA s.4).
Aquaculture Licence	Authorises aquaculture activities within the area covered by an aquaculture lease.	No. Currency of the licence is dependent on the currency of the associated Aquaculture Lease.	No	Compensation payable, based on the reduction in market value of the authorisation arising from relevant events (see FRICMRA s.4).
Aquaculture Lease	Minister may grant an aquaculture lease over WA land or waters	Provides the exclusive right to undertake aquaculture activities within an associated lease area and confers ownership of the aquatic organisms and pearls the subject of the aquaculture activities. Currency of the lease is dependent on the currency of a relevant Aquaculture Licence.	No	Compensation payable, based on the reduction in market value of the authorisation arising from relevant events (see FRICMRA s.4).
Section 125 Order	Supercedes s.43 Orders. They are not licences or authorities, but rather prohibition	No	Associated licences may be subject to this Act which provides a discretionary power	Compensation may be payable with respect to associated licences, based on the reduction in

	orders which may make exceptions to the prohibition. These exceptions may be defined with reference to certain licences.		for the Minister to establish a compulsory or voluntary scheme to reduce the size of a fishery(ies). Compensation payable under a voluntary scheme is determined by the Minister on advice from a committee of management. Compensation with respect to a compulsory scheme (which has never occurred) is based on the market value of the licence/entitlement.	market value of the authorisation arising from relevant events (see FRICMRA s.4).
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*Note. It is expected that a number of additional authorisations will be provided for under the *Aquatic Resources Management Regulations*. These Regulations are yet to be finalised.

[Source: Letter from the (then) Minister for Fisheries, 26 September 2019.]

APPENDIX 13

CHARACTERISTICS OF ACCESS RIGHTS UNDER *FISH RESOURCES MANAGEMENT ACT 1994* MANAGEMENT PLANS, *AQUATIC RESOURCES MANAGEMENT ACT 2016* TRANSITIONED MANAGEMENT PLAN AND *AQUATIC RESOURCES MANAGEMENT ACT 2016* MANAGED AQUATIC RESOURCES

APPENDIX 1

Comparison of the Characteristics of Access Rights Under FRMA Management Plans and ARMA (Transitioned Management Plans and Managed Aquatic Resources)

Characteristic	FRMA Management Plan	ARMA Transitioned Management Plan	ARMA Managed Aquatic Resource
Exclusivity (the impact of others on the right)	Access to commercial fishing limited according to criteria in the management plan.	Access to commercial fishing limited according to criteria in the management plan.	Access to commercial fishing limited according to the number of shares in the ARMS and the process for allocating the shares under the ARUP.
			ARMS must set out the quantity of the resource available for customary fishing and public benefit.
Durability (the degree of permanence, temporal duration and renewability of the right)	Authorisations are renewable subject to an application being made no more than 60 days after expiry, payment of fees and good behaviour. Note that management plans for interim managed fisheries may include an end date beyond which the plan and associated authorisations are of no effect.	Authorisations are renewable subject to an application being made no more than 180 days after expiry, payment of fees and good behaviour. Note that management plans for interim managed fisheries will transition as managed fishery management plans, so will no longer have a legislated end date.	ARMS must set out the proportion of the Total Allowable Catch for commercial and recreational fishing and there is an obligation to monitor and manage each sector to its allocation, thereby increasing exclusivity by reducing the capacity for the commercial sector's access to be impacted upon by others.
			Shares granted under an ARUP will only need to be registered upon allocation. Annual renewal will not be required. They exist for as long as the ARUP is in place. At the start of each fishing period, shares give rise to catch entitlement which is valid for that fishing period upon registration.
Transferability (including the divisibility of the right and ease of temporary leasing and permanent transfer)	Both authorisations and entitlements (e.g. quota units) under authorisations must be transferred upon application subject to limited grounds for refusal (see S.140(2) of the FRMA).	Both authorisations and entitlements (e.g. quota units) under authorisations must be transferred upon application subject to limited grounds for refusal (see S.60 of the ARMA).	Shares must be transferred on request subject to limited circumstances where the transfer must be refused (see S.36(3) of ARMA).
	Entitlements under an authorisation may be transferred independently of the authorisation, but only to another authorisation holder.	Entitlements under an authorisation may be transferred independently of the authorisation, but only to another authorisation holder.	Once registered at the start of each fishing period, shares (the ongoing right of access) and catch entitlement (the annual right to catch fish) are separate entities. Shares and catch entitlement can therefore be transferred independently of each other. This increases divisibility and flexibility to accommodate various business arrangements.
	If a management plan provides for it (most do), entitlements under an authorisation may be temporarily transferred to another authorisation holder to facilitate lease arrangements.	If a management plan provides for it (most do), entitlements under an authorisation may be temporarily transferred to another authorisation holder to facilitate lease arrangements.	

<p>Security (the quality of the right, including ease of cancellation or change and degree of legal protection)</p>	<p>A court may cancel or suspend an authorisation if the court convicts a person of an offence and the CEO of DPIRD applies for the suspension/cancellation.</p>	<p>A court may cancel or suspend an authorisation if the court convicts a person of an offence and the prosecutor applies for the suspension/cancellation.</p>	<p>Shares are granted in perpetuity, subject to the continued existence of the relevant ARUP. They can only be forfeited where an order is made by a court in association with the shares having been used as surety for an authorisation.</p>
	<p>Where three major offences are recorded against an authorisation in a 10 year period, the CEO of DPIRD must suspend the authorisation of one year.</p>	<p>Where three major offences are recorded against an authorisation in a 10 year period, the CEO of DPIRD must suspend the authorisation of one year.</p>	<p>The perpetual nature of shares, together with their separation from the annual right to fish (catch entitlement) and any associated authorisations means that shares and non-fishing shareholders are not impacted upon by prosecution of the fisher. This provides greater security than under the FRMA.</p>
	<p>Authorisations may be cancelled, suspended or not renewed on limited grounds set out in S.143 of FRMA (e.g. non-payment of fees, grounds set out in a management plan, poor behaviour).</p>	<p>Authorisations may be cancelled, suspended or not renewed on limited grounds set out in S.134 of ARMA (e.g. non-payment of fees, grounds set out in a management plan, poor behaviour).</p>	
	<p>Upon cessation of a management plan, while the CEO of DPIRD is to take into account that a person held an authorisation under that plan, the person is not entitled to the grant of a subsequent authorisation as of right.</p>	<p>N/A. No new management plans can be made under ARMA.</p>	<p>Upon the revocation of an ARUP, share options must be granted to those who held shares immediately prior to the revocation, except if a new ARUP is made which allocates shares of an equivalent value to those persons. The Minister must have regard for share options when determining the method for allocating resource shares in a subsequent ARUP.</p>

[Source: Submission 68 from the Department of Primary Industries and Regional Development, 29 July 2019.]

GLOSSARY

Term	Definition
2004 Inquiry	Standing Committee on Public Administration and Finance inquiry into the impact of government actions and processes on the use and enjoyment of freehold and leasehold land in Western Australia, 2001 – 2004.
Area F	Alcoa residue disposal area
ARM Act	<i>Aquatic Resources Management Act 2016</i>
ARM Amendment Bill	Aquatic Resources Management Amendment Bill 2020
ARMS	Aquatic Resources Management System
ARUP	Aquatic Resource Use Plan
Association	Joondalup Urban Development Association
Acquire	To take an interest in land, as permitted in Western Australian statute
CALM Act	<i>Conservation and Land Management Act 1984</i>
CAWS Act	<i>Country Areas Water Supply Act 1947</i>
Charter	Private property rights charter for Western Australia
Clearing Regulations	<i>Environmental Protection (Clearing on Native Vegetation) Regulations 2004</i>
CEO	Chief Executive Officer of the Department of Primary Industries and Regional Development
Coalition	Western Australian Water Users Coalition
Committee	Standing Committee on Public Administration
DER	Department of Environmental Regulation (former)
DLI	Department of Land Information (former)
DPIRD	Department of Primary Industries and Regional Development
DPLH	Department of Planning, Lands and Heritage
DOLA	Department of Lands Administration (former)
DWER	Department of Water and Environmental Regulation
Easement	Express/implied
EBFM	Ecosystem Based Fisheries Management
Environment Committee	Standing Committee on Environment and Public Affairs

Term	Definition
EOP Act	<i>Energy Operators (Power) Act 1979</i>
EPA	Environmental Protection Authority
EP Act	<i>Environmental Protection Act 1986</i>
EP Bill	Environmental Protection Amendment Bill 2020
EPPs	Environmental Protection Policies
ESA	Environmentally Sensitive Area, as declared under the <i>Environmental Protection (Environmentally Sensitive Areas) Notice 2005</i>
ESD	Ecologically Sustainable Development
FAS Act	<i>Fisheries Adjustment Schemes Act 1987</i>
FOI Act	<i>Freedom of Information Act 1992</i>
FPC	Forest Products Commission
FRICMR Act	<i>Fishing and Related Industries Compensation (Marine Reserves) Act 1997</i>
FRICMR Regulations	<i>Fishing and Related Industries Compensation (Marine Reserves) Regulations 1998</i>
FRM Act	<i>Fish Resources Management Act 1994</i>
Guide	The Department of Water and Environmental Regulation's 'A Guide to Grazing of Native Vegetation'
HOA	Housing Opportunity Area
IFAAC	Integrated Fisheries Allocation Advisory Committee
IFM	Integrated Fisheries Management
Inquiry	Inquiry into Private Property Rights
Notice	Environmental Protection (Environmentally Sensitive Areas) Notice 2005
LA Act	<i>Land Administration Act 1997</i>
LALAC Bill	Land Acquisition Legislation Amendment (Compensation) Bill 2014
LPS Regulations	<i>Planning and Development Local Planning Schemes Regulations 2015</i>
MRIF	Metropolitan Region Improvement Fund
MRIT	Metropolitan Region Improvement Tax
MRS	Metropolitan Region Scheme
NWI	National Water Initiative
ONIC	Oakajee Narngulu Infrastructure Corridor

Term	Definition
PAF Committee	Standing Committee on Public Administration and Finance
PD Act	<i>Planning and Development Act 2005</i>
Pearling Act	<i>Pearling Act 1990</i>
Petition	Petition to repeal the Environmental Protection (Environmentally Sensitive Areas) Notice 2005
PIR	Property Interest Report
Plan	Warren-Donnelly Surface Water Allocation Plan
PPA	Pearl Producers Association
RIWI Act	<i>Rights in Water and Irrigation Act 1914</i>
RIWI Amendment Act 2000	<i>Rights in Water and Irrigation Amendment Act 2000</i>
RIWI Amendment Bill 1999	Rights in Water and Irrigation Amendment Bill 1999
SLIP	Shared Land Information Platform
SFIS	Southern Forests Irrigation Scheme
TAC	Total Allowable Catch
TL Act	<i>Transfer of Land Act 1893</i>
WAFIC	Western Australian Fishing Industry Council
WA	Western Australia
WA Land Authority	Landgate
WALRC	Law Reform Commission of Western Australia
WAPC	Western Australian Planning Commission
WCAA	West Coast Abalone Association
WRLC	Western Rock Lobster Council

Standing Committee on Public Administration

Date first appointed:

17 August 2005

Terms of Reference:

The following is an extract from Schedule 1 of the Legislative Council Standing Orders:

5. Public Administration Committee

5.1 *A Public Administration Committee is established.*

5.2 The Committee consists of 5 Members.

5.3 The functions of the Committee are to —

(a) inquire into and report on —

- (i) the structure, efficiency and effectiveness of the system of public administration;
- (ii) the extent to which the principles of procedural fairness are embodied in any practice or procedure applied in decision making;
- (iii) the existence, adequacy, or availability, of merit and judicial review of administrative acts or decisions; and
- (iv) any Bill or other matter relating to the foregoing functions referred by the Council;

and

(b) consult regularly with the Parliamentary Commissioner for Administrative Investigations, the Public Sector Commissioner, the Information Commissioner, the Inspector of Custodial Services, and any similar officer.

5.4 The Committee is not to make inquiry with respect to —

- (a) the constitution, function or operations of the Executive Council;
- (b) the Governor's Establishment;
- (c) the constitution and administration of Parliament;
- (d) the judiciary;
- (e) a decision made by a person acting judicially;
- (f) a decision made by a person to exercise, or not exercise, a power of arrest or detention; or
- (g) the merits of a particular case or grievance that is not received as a petition.'



Parliament House,
4 Harvest Terrace, West Perth WA 6005
Telephone: +61 8 9222 7300
Email: lcco@parliament.wa.gov.au
Website: <http://www.parliament.wa.gov.au>

From: mrs
Subject: FW: City Submission on
Attachments: 23112016161803-0001.pdf; img_908100125.pdf; Second revision Flora and Veg Survey Forrestfield North.pdf

Lynette De Reggi and Peter Miles.

Sent from my iPad

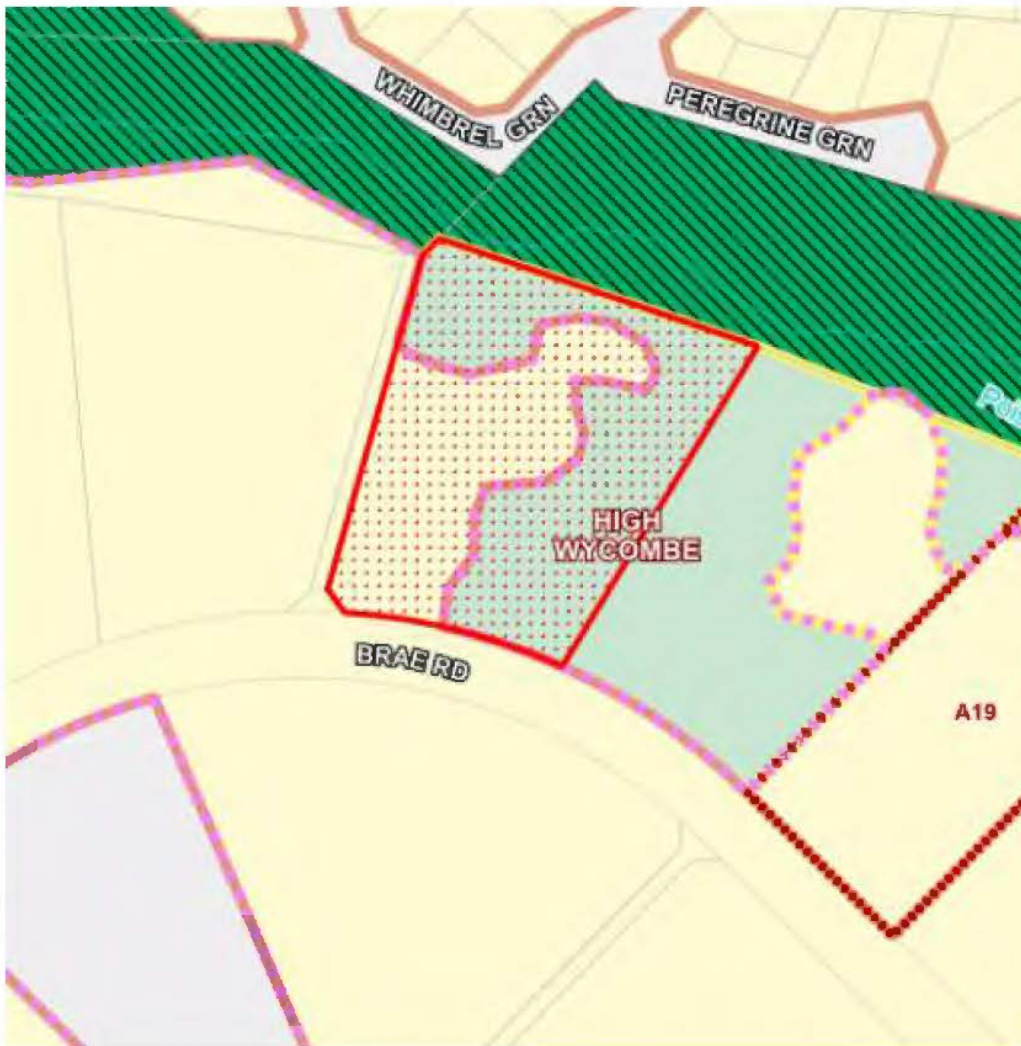
Hi Lyn,
Further to our discussion, see attached City submission requesting review of the Bush Forever Boundary.
Touch base if you have any queries.

Regards, PV
Peter Varelis
Director Development Services
T 9257 9930

Metropolitan Region Scheme: Urban and Rural with the rural area containing a Bush Forever overlay



Local Planning Scheme No.3: Special Rural and Urban Development with the Urban Development area being contained within Development Area 2 (pink lines).



Development Area 1 has the following specific provisions within LPS3:

PART 2: MILNER ROAD, HIGH WYCOMBE, DA2.

AMD 23 GG 07/02/12

In respect of the Urban Development Zone, identified as DA2 on the Scheme Map, the Structure Plan(s) for this area shall ensure — *AMD 75 GG 25/9/18*

- (i) the protection of the threatened ecological community in the area of Lot 12 (11) Ibis Place, High Wycombe, for conservation purposes. The boundary of the threatened ecological community shall be defined from botanical survey by a suitably qualified botanist and may extend beyond the lot boundary. In addition, a vegetation management plan shall be prepared and implemented. The management plan and boundary determination shall be completed on advice of the Department of Environment and Conservation and to the requirements of the Environmental Protection Authority, prior to determination of the Structure Plan; and
- (ii) The protection of declared rare flora, associated habitat, threatened fauna habitat, and low representation vegetation complexes in appropriately sized retention areas for conservation purposes. These retention areas shall be informed by Level 2 Flora and Vegetation and Fauna Surveys in accordance with EPA Guidance Statements 51 and 56 (or as revised), and targeted for Declared Rare Flora and threatened fauna, and associated habitat. The retention area size, location, protection and management mechanism shall be subject to OEPA advice prior to the WAPC endorsement of the structure plan.
- (iii) All future subdivision and development proposals must be consistent with the retention areas agreed under the above point. *AMD 75 GG 25/9/18*

Regards, PV

Peter Varelis

Director Development Services

T 9257 9930

www.kalamunda.wa.gov.au



Please consider the environment before you print this e-mail.

Disclaimer by the City of Kalamunda

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**From the office of the
Director Development Services**

23 November 2016
Your Ref: 833-2-1-65 (RLS/0595/1)



Secretary
ATTN: Tracey Scroop
Department of Planning
Locked Bag 2506
PERTH WA 6001

Dear Sir/Madam

**Submission on Metropolitan Region Scheme Amendment – Bush Forever
Omnibus – North**

Thank you for the opportunity to comment on the above proposals.

Landowners within Bush Forever site 45 have suggested that the environmental values associated with their properties are no longer present and the identification of their land as Bush Forever should be removed. The Shire made the commitment to review the environmental values of Bush Forever sites as part of the planning process for the Forrestfield North District Structure Plan.

As a summary, please refer to the recommendations below for each individual property:

Property	Bush Forever values present	Recommendation	Illustration Orange sections indicate land to be removed from Bush Forever and included in Urban
86 Brae Rd	<ul style="list-style-type: none"> • ecological communities • rarity • general criteria for the protection of wetland, streamline and estuarine fringing vegetation and coastal vegetation. 	<p>The majority of the vegetation is in good or worse condition (cleared or degraded). Whilst some alignment with Floristic Community Type 3c, the quality of the vegetation south of the dwelling is sufficiently degraded to provide the potential for the Bush Forever designation to be removed entirely or retracted to only include the northern extremity of the property given the proximity of this area to Poison Gully.</p>	
80 Brae Rd	<ul style="list-style-type: none"> • ecological communities • rarity • general criteria for the protection of wetland, streamline and estuarine fringing vegetation and coastal vegetation. 	<p>The vegetation contained within the Bush Forever site is predominantly in a Degraded and Good-Degraded condition, with a small area in Very Good condition in the north east of the site.</p> <p>The potential exists for the Bush Forever designation to be removed entirely or retracted to only include the northern extremity of the property given the proximity of this area to Poison Gully.</p>	

Property	Bush Forever values present	Recommendation
15 Milner Rd	<ul style="list-style-type: none"> • general criteria for the protection of wetland, streamline and estuarine fringing vegetation and coastal vegetation. 	The portion of the property that is contained within the Bush Forever site is in proximity to Poison Gully and therefore it is considered unlikely that the Bush Forever boundary would be modified.
15 Raven Street	<ul style="list-style-type: none"> • ecological communities • rarity • general criteria for the protection of wetland, streamline and estuarine fringing vegetation and coastal vegetation. 	The proposed amendment removes the cleared portion of land from Bush Forever. No further changes are recommended.
231 Maida Vale Road	<ul style="list-style-type: none"> • ecological communities • rarity • general criteria for the protection of wetland, streamline and estuarine fringing vegetation and coastal vegetation. 	The proposed amendment removes the cleared portion of land from Bush Forever. No further changes are recommended.

Attached is the full Flora and Vegetation Survey, which has informed the Shire's comment on this matter. For any clarification or questions, please call Jordan Koroveshi on 9257 9935 or email jordan.koroveshi@kalamunda.wa.gov.au.

Yours sincerely



Natalie Martin Goode
Director Development Services

Enc. Forrestfield North Spring Flora and Vegetation Survey



Our Ref: 833-2-1-65 (RLS/0595/1)
Your Ref: -
Enquiries: Tracey Scroop (6551 9348)

Chief Executive Officer
Shire of Kalamunda
PO Box 42
KALAMUNDA WA 6926

Dear Sir/Madam

**PROPOSED MRS AMENDMENT - BUSH FOREVER OMNIBUS - NORTH
REQUEST FOR PRELIMINARY COMMENT**

Please find attached a CD containing a report in support of a proposed amendment for the abovementioned area in the Metropolitan Region Scheme. It would be appreciated if you could provide any preliminary comments your organisation may have on the proposal by Friday 25 November 2016.

Once your comments have been reviewed, a report may be presented to the Western Australian Planning Commission recommending the initiation of an amendment to the Metropolitan Region Scheme. Should an amendment be initiated, we will again contact you seeking your formal comment on the amendment proposal.

If you have any queries regarding the proposed amendment, please email Tracey Scroop at tracey.scroop@planning.wa.gov.au.

Yours sincerely

A handwritten signature in black ink that reads "Kerrine Blenkinsop".

Kerrine Blenkinsop
Secretary
Western Australian Planning Commission

2 September 2016



DRAFT

Metropolitan Region Scheme Amendment No. 12xx/57 (Minor Amendment)

Bush Forever Omnibus (North)

Amendment Report

Cities of Joondalup, Swan & Wanneroo, and the Shire of
Kalamunda

CONTENTS

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	Abbreviations
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2.	Background
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5.	Sustainability Appraisal
6.	Substantiality.
7.	Aboriginal Heritage
8.	Coordination of Region and Local Scheme Amendments
9.	The Amendment Process
10.	Submissions on the Amendment.
11.	Modifications to the Amendment
12.	Final Outcome

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Appendix A	Notice of environmental assessment
Appendix B	List of Detailed Plans Supporting the Amendment
Appendix C	Your property and the Metropolitan Region Scheme
Appendix D	Preparing a submission
Appendix E	Submission Form for this Amendment (Form 57)

Metropolitan Region Scheme Amendment 12xx/57

Bush Forever Omnibus

1. PURPOSE

The purpose of the amendment is to amend various Bush Forever area boundaries in the Perth Metropolitan Region Scheme (MRS) in relation to rationalisations of zones and reservations to match cadastral boundaries and generally to ensure the MRS is kept up-to-date as the statutory regional plan for Perth. Amendments are proposed to address existing anomalies, amendments to cadastre boundaries and changes in Bush Forever areas as a result of planning decisions.

The amendment contains 26 separate proposals in Cities of Joondalup, Swan & Wanneroo, and the Shire of Kalamunda.

2. BACKGROUND

The amendment is part of a continuing program of amendments to the MRS. During this time, omnibus amendments have been utilised for progressing groups of proposals of relatively less significance in a regional context rather than progressing the proposals as individual amendments. This amendment is linked to the Central and South Bush Forever omnibus amendments.

3. ENVIRONMENTAL PROTECTION AUTHORITY ADVICE

{to be inserted after advice received from the EPA}

4. SCOPE AND CONTENT OF THE AMENDMENT

The amendment proposes the following changes to Bush Forever area boundaries, zones and reservations in the MRS.

CITY OF WANNEROO

PROPOSAL 1

Bush Forever area 494: to reserve Lot 8033 Flynn Drive, Carramar to Parks and Recreation and remove Bush Forever from the Flynn Drive road cadastre (Fig. 1).

Bush Forever area 494 was part of a negotiated planning solution (NPS). As the NPS has been finalised, and Lot 8033 is now in State ownership, this amendment seeks to reserve Lot 8033 as Parks and Recreation. A small portion of Bush Forever is within the Flynn Drive road cadastre. This proposal also seeks to rationalise the boundary to the cadastre of Lot 8033 and 8032.

PROPOSAL 2

Bush Forever area 147: to add Crown Allotments 10916, 1646 and part Lot 42 Caporn Street, Mariginiup to Bush Forever area 147 (Fig. 2).

The above lots are reserved as Parks and Recreation and are owned by the Western Australian Planning Commission. As such, this amendment seeks to add the land to Bush Forever.

PROPOSAL 3

Bush Forever area 295: to modify boundary of Bush Forever area 295 to the road reserve (Fig. 3).

This amendment seeks to rationalise the Bush Forever boundary so the built road is outside of Bush Forever, and the vegetated strip within Crown Reserve 11598 (which is currently not in Bush Forever) is included.

PROPOSAL 4

Bush Forever area 397: to modify the Bush Forever boundary to the Parks and Recreation reservation and Urban or Urban Deferred zoned land to be in line with Crown Allotment 12871 and Lots 8003, 8004 and 8005 Sovereign Drive, Two Rocks (Reserve R45379) and Crown Allotment 13321 (Reserve R45935) and Lot 9101 Two Rocks Road, Two Rocks (Fig. 4 a-e).

Reserves R45379 and R45935 are vested in the City of Wanneroo for foreshore management, so it is appropriate that the whole reserve is reserved as Parks and Recreation. The Parks and Recreation boundary and Bush Forever boundary do not align within a small portion of Lot 9101. This amendment seeks to align the two boundaries.

PROPOSAL 5

Bush Forever area 397: to remove the marina and breakwaters, Lot 8796 Pope Street, Two Rocks, from Bush Forever and add part Lot 8989 to Bush Forever area 397 and reserve for Parks and Recreation (Fig 5).

The marina and breakwater is void of vegetation as it is a developed marina and car park (as it has historically been) therefore there is no environmental reason to include the marina in Bush Forever. Lot 8989 is owned by the Western Australian Planning Commission and the majority of the lot is reserved for Parks and Recreation and Bush Forever. It is logical to add this small portion to Parks and Recreation and Bush Forever.

PROPOSAL 6

Bush Forever area 397: to modify Bush Forever boundary of Crown Allotment 15454 (Reserve 22915) Ocean Drive, Quinns Rock to the Parks and Recreation reservation (Fig. 6).

The boundary of Bush Forever area 397 on Crown Allotment 15454 Ocean Drive, Quinns Rock extends into the ocean, and therefore this amendment is to amend the Bush Forever boundary to the Parks and Recreation reservation boundary.

PROPOSAL 7

Bush Forever area 397: to modify the Bush Forever boundary to be in accordance with MRS Amendment 1029/33 Environmental Conditions (Fig. 7).

EPA Bulletin 1207 sets out the environmental conditions for the Alkimos-Eglinton MRS Amendment 1029/33. The amendments for this have been implemented, so there are locations where the Bush Forever boundary is now inconsistent, and should be amended to reflect the Parks and Recreation reservation.

PROPOSAL 8

Bush Forever area 397: to include the Parks and Recreation reservation portion of Lot 9036 Marmion Avenue and Crown Allotment 11593 (Reserve 11929), Jindalee in Bush Forever area 397 (Fig. 8).

A transfer of land has been undertaken between the land owner and the Western Australian Planning Commission. This portion was acquired by the WAPC in exchange for urban development closer to the foreshore. The inclusion of this land into Bush Forever once the land was transferred was the agreed outcome.

PROPOSAL 9

Bush Forever area 469: to amend the Bush Forever boundary to remove the cleared portion of the Caporn Street road reserve (Fig. 9).

Caporn Street has been upgraded, and a portion of the Bush Forever area has been cleared with the relevant planning and environmental approvals, so this amendment seeks to remove this portion of Bush Forever.

PROPOSAL 10

Bush Forever area 470: to amend the Bush Forever boundary to follow the Parks and Recreation reservation on Crown Allotment 10857 (Reserve R36601), and to increase both the Bush Forever area and the Parks and Recreation reservation to the clearly demarcated fenceline (Fig. 10).

The land is vested in the City of Wanneroo, and has a clearly defined boundary, so this amendment seeks to follow the fenceline, which increases the Bush Forever area to the south, and moves the east/west cadastre.

CITY OF SWAN

PROPOSAL 11

Bush Forever area 22: to modify the Bush Forever boundary to contain the whole of Lot 8021 Torres Parade, and add Lot 8022 to Bush Forever; to transfer Lot 8021 and 8022 Torres Parade from the Urban zone to Parks and Recreation reservation; to remove portions of Thomby and Holdsworth Avenue and Bellazario Promenade from Bush Forever (Fig. 11).

The Western Australian Planning Commission has advised that the subject land was acquired for the purposes of Bush Forever and conservation, and therefore is appropriate to be reserved as Parks and Recreation. This was part of a Negotiated Planning Solution.

The reserves for Holdsworth and Thomby Avenues and Bellazario are cleared, and therefore this amendment seeks to modify the Bush Forever overlay to the cadastral boundary.

PROPOSAL 12

Bush Forever area 291: to modify boundary of Bush Forever area 291 to include the whole of Lot 13974 Woodsend Court Bullsbrook (Fig. 12).

Lot 13974 (Reserve R46564) is vested with the Conservation Commission of Western Australia, and is reserved Parks and Recreation. Therefore this amendment seeks to rationalise the Bush Forever overlay to the cadastral boundary for ease of management.

PROPOSAL 13

Bush Forever area 292: to include all of Lot 3739 Great Northern Highway, Bullsbrook into Bush Forever area 292 (Fig. 13).

Lot 3739 (Reserve R 1654) is vested in the National Parks and Natural Conservation Authority and is reserved Parks and Recreation. Therefore this amendment seeks to modify the Bush Forever overlay to the Parks and Recreation boundary.

PROPOSAL 14

Bush Forever area 294: to exclude the Pearce Airport runways and buildings from Bush Forever area 294; to add Lot 52 Great Northern Highway and vegetated portions of Lots 200 Almeria Parade, 123 Great Northern Highway, 156 and 157 Turner Road, Bullsbrook to Bush Forever area 294 (Fig. 14).

All the land is owned by the Commonwealth of Australia. The airport does not historically have any mapped native vegetation, so this amendment seeks to remove the cleared areas from Bush Forever, and include the small vegetated pockets within Lots 52 and 123 Great Northern Highway, Lot 200 Almeria Parade and Lots 156 and 157 Turner Road, which are currently not within Bush Forever.

PROPOSAL 15

Bush Forever area 300: to add Lot 12860 Reserve R 46920 to Bush Forever area 300 (Fig. 15).

Lot 12860 (Reserve R 46920) is vested with the Conservation Commission of Western Australia, and is fully vegetated. Based on desktop aerials, it is assumed that this vegetation is of high quality, and as such, this amendment seeks to add to Bush Forever area 300.

PROPOSAL 16

Bush Forever area 300: to remove Lots 8377, 8378, 8379, 8158, 8157, 8148, 8147, 8146, 8139, 8138, 8137, 8129, 8128, 8127, 7350, 7351, 7349, 7348, 7347, 7346, 7345, 7344, 7341, 7340, 7342 and part Lots 8159, 8149, 8145, 8130, 8126, 8165, 7352, 7353, 7354, 7355, 7356, 7339, 7343, 7338, 9268, Grassdale Parkway, Stonyford Bend, Pineroo Terrace from Bush Forever (Urban zoned land). The small part of Bush Forever within the public road reservations of Stonyford Bend, Grassdale Parkway, Pineroo Terrace, Derwent Street, Waggego Outlook, and Riverland Drive is also to be removed (Fig. 16).

The various lots and public roads above are zoned Urban and have already been developed. As such, this amendment seeks to remove the Bush Forever overlay and align it to the Bushland side of Pineroo Terrace within Reserve 46875.

PROPOSAL 17

Bush Forever area 300: to include all of Reserve 46875 into Bush Forever area 300. Remove Lots 9383 and 9384 Wilding Boulevard and part Lots , 9378, 9379, 9380, 9381, 9382, 9385, 9386, 9387, 9407, 9408, 9409 Wilding Boulevard. Remove part Lot 9521 and 9308 Spring Street, Lot 9136 and part lot 8915 and 9095 (unnamed road) and part Lots 9127, 9128, 9129, 9130, 9131, 9132, 9133, 9135 Hawthornden Avenue. Remove part Wilding Boulevard, Sadlier Lane, Moraba Grove, Banrock Drive, Helms Loop, Dagarup Way, Gonaning Street and Hawthornden Avenue from Bush Forever (Urban zoned land) (Fig. 17 a-c).

Reserve 46875 (Lots 545 and 542) is vested in the Conservation Commission of Western Australia, and (Lot 544) is owned by the State of WA. They are reserved as Parks and Recreation, so this amendment seeks to modify the Bush Forever boundary to the P&R reservation and cadastre boundaries.

The various lots and road reserves for removal are devoid of native vegetation, are zoned Urban and built on, and therefore appropriate to remove from Bush Forever.

PROPOSAL 18

Bush Forever area 385: to include Lot 15141 Alexander Drive, Malaga into Bush Forever area 385 and reserve as Parks and Recreation (Fig. 18).

Lot 15141 Alexander Drive, Malaga is unallocated Crown Land which is mapped Karrakatta Central and South vegetation complex and directly abuts Bush Forever area 385. This amendment seeks to include into Bush Forever, and reserve as Parks and Recreation from Industrial zoned land.

PROPOSAL 19

Bush Forever area 386: to modify the boundary of Bush Forever within Lot 1 Kalamunda Road, Perth Airport (Fig. 19).

Lot 1 Kalamunda Road, Perth Airport is owned by the Commonwealth of Australia. Part of Lot 1 should be removed from Bush Forever as it has been developed, in accordance with the Perth Airport Master Plan, and no longer serves an environmental purpose.

PROPOSAL 20

Bush Forever area 481: to remove Lot 3 Midland Road, Hazelmere and adjoining public road from Bush Forever area 481 (Fig. 20).

Lot 3 Midland Road (and adjoining public road), Hazelmere was cleared of all vegetation before 2000, and as such, this amendment seeks to remove the Bush Forever overlay, as it was not appropriately identified previously.

PROPOSAL 21

Bush Forever area 491: to modify the boundary of Bush Forever area 491 within Lot 400 Wilkie Street, South Guildford to remove the river and to include bushland that was omitted (Fig. 21).

This amendment seeks to rationalise the Bush Forever overlay in accordance with cadastral and Parks and Recreation reservation boundaries.

CITY OF JOONDALUP

PROPOSAL 22

Bush Forever area 299: to modify the boundary of Bush Forever area 299 to remove Lake Side Drive (Fig. 22).

Part of Bush Forever area 299 is located in the Joondalup City Centre, which is largely devoid of vegetation, so this amendment seeks to modify the Bush Forever overlay to exclude the public road. The inclusion of the public road into Bush Forever was an anomaly from 2000.

PROPOSAL 23

Bush Forever area 303: to modify the boundary of Bush Forever area 303 to remove one hectare for the Metropolitan Cemeteries Board (Fig. 23).

In 2004, a commitment was made by the Bush Forever Technical Advisory Group to provide the Metropolitan Cemeteries Board (MCB) one hectare of land within Bush Forever area 303, for one hectare of MCB land that was provided to Western Power for a substation. Western Power previously relinquished its one hectare site, which was incorporated into Bush Forever 303 in 2005.

MBC provided three alternative sites for the one hectare, based on the needs of MCB and location to other burial sites. A site visit was conducted with officers of MCB, Department of Planning and Office of Environmental Protection Agency, and an alternative site (current proposal) was recommended, which took into account MCB's need for the site to be near a road, and the vegetation condition.

SHIRE OF KALAMUNDA

PROPOSAL 24

Bush Forever area 45: to modify the boundary of Bush Forever area 45 on Lots 1353 Maida Vale Road, 100 Raven Street and 104 Raven Street, High Wycombe and rezone removed portion to Urban (Fig. 24).

This amendment seeks to rationalise the boundary of the Bush Forever area overlay to exclude existing housing from Bush Forever, and to rezone this land to Urban. This will potentially facilitate the ceding of Bush Forever land at subdivision.

PROPOSAL 25

Bush Forever area 50: to include part Lot 2611 Schofield Road, Wattle Grove into Bush Forever area 50 (Fig. 25).

The amendment seeks to add part Lot 2611 Schofield Road to Bush Forever area 50, the Forrestfield vegetation complex portion. In 2000, this area was investigated to be included in Bush Forever, however the vegetation was not deemed to be regionally significant at that time as it was a rehabilitated gravel pit. The site has now been successfully re-established, and may now be considered regionally significant. The land is owned by State of WA, with a land use for Government Requirements.

PROPOSAL 26

Bush Forever area 387: to remove Lot 341 Welshpool Road, Wattle Grove from Bush Forever area 387 and Parks and Recreation reservation (Fig. 26).

Lot 341 Welshpool Road, Wattle Grove is devoid of any native vegetation, and historically this has always been the case. This amendment seeks to remove the Lot from Bush Forever and to rezone the Lot from Parks and Recreation to Urban.

5. SUSTAINABILITY APPRAISAL

Due to the small scale of the proposals in this amendment, many have no significant sustainability impacts. Where proposals do have environmental, economic, social or other sustainability issues, these are discussed in the sections on each individual proposal.

6. Substantiality

The *Planning and Development Act, 2005* allows for amendments to the MRS to be processed as either "minor" or "major" amendments depending on whether they are considered to constitute a substantial alteration to the MRS. WAPC Policy DC 1.9 "Matters to be Taken Into Account When Deciding Substantiality for the Purpose of the Act" sets out the criteria for deciding whether the "major" or "minor" process should be followed. The criteria relate to a variety of matters, not all of which relate to every amendment. In this regard, the amendment is proposed to be processed as a "minor" amendment as the extent and minor nature of each proposal does not constitute a substantial or regional change to the planning philosophy of the MRS.

7. ABORIGINAL HERITAGE

The *Aboriginal Heritage Act 1972* (AHA) provides for the protection and preservation of Aboriginal heritage and culture throughout Western Australia, including places and objects that are of significance to Aboriginal people. Aboriginal sites and materials are protected whether or not they have been previously recorded or reported.

The process of rezoning or reservation of land in a region scheme is not in itself directly affected by the AHA. Proposed changes to land-use are broad by nature and do not physically interfere with the land. Consideration of any protection that may be required is addressed more specifically at later stages of the planning process,

typically being a local planning scheme amendment and when preparing a local structure plan.

Nevertheless, in recognising the importance of having reliable Aboriginal information on land and the values attached to it, the WAPC / Department of Planning has entered into a Memorandum of Understanding with the South West Aboriginal Land and Sea Council (SWALSC) for the provision of Aboriginal consultative services. All MRS amendment proposals likely to have Aboriginal interest are now referred to SWALSC for comment before being released for public submission. SWALSC is the recognised Native Title Representative Body for Western Australia's South-West region, and as such is also well placed to provide advice on Aboriginal heritage.

In this regard, this omnibus amendment has not been pre-referred to SWALSC as it was considered that it did not impact on Aboriginal Heritage issues. However, it will be referred to SWALSC during the advertising period.

8. CO-ORDINATION OF REGION AND LOCAL SCHEME AMENDMENTS

Section 126(3) of the *Planning and Development Act 2005* allows for the concurrent amendment of a Local Planning Scheme to a "Development" zone (or similar) where land is to be transferred to the Urban zone in the MRS.

The concurrent Local Scheme amendment of proposals which zone land Urban, under Section 126(3) of the *Planning and Development Act 2005*, will be considered by the WAPC after all submissions have been received.

9. THE AMENDMENT PROCESS

The procedures for a minor amendment of the MRS are prescribed by the *Planning and Development Act, 2005*. The amendment proposed in this report is being made under the provisions of Section 57 of that Act.

In essence, this procedure for an amendment not constituting a substantial alteration to the MRS (often referred to as a "minor amendment") involves:

- formulation of the amendment by the WAPC;
- referral to the EPA for environmental assessment;
- completion of an Environmental Review (if required) to EPA instructions;
- public submissions being sought on the proposed amendment (including Environmental Review if required);
- consideration of submissions;
- approval, with or without any modifications in response to submissions, or decline to approve by the Minister; and
- the amendment takes legal effect with Gazettal of the Minister's approval.

An explanation of this process can also be found in the front of this report, entitled ‘*The Metropolitan Region Scheme, what it is and how it is amended*’.

10. SUBMISSIONS ON THE AMENDMENT

The amendment will be advertised for public submissions for a period of 60 days from the date of gazettal, being Friday, xx xxx 2016.

Copies of the amendments are available for public inspection at:

- i) the Western Australian Planning Commission, 140 William Street Perth
- ii) the offices of the local governments Cities of Joondalup, Swan and Wanneroo and the Shire of Kalamunda; and
- iii) the State Reference Library, Northbridge.

Written submissions commenting on the amendment should be sent to:-

The Secretary
Western Australian Planning Commission
Locked Bag 2506
PERTH WA 6001

And must be received by 5pm Friday xx

For your convenience a submission form (Form 57) for this amendment No. 12xx/57 – Omnibus xx is attached to this report (Appendix x). Additional copies of this form are available from the display locations listed above and from the PlanningWA website www.planning.wa.gov.au.

You should be aware that calling for submissions is a public process and all submissions lodged will together become a public document. The document will be published and made available when the Minister has made a determination on the amendment. Advice of disclosure and access requirements is shown on side two of the submission form.

Before making your submission, it is recommended that you read the information in Appendix x of this report regarding preparing a submission.

11. MODIFICATIONS TO THE AMENDMENT

After considering any comments received from Government agencies and the public, the WAPC may recommend that the Minister modify the amendment. The Minister may approve the amendment, with or without any modifications in response to submissions, or decline to approve.

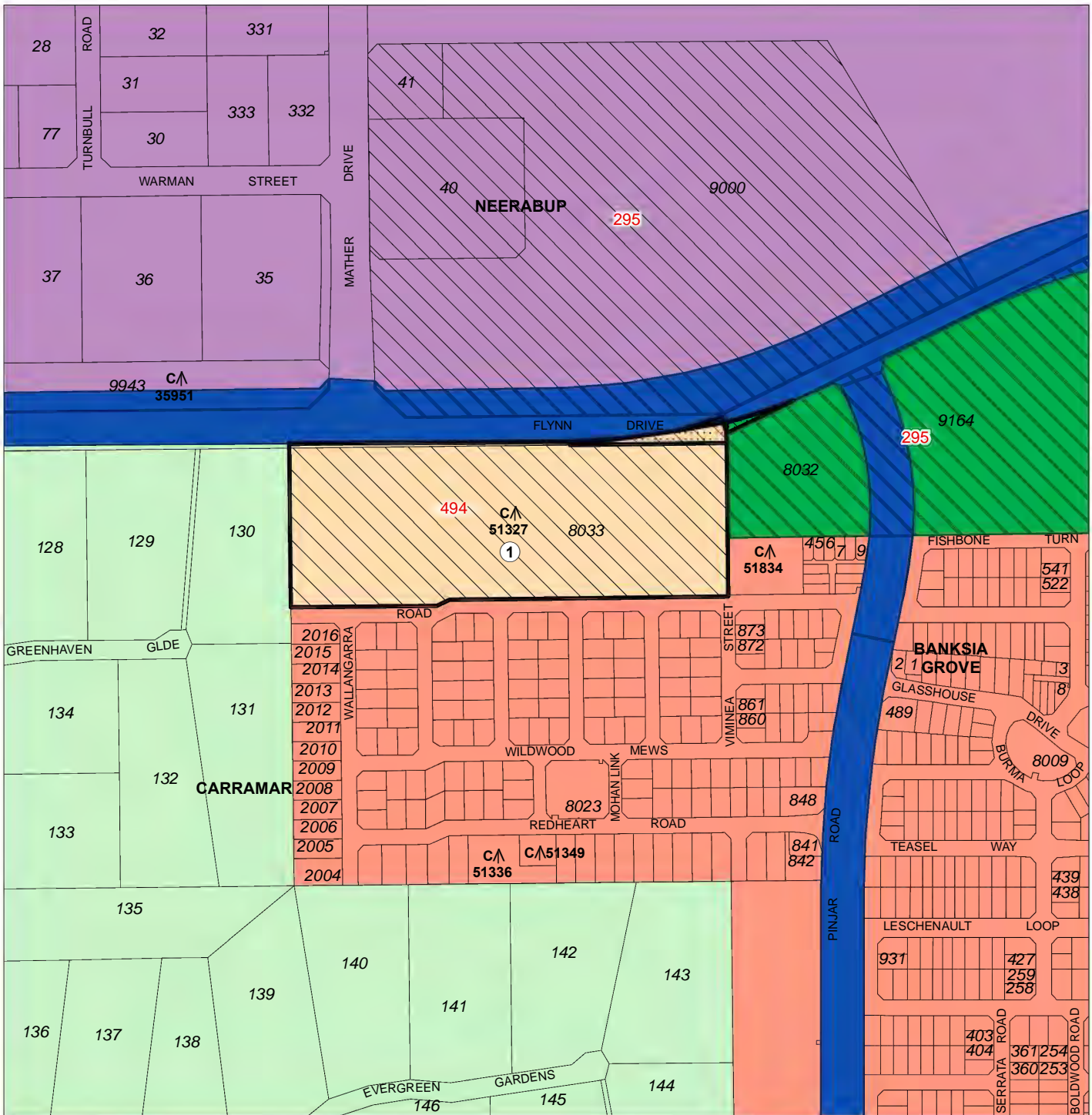
12. FINAL OUTCOME

The recommendations of the WAPC, including any modifications, are published in the Report on Submissions. Anyone who has made a submission will receive a copy of this document when the amendment is finalized.

MRS Amendment xxxx/57

**Bush Forever Omnibus
Amendment No. 1**

**FIGURES
Proposals 1-26**




Bush Forever Omnibus (North) Proposed Minor Amendment as advertised


30 Aug 2016

Proposal 1








Proposed Amendment:

 Parks and recreation reservation

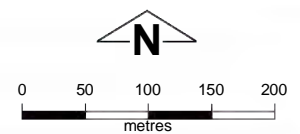
Notice of Delegation

 (Site No) Bush Forever area removal

Existing Region Scheme:

-  Industrial
-  Other regional roads
-  Parks and recreation
-  Rural
-  Urban
-  Urban deferred
-  (Site No) Bush forever areas

Oracle reference no: 2882
File number: 833/02/01/0065P
Version number: 2






**Bush Forever Omnibus (North)
Proposed Minor Amendment
as advertised**

31 May 2016







Proposal 2

Proposed Amendment:

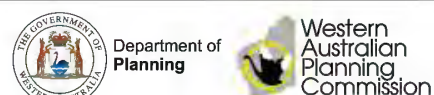
Notice of Delegation

 (Site No) Bush Forever area addition

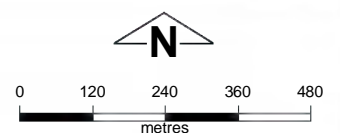
Existing Region Scheme:

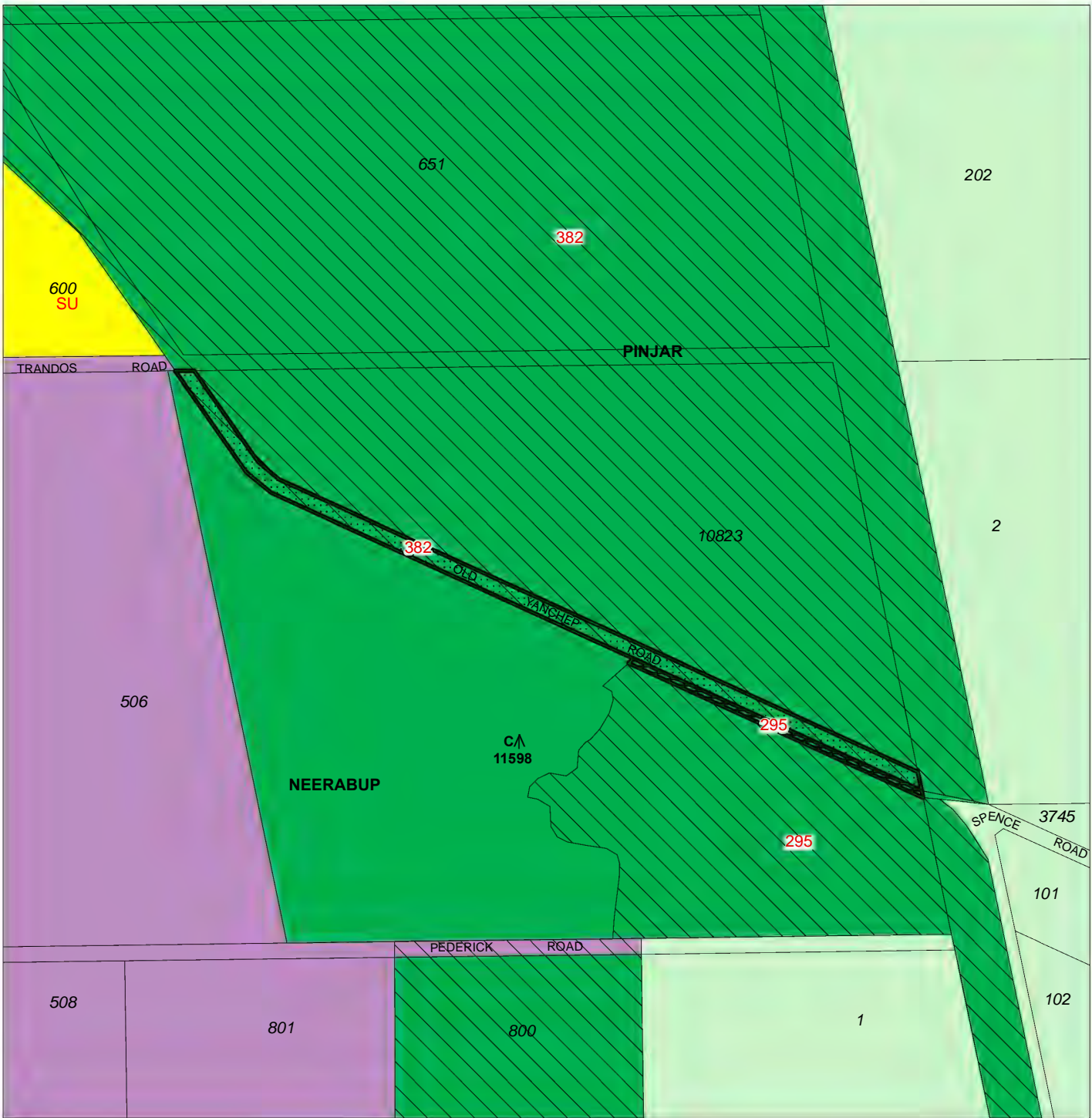
-  Other regional roads
-  Parks and recreation
-  Rural
-  Urban
-  Urban deferred
-  (Site No) Bush forever areas

Oracle reference no: 2882
File number: 833/02/01/0065P
Version number: 1



Date: 1/06/2016
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**Bush Forever Omnibus (North)
Proposed Minor Amendment
as advertised**


31 May 2016

Proposal 3





Proposed Amendment:

Notice of Delegation

 (Site No) Bush Forever area addition

 (Site No) Bush Forever area removal

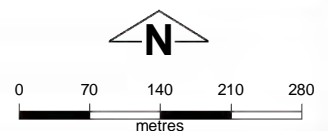
Existing Region Scheme:

-  Industrial
-  Parks and recreation
-  SU Public purposes - special uses
-  Rural
-  (Site No) Bush forever areas

Oracle reference no: 2882
File number: 833/02/01/0065P
Version number: 1



Date: 1/06/2016
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Bush Forever Omnibus (North)
Proposed Minor Amendment
as advertised

31 May 2016

Proposal 4a

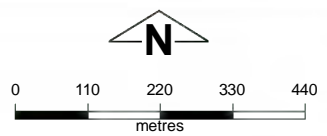
Proposed Amendment:

- 1 Parks and recreation reservation
- 2 Urban zone

Existing Region Scheme:

- Parks and recreation
- Urban
- Waterways
- (Site No) Bush forever areas

Oracle reference no: 2882
File number: 833/02/01/0065P
Version number: 1






**Bush Forever Omnibus (North)
Proposed Minor Amendment
as advertised**


30 Aug 2016

Proposal 4b


Proposed Amendment:

 Parks and recreation reservation


Notice of Delegation


 (Site No) Bush Forever area addition

Existing Region Scheme:

 Parks and recreation

 Urban

 Waterways

 (Site No) Bush forever areas

Oracle reference no: 2882

File number: 833/02/01/0065P

Version number: 2

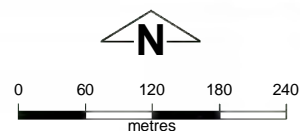


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**Bush Forever Omnibus (North)
Proposed Minor Amendment
as advertised**

30 Aug 2016

Proposal 4c

Proposed Amendment:

- 1 Parks and recreation reservation
- 3 Urban deferred zone

Existing Region Scheme:

- Other regional roads
- Parks and recreation
- Urban
- Urban deferred
- Waterways
- (Site No) Bush forever areas

Oracle reference no: 2882
File number: 833/02/01/0065P
Version number: 2

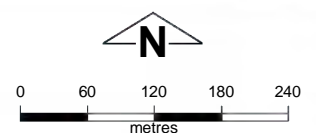


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**Bush Forever Omnibus (North)
Proposed Minor Amendment
as advertised**

31 May 2016

Proposal 4d

Proposed Amendment:

- 1 Parks and recreation reservation
- 3 Urban deferred zone

Existing Region Scheme:

- Parks and recreation
- Urban deferred
- Waterways
- (Site No) Bush forever areas

Oracle reference no: 2882
File number: 833/02/01/0065P
Version number: 1

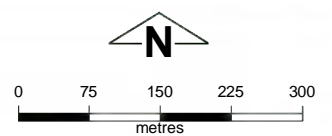


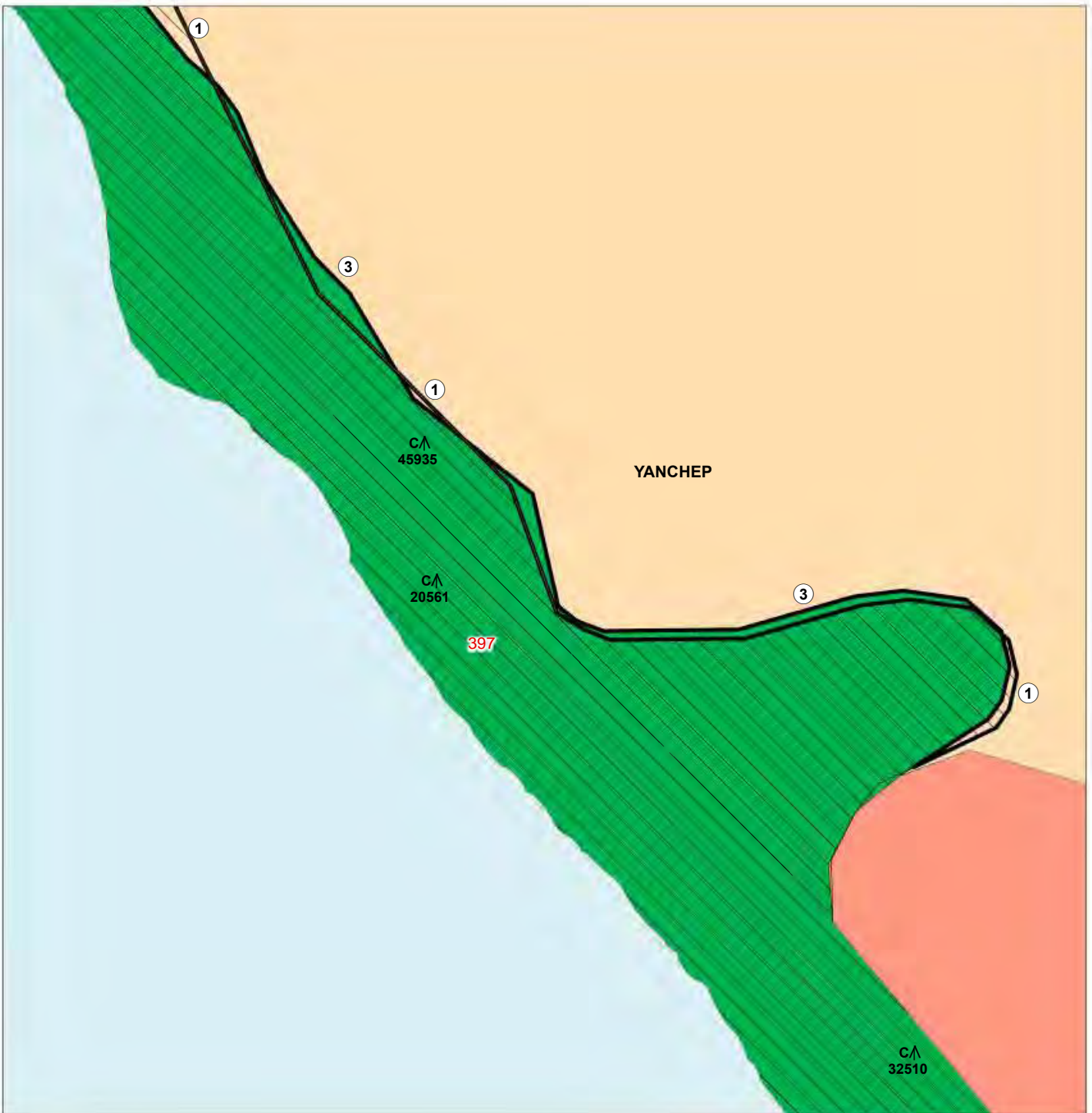
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**Bush Forever Omnibus (North)
Proposed Minor Amendment
as advertised**

30 Aug 2016

Proposal 4e

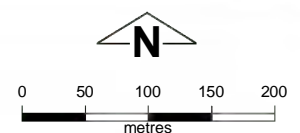
Proposed Amendment:

- 1 Parks and recreation reservation
- 3 Urban deferred zone

Existing Region Scheme:

- Parks and recreation
- Urban
- Urban deferred
- Waterways
- (Site No) Bush forever areas

Oracle reference no: 2882
File number: 833/02/01/0065P
Version number: 2






**Bush Forever Omnibus (North)
Proposed Minor Amendment
as advertised**


31 May 2016


Proposal 5

Proposed Amendment:

 Parks and recreation reservation


Notice of Delegation

 (Site No) Bush Forever area addition

 (Site No) Bush Forever area removal


Existing Region Scheme:

 Other regional roads  (Site No) Bush forever areas

 Parks and recreation

 Urban

 Urban deferred

 Waterways

Oracle reference no: 2882

File number: 833/02/01/0065P

Version number: 1

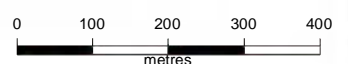


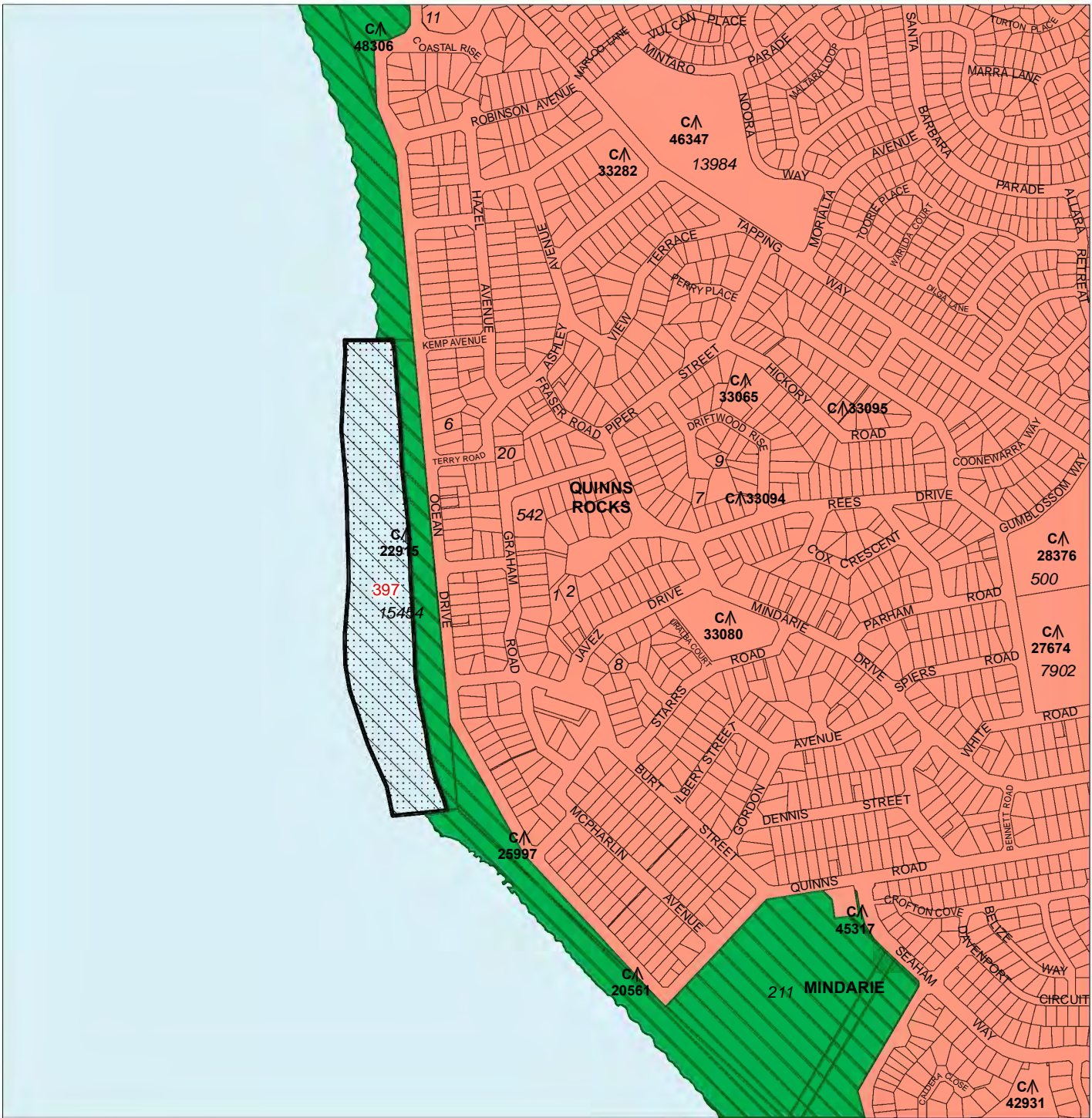
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Date: 24/08/2016
Produced by GeoSpatial Research and Modelling, Department of Planning, Perth WA
Base information supplied by Western Australian Land Information Authority LI 782-2015-1






**Bush Forever Omnibus (North)
Proposed Minor Amendment
as advertised**

31 May 2016


Proposal 6

Proposed Amendment:


Notice of Delegation


 (Site No) Bush Forever area removal

Existing Region Scheme:

 Parks and recreation

 Urban

 Waterways

 (Site No) Bush forever areas

Oracle reference no: 2882

File number: 833/02/01/0065P

Version number: 1

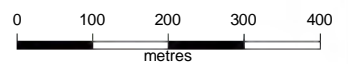


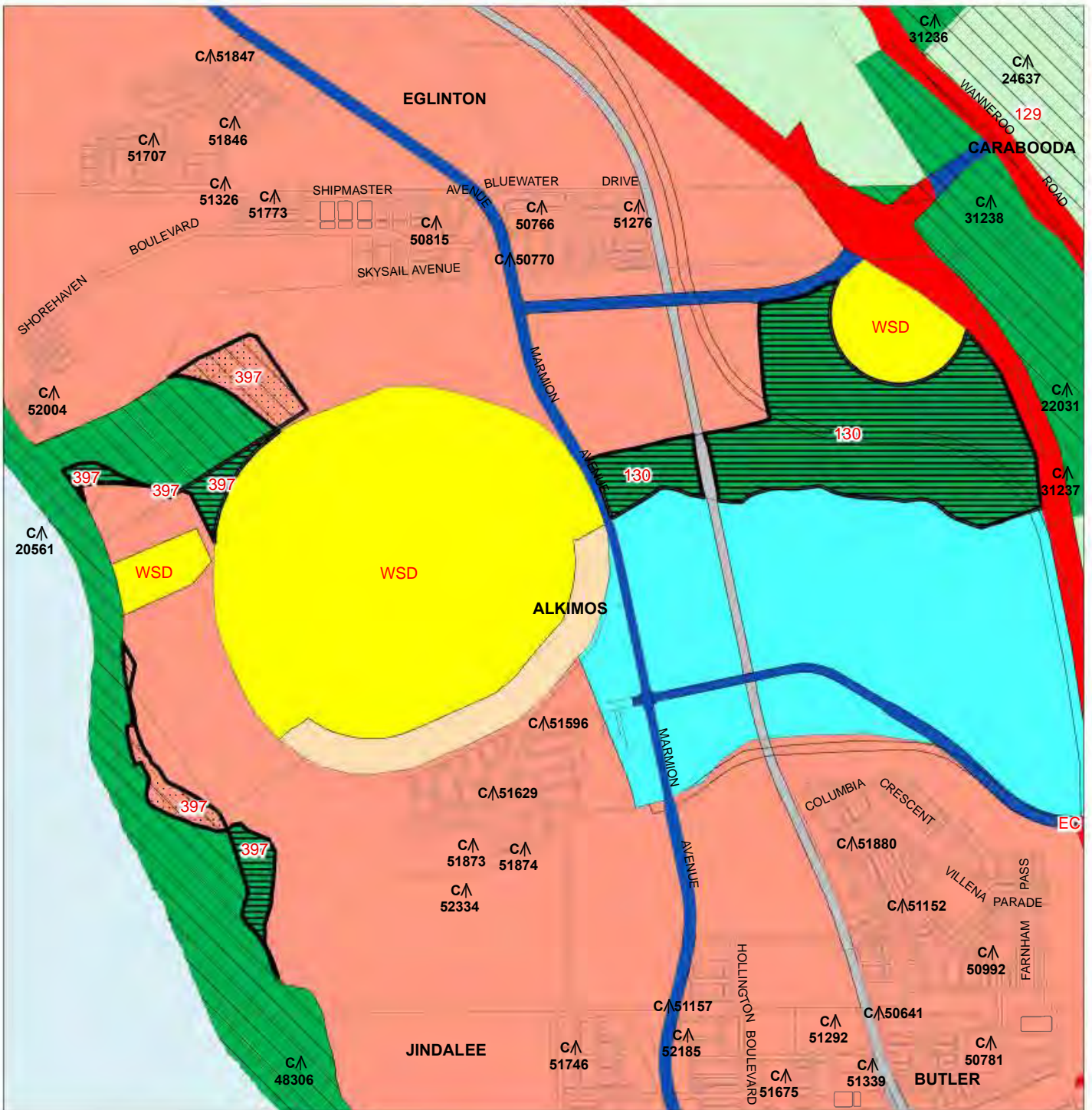
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Bush Forever Omnibus (North) Proposed Minor Amendment as advertised

31 May 2016

Proposal 7













Proposed Amendment:

Notice of Delegation

 (Site No) Bush Forever area addition

 (Site No) Bush Forever area removal

Existing Region Scheme:

- | | |
|---|--|
|  Central city area |  Rural |
|  Other regional roads |  Urban |
|  Parks and recreation |  Urban deferred |
|  Primary regional roads |  Waterways |
|  WSD Public purposes - Water Authority of WA |  (Site No) Bush forever areas |
|  Railways |  Environmental conditions |

Oracle reference no: 2882

File number: 833/02/01/0065P

Version number: 1

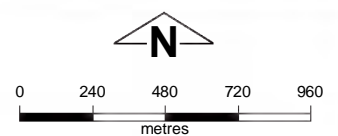


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**Bush Forever Omnibus (North)
Proposed Minor Amendment
as advertised**

31 May 2016

Proposal 8

Proposed Amendment:

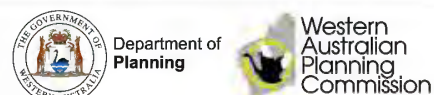
Notice of Delegation

 (Site No) Bush Forever area addition

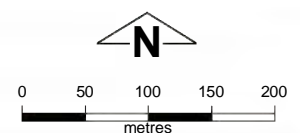
Existing Region Scheme:

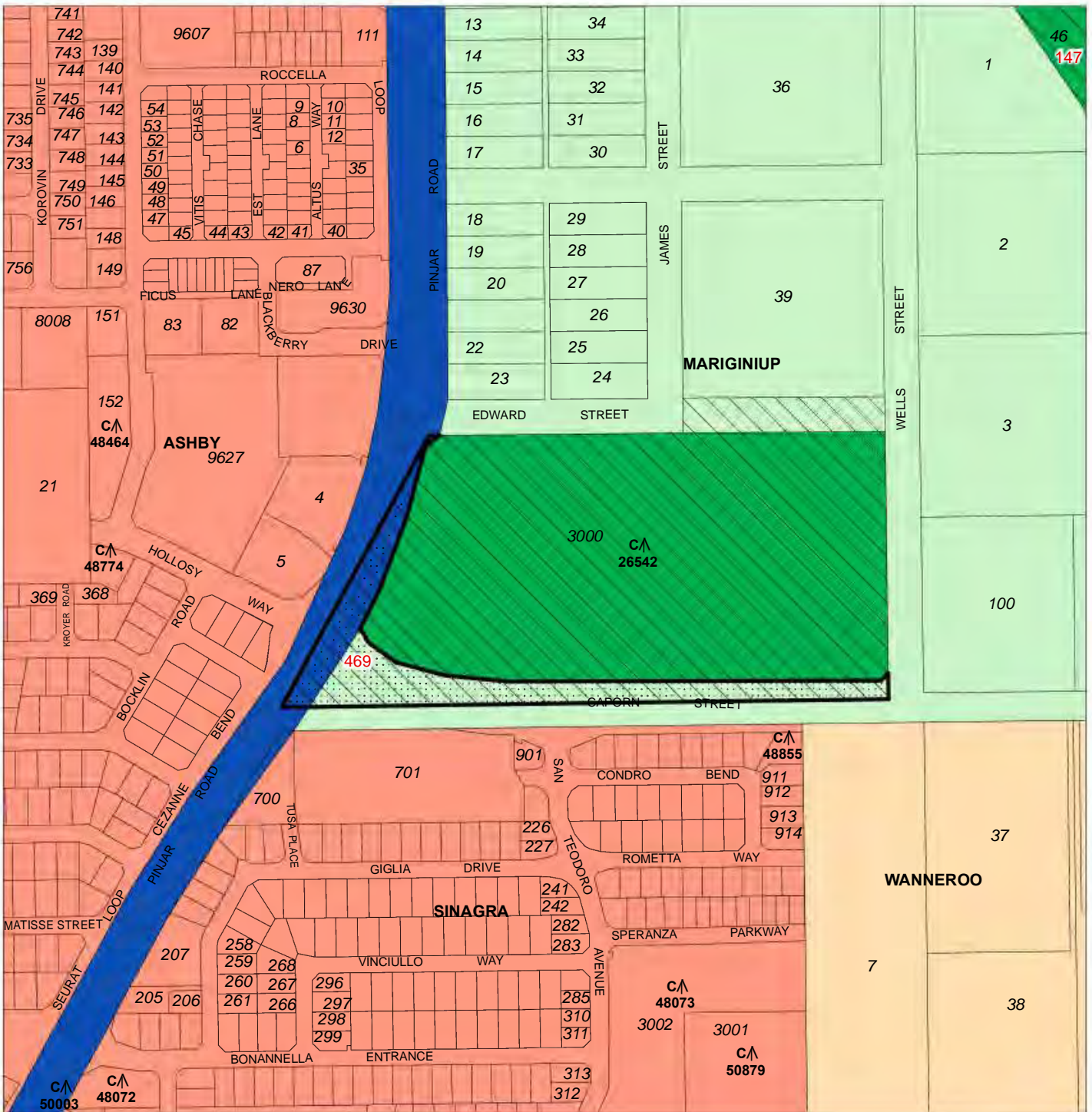
-  Other regional roads
-  Parks and recreation
-  Urban

Oracle reference no: 2882
File number: 833/02/01/0065P
Version number: 1



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**Bush Forever Omnibus (North)
Proposed Minor Amendment
as advertised**

31 May 2016







Proposal 9

Proposed Amendment:

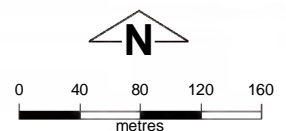
Notice of Delegation

 (Site No) Bush Forever area removal

Existing Region Scheme:

-  Other regional roads
 -  Parks and recreation
 -  Rural
 -  Urban
 -  Urban deferred
-  (Site No) Bush forever areas

Oracle reference no: 2882
File number: 833/02/01/0065P
Version number: 1






**Bush Forever Omnibus (North)
Proposed Minor Amendment
as advertised**


31 May 2016


Proposal 10

Proposed Amendment:


 Parks and recreation reservation

Notice of Delegation


 (Site No) Bush Forever area addition

 (Site No) Bush Forever area removal

Existing Region Scheme:

 Parks and recreation

 Rural

 (Site No) Bush forever areas

Oracle reference no: 2882

File number: 833/02/01/0065P

Version number: 1

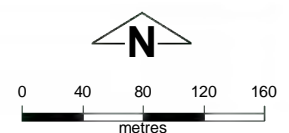


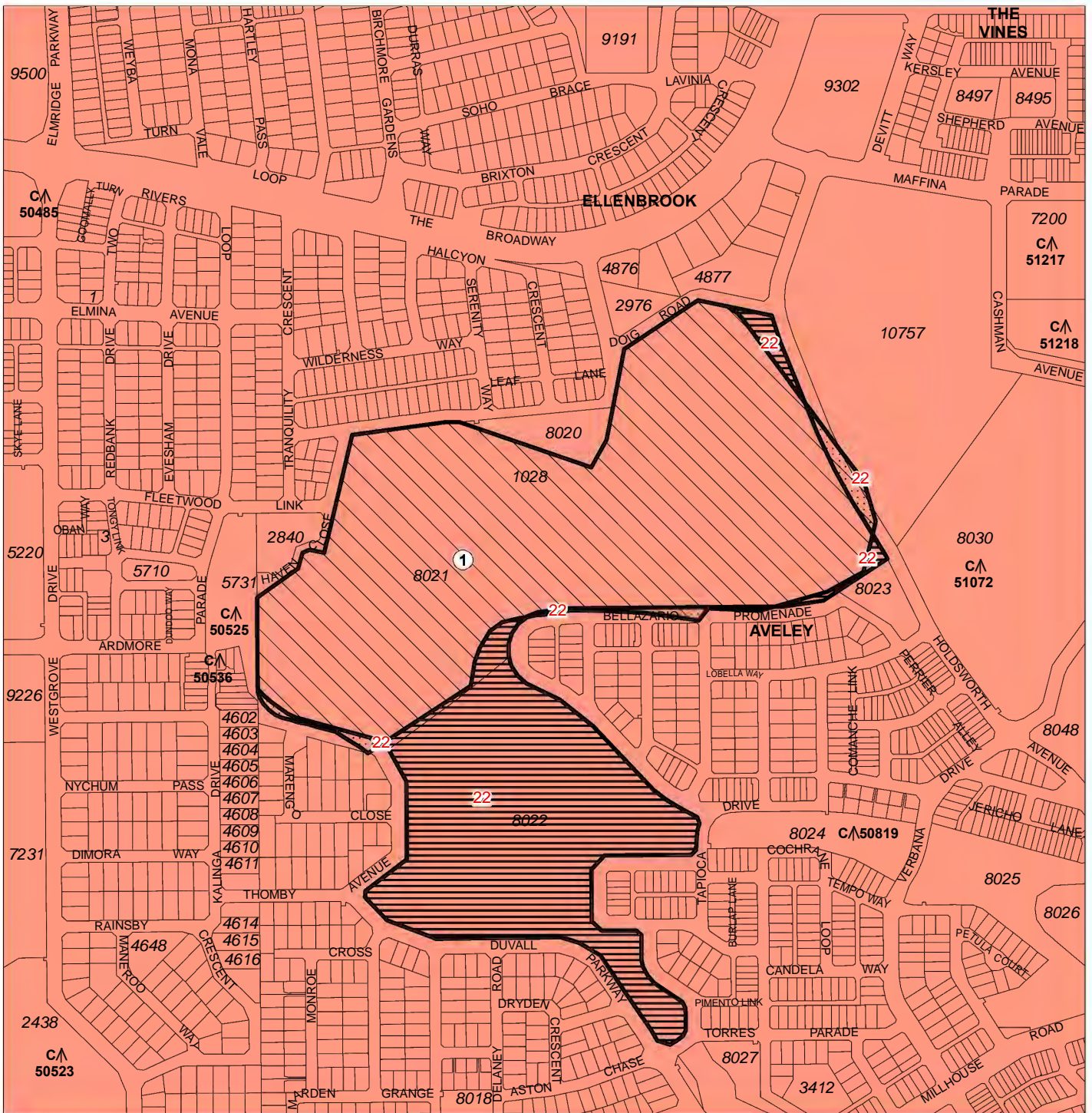
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Bush Forever Omnibus (North) Proposed Minor Amendment as advertised



31 May 2016

Proposal 11

Proposed Amendment:

-  Parks and recreation reservation
- Notice of Delegation**
-  (Site No) Bush Forever area addition
-  (Site No) Bush Forever area removal

Existing Region Scheme:

-  Urban
-  (Site No) Bush forever areas

Oracle reference no: 2882
File number: 833/02/01/0065P
Version number: 1

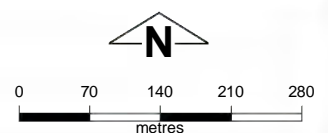


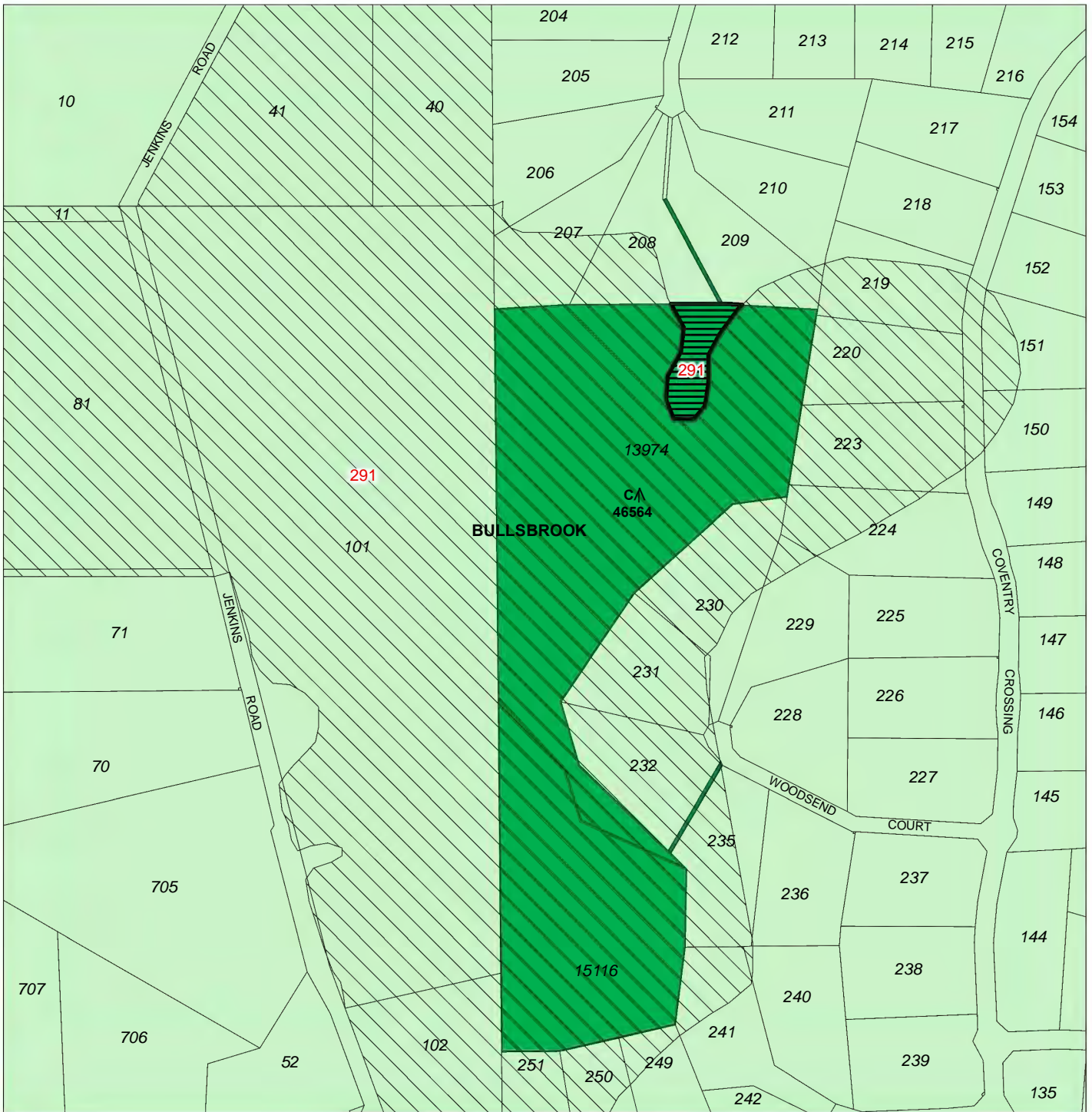
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**Bush Forever Omnibus (North)
Proposed Minor Amendment
as advertised**

31 May 2016


Proposal 12

Proposed Amendment:


Notice of Delegation

 (Site No) Bush Forever area addition

Existing Region Scheme:

 Parks and recreation

 Rural

 (Site No) Bush forever areas

Oracle reference no: 2882

File number: 833/02/01/0065P

Version number: 1

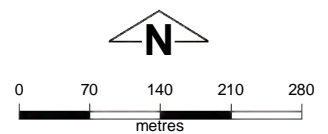


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**Bush Forever Omnibus (North)
Proposed Minor Amendment
as advertised**

31 May 2016


Proposal 13


Proposed Amendment:

Notice of Delegation


 (Site No) Bush Forever area addition

Existing Region Scheme:

 R Parks and recreation - restricted public access

 Primary regional roads

 Rural

 (Site No) Bush forever areas

Oracle reference no: 2882

File number: 833/02/01/0065P

Version number: 1

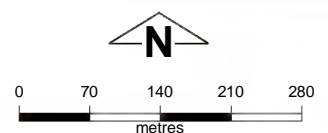


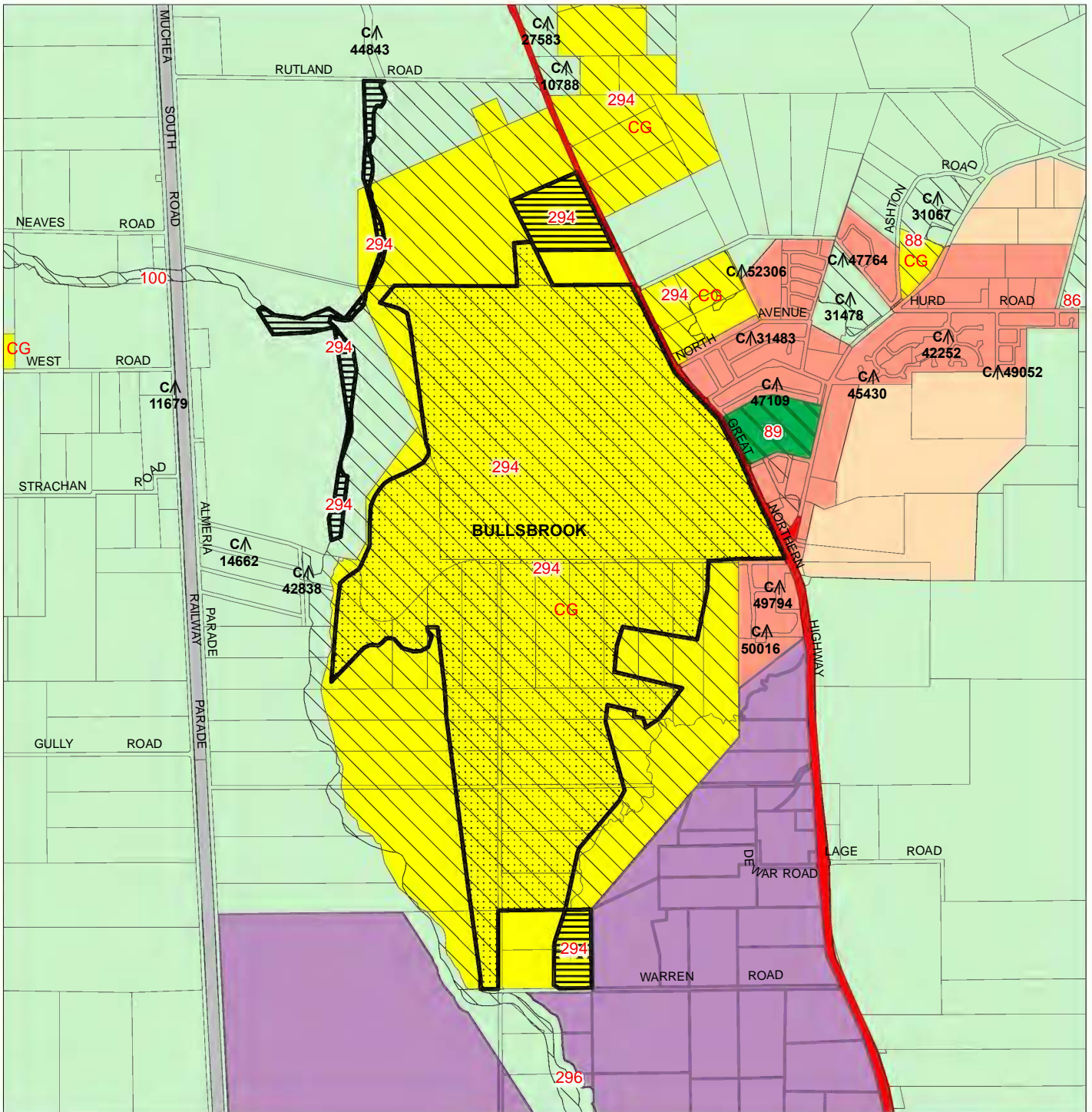
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**Bush Forever Omnibus (North)
Proposed Minor Amendment
as advertised**


31 May 2016

Proposal 14



Proposed Amendment:

Notice of Delegation

 (Site No) Bush Forever area addition

 (Site No) Bush Forever area removal

Existing Region Scheme:

-  Industrial
-  Parks and recreation
-  Primary regional roads
-  CG Public purposes - Commonwealth Government
-  Railways
-  Rural
-  Urban
-  Urban deferred
-  (Site No) Bush forever areas

Oracle reference no: 2882

File number: 833/02/01/0065P

Version number: 1

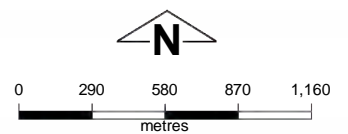


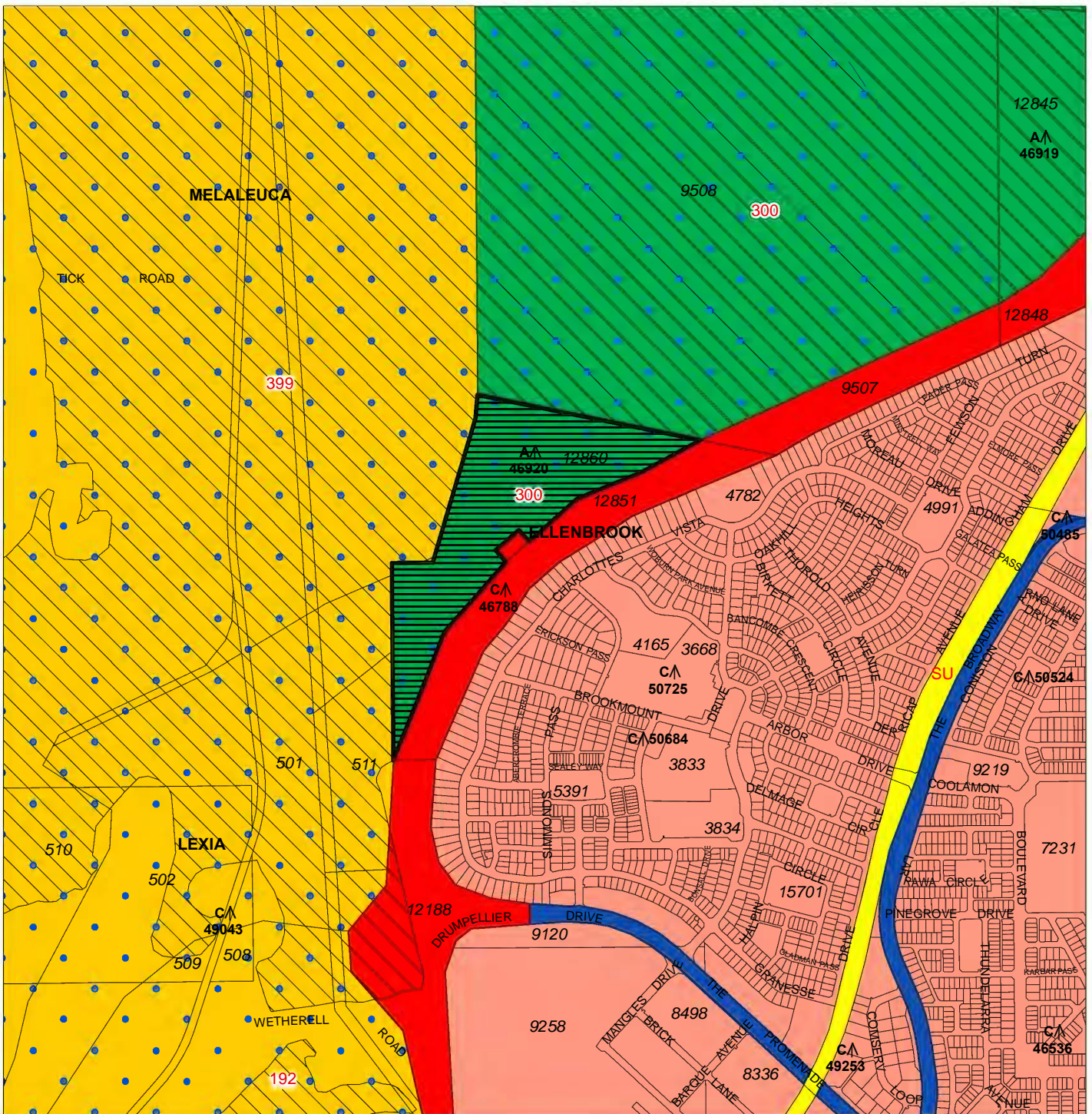
Department of Planning



Western Australian Planning Commission

Date: 1/06/2016
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Base information supplied by Western Australian Land Information Authority LI 782-2015-1






Bush Forever Omnibus (North) Proposed Minor Amendment as advertised

31 May 2016


Proposal 15

Proposed Amendment:

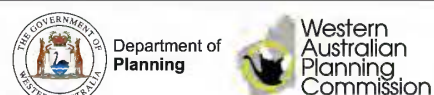
Notice of Delegation

 (Site No) Bush Forever area addition

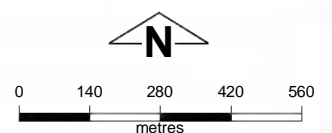
Existing Region Scheme:

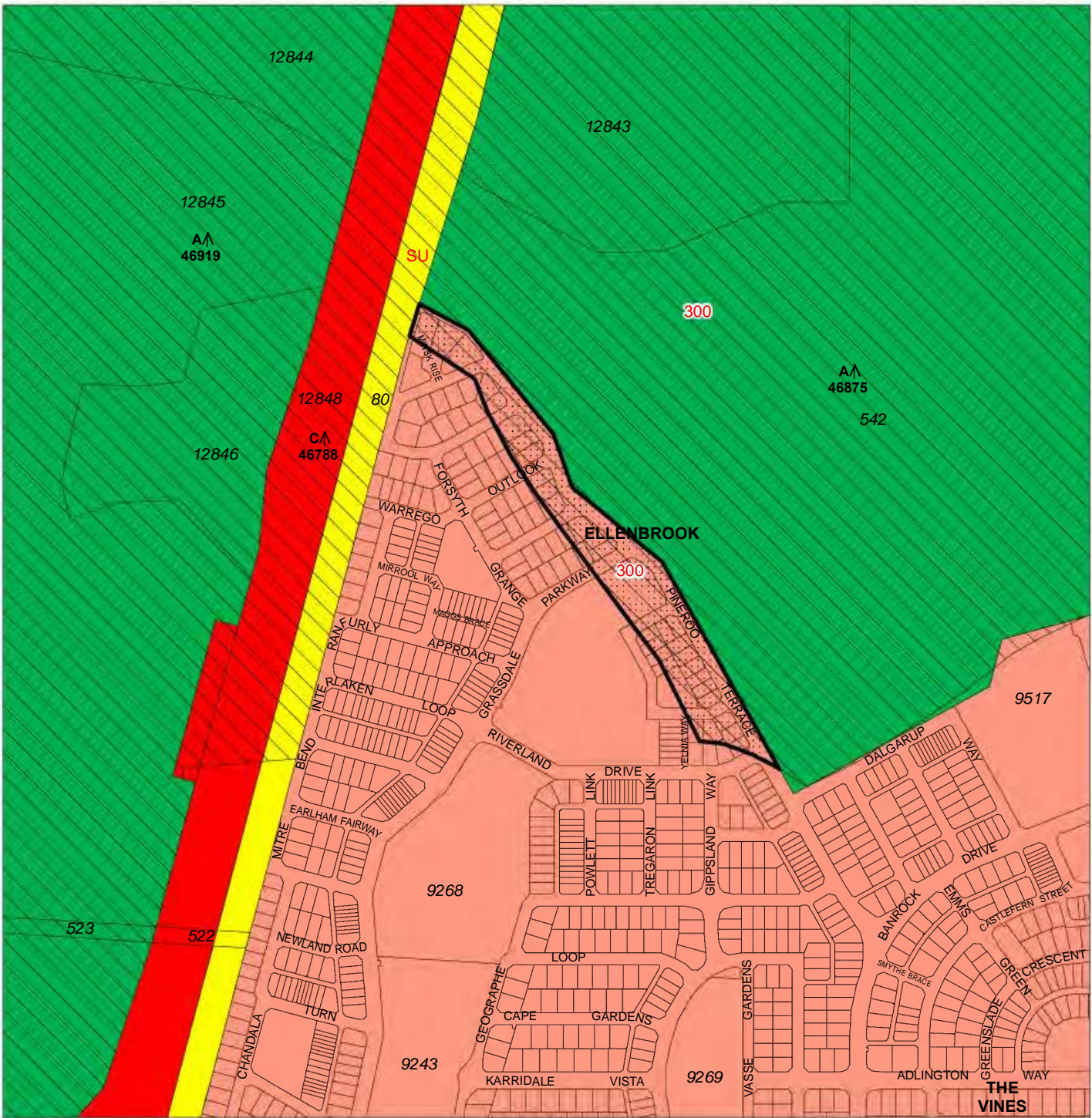
- | | |
|---|--|
|  Other regional roads |  State forests |
|  Parks and recreation |  Urban |
|  Primary regional roads |  Water catchments |
|  SU Public purposes - special uses |  (Site No) Bush forever areas |

Oracle reference no: 2882
File number: 833/02/01/0065P
Version number: 1



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**Bush Forever Omnibus (North)
Proposed Minor Amendment
as advertised**

31 May 2016



Proposal 16

Proposed Amendment:

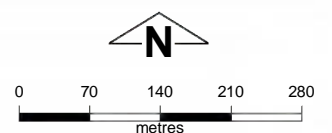
Notice of Delegation

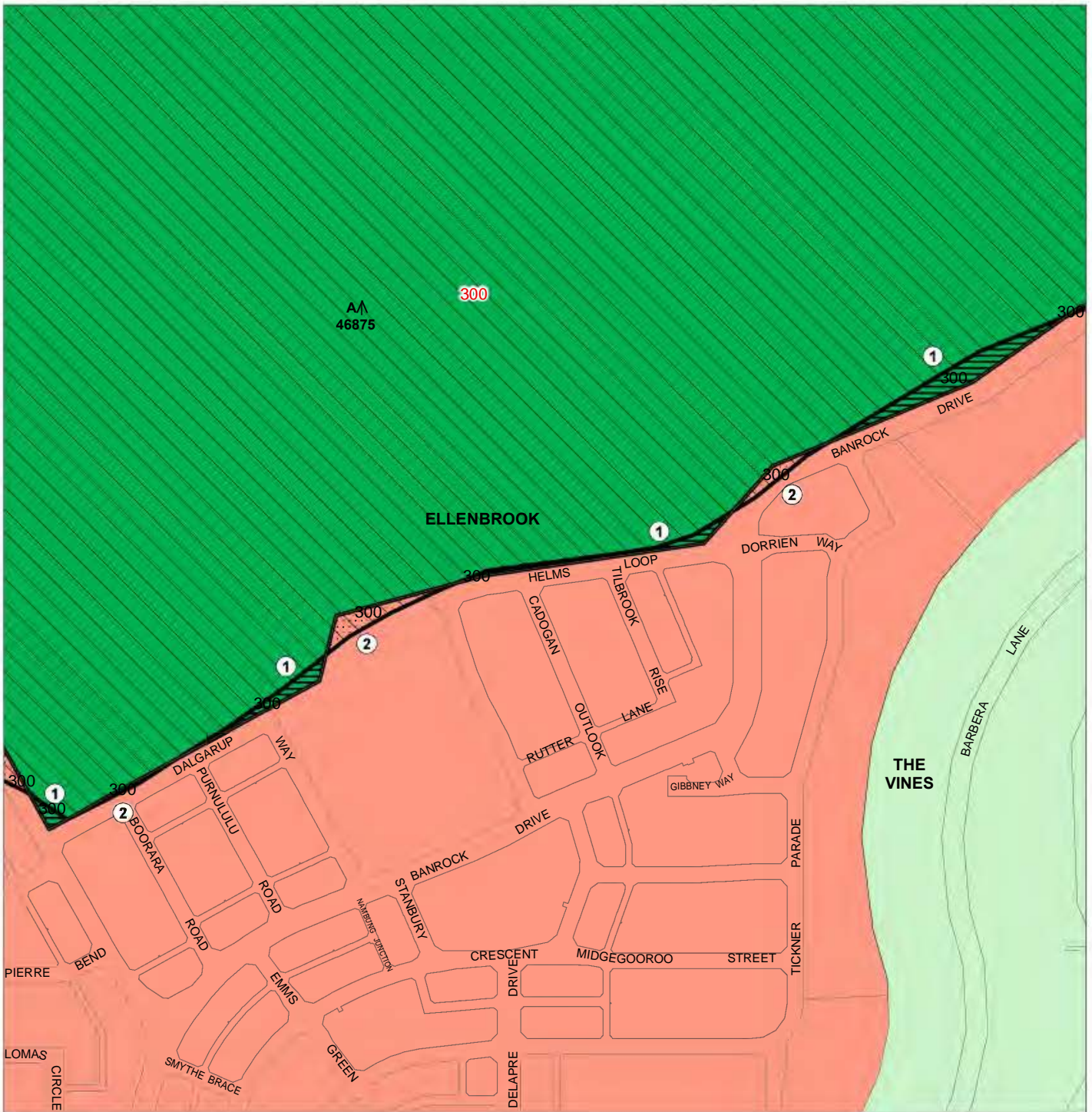
 (Site No) Bush Forever area removal

Existing Region Scheme:

-  Parks and recreation
-  Primary regional roads
-  SU Public purposes - special uses
-  Urban
-  (Site No) Bush forever areas

Oracle reference no: 2882
File number: 833/02/01/0065P
Version number: 1





Bush Forever Omnibus (North) Proposed Minor Amendment as advertised

31 May 2016

Proposal 17a

Proposed Amendment:





Notice of Delegation



(Site No) Bush forever area addition

(Site No) Bush forever area removal

Existing Region Scheme:

-  Parks and recreation
-  Rural
-  Urban
-  (Site No) Bush forever areas

Oracle reference no: 2882

File number: 833/02/01/0065P

Version number: 1

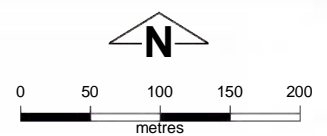


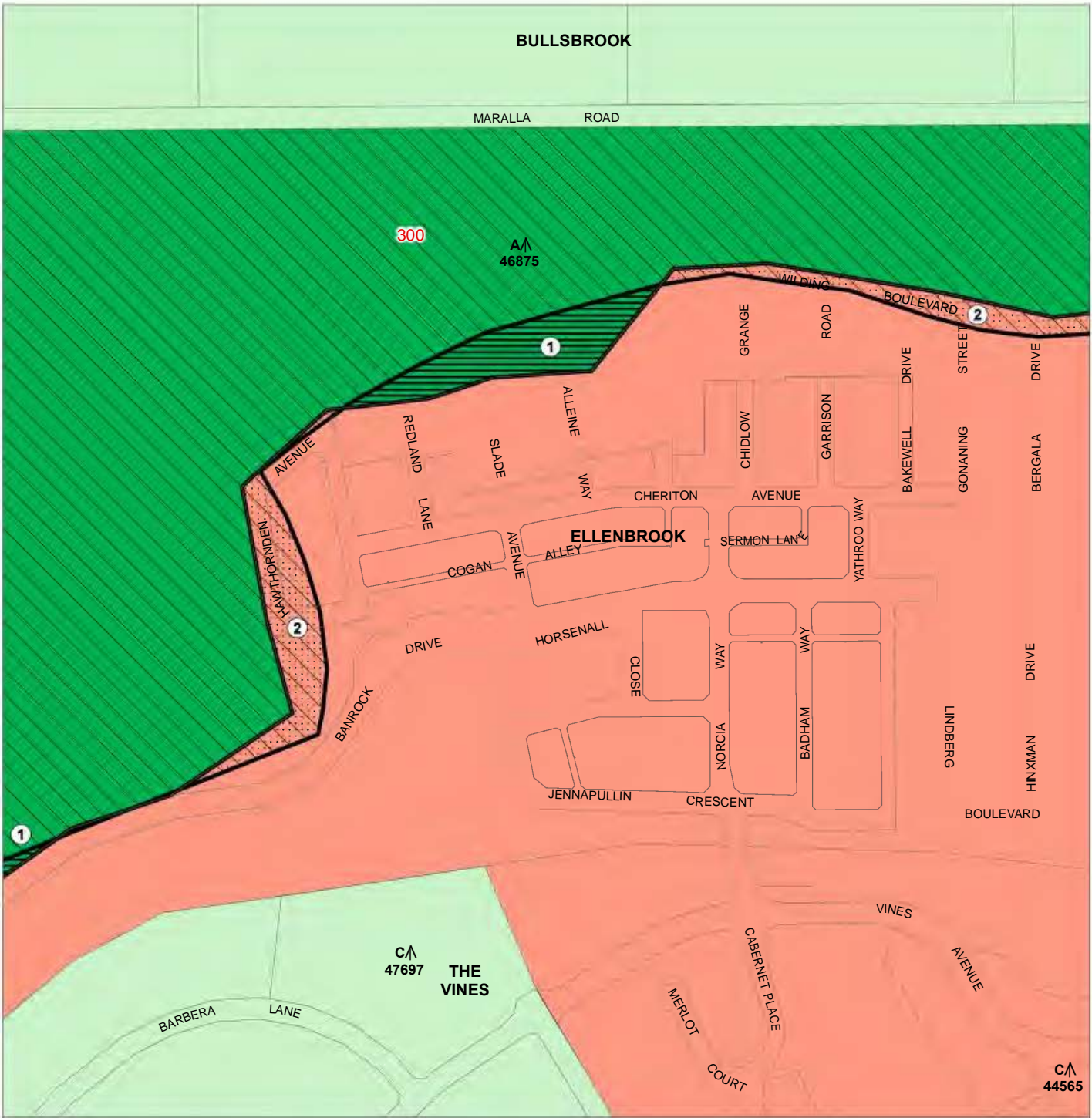
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**Bush Forever Omnibus (North)
Proposed Minor Amendment
as advertised**

31 May 2016



Proposal 17b

Proposed Amendment:

Notice of Delegation

-  (Site No) Bush forever area addition
-  (Site No) Bush forever area removal

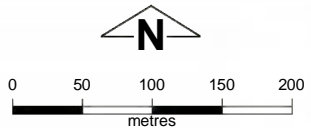
Existing Region Scheme:

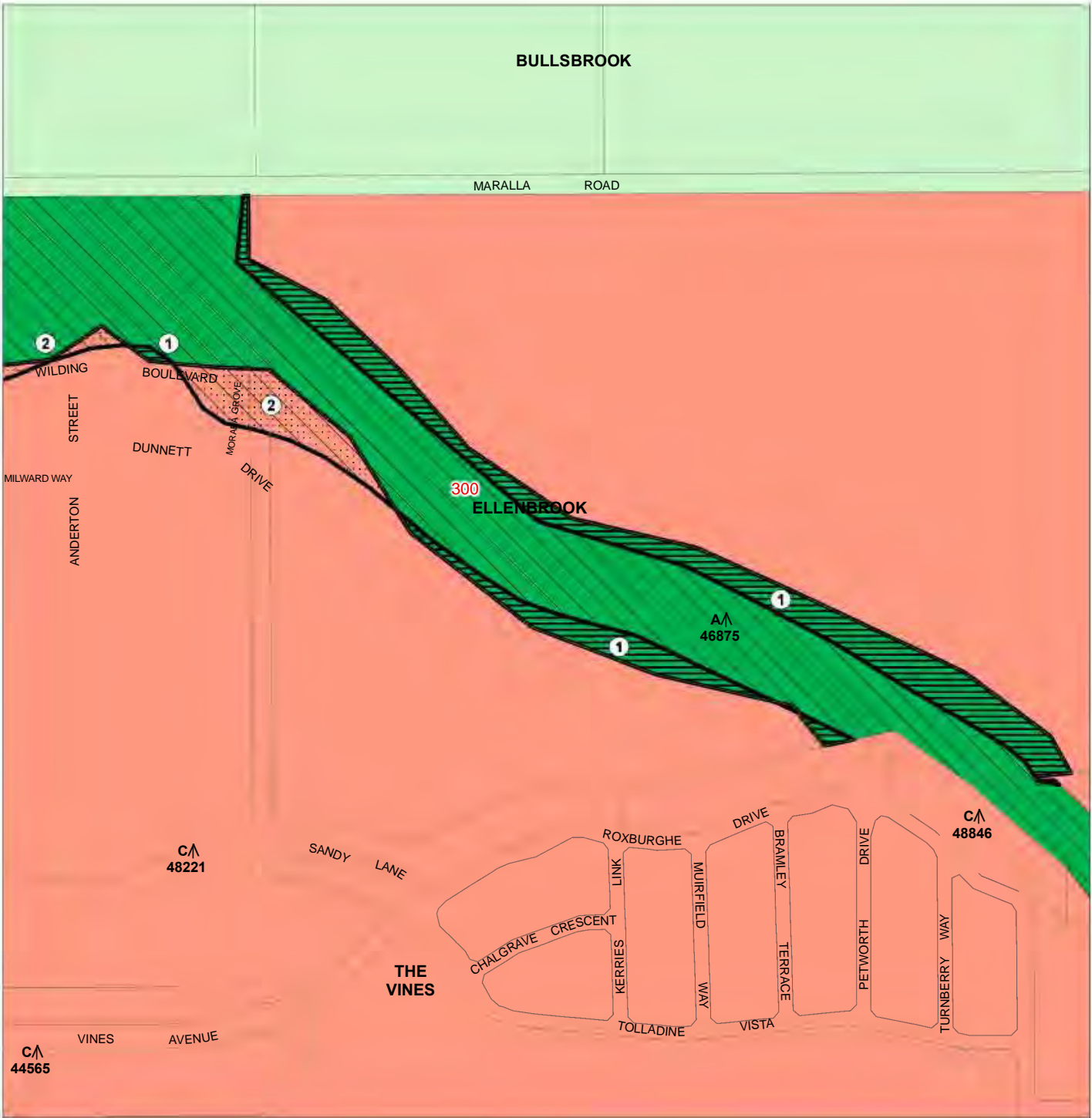
-  Parks and recreation
-  Rural
-  Urban
-  (Site No) Bush forever areas

Oracle reference no: 2882
File number: 833/02/01/0065P
Version number: 1



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**Bush Forever Omnibus (North)
Proposed Minor Amendment
as advertised**

31 May 2016

Proposal 17c

Proposed Amendment:

Notice of Delegation



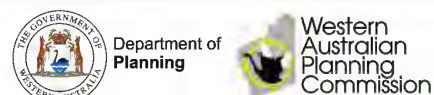
(Site No) Bush forever area addition

(Site No) Bush forever area removal

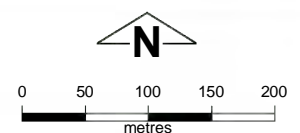
Existing Region Scheme:

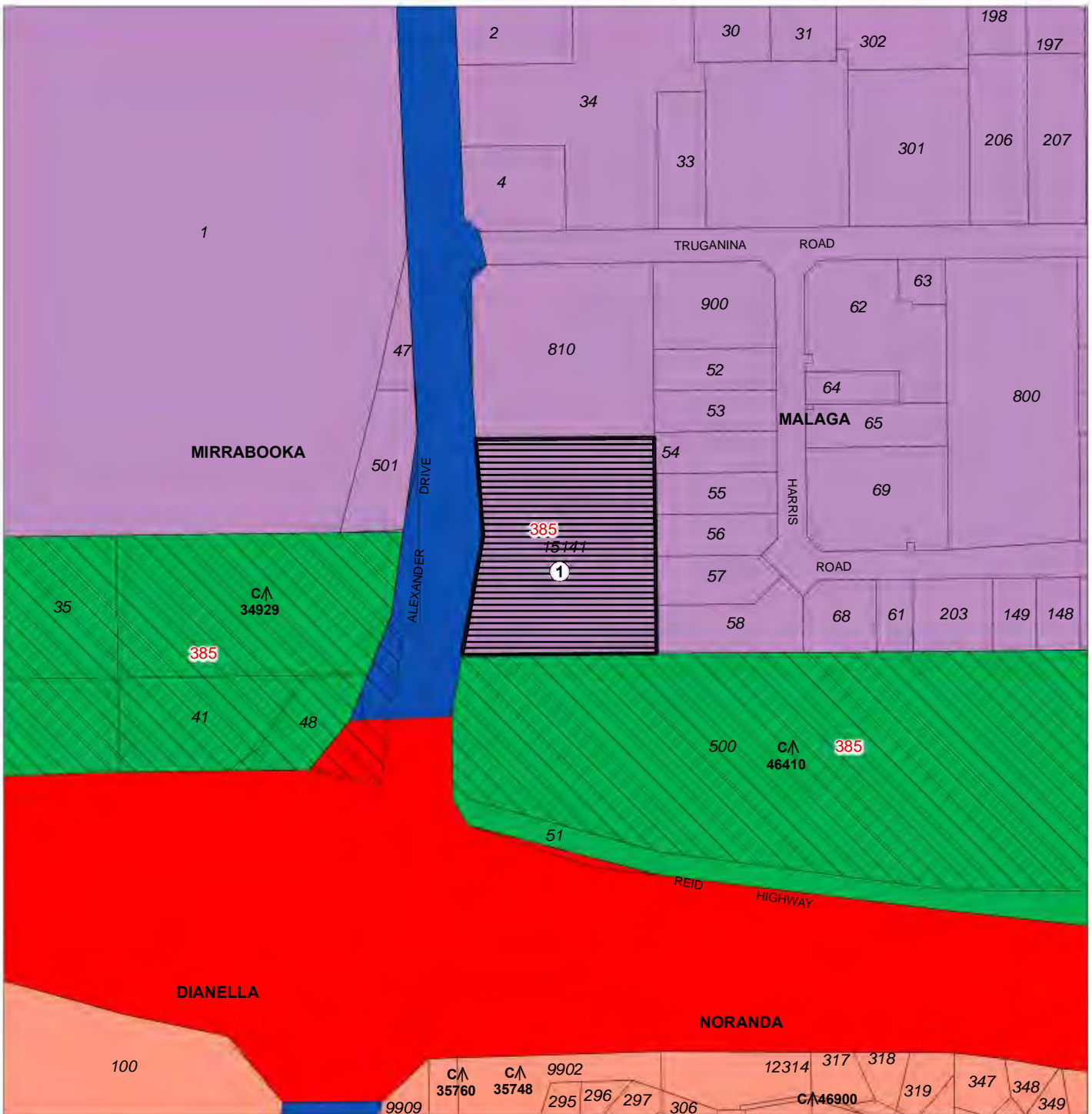
- Parks and recreation
- Rural
- Urban
- (Site No) Bush forever areas

Oracle reference no: 2882
File number: 833/02/01/0065P
Version number: 1



Date: 31/05/2016
Produced by GeoSpatial Research and Modelling, Department of Planning, Perth WA
Base information supplied by Western Australian Land Information Authority LI 782-2015-1






**Bush Forever Omnibus (North)
Proposed Minor Amendment
as advertised**


31 May 2016

Proposal 18

Proposed Amendment:


 Parks and recreation reservation


Notice of Delegation

 (Site No) Bush Forever area addition

Existing Region Scheme:


 Industrial

 Other regional roads

 Parks and recreation

 Primary regional roads

 Urban

 (Site No) Bush forever areas

Oracle reference no: 2882

File number: 833/02/01/0065P

Version number: 1

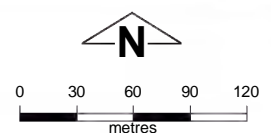


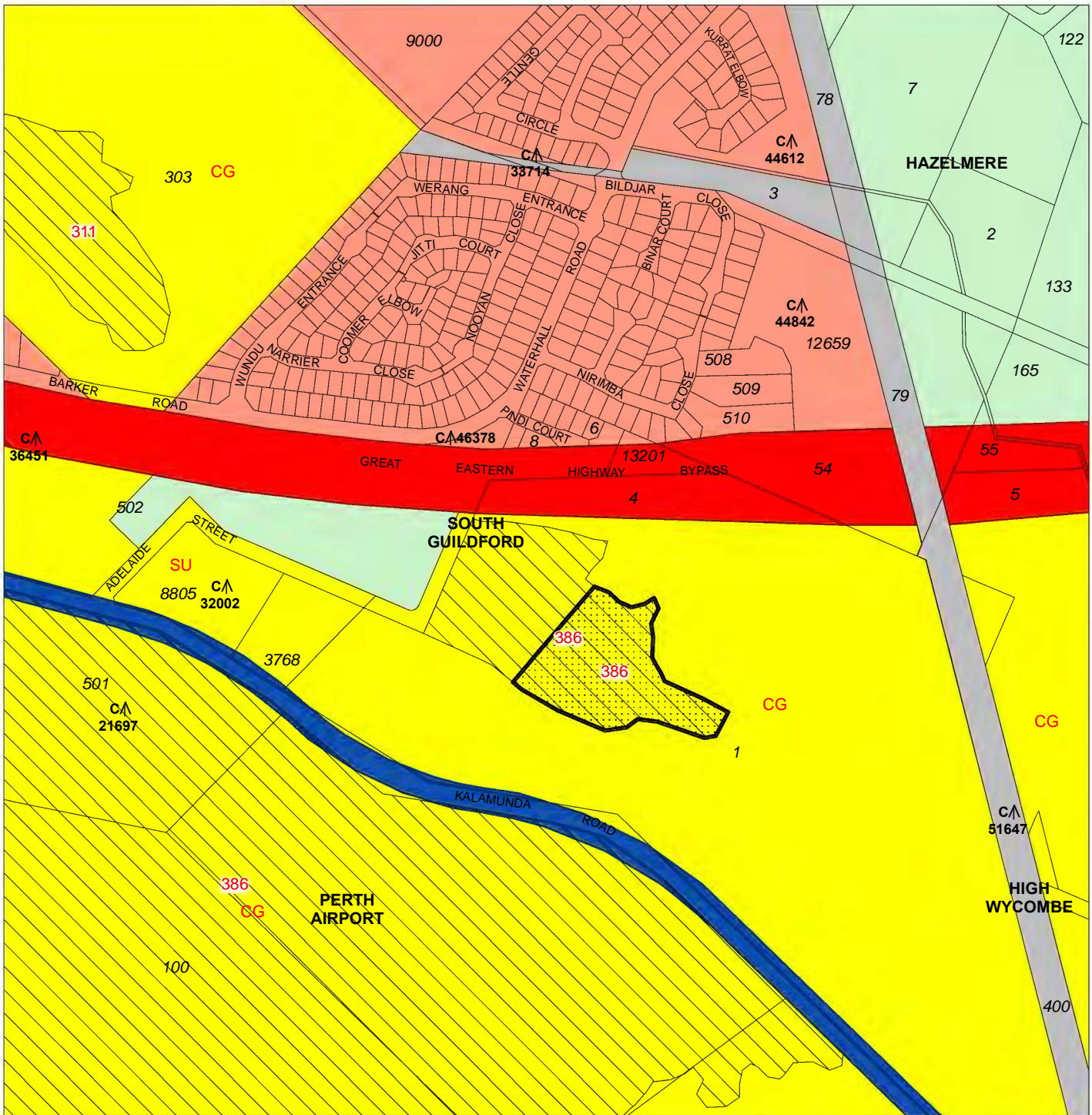
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Date: 1/06/2016
Produced by GeoSpatial Research and Modelling, Department of Planning, Perth WA
Base information supplied by Western Australian Land Information Authority LI 782-2015-1






**Bush Forever Omnibus (North)
Proposed Minor Amendment
as advertised**

31 May 2016

Proposal 19

Proposed Amendment:

Notice of Delegation

 (Site No) Bush Forever area removal

Existing Region Scheme:

-  Other regional roads
-  Primary regional roads
-  CG Public purposes - Commonwealth Government
-  SU Public purposes - special uses
-  Railways
-  Rural
-  Urban
-  (Site No) Bush forever areas

Oracle reference no: 2882

File number: 833/02/01/0065P

Version number: 1

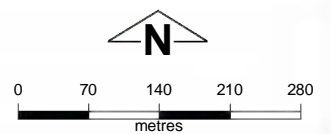


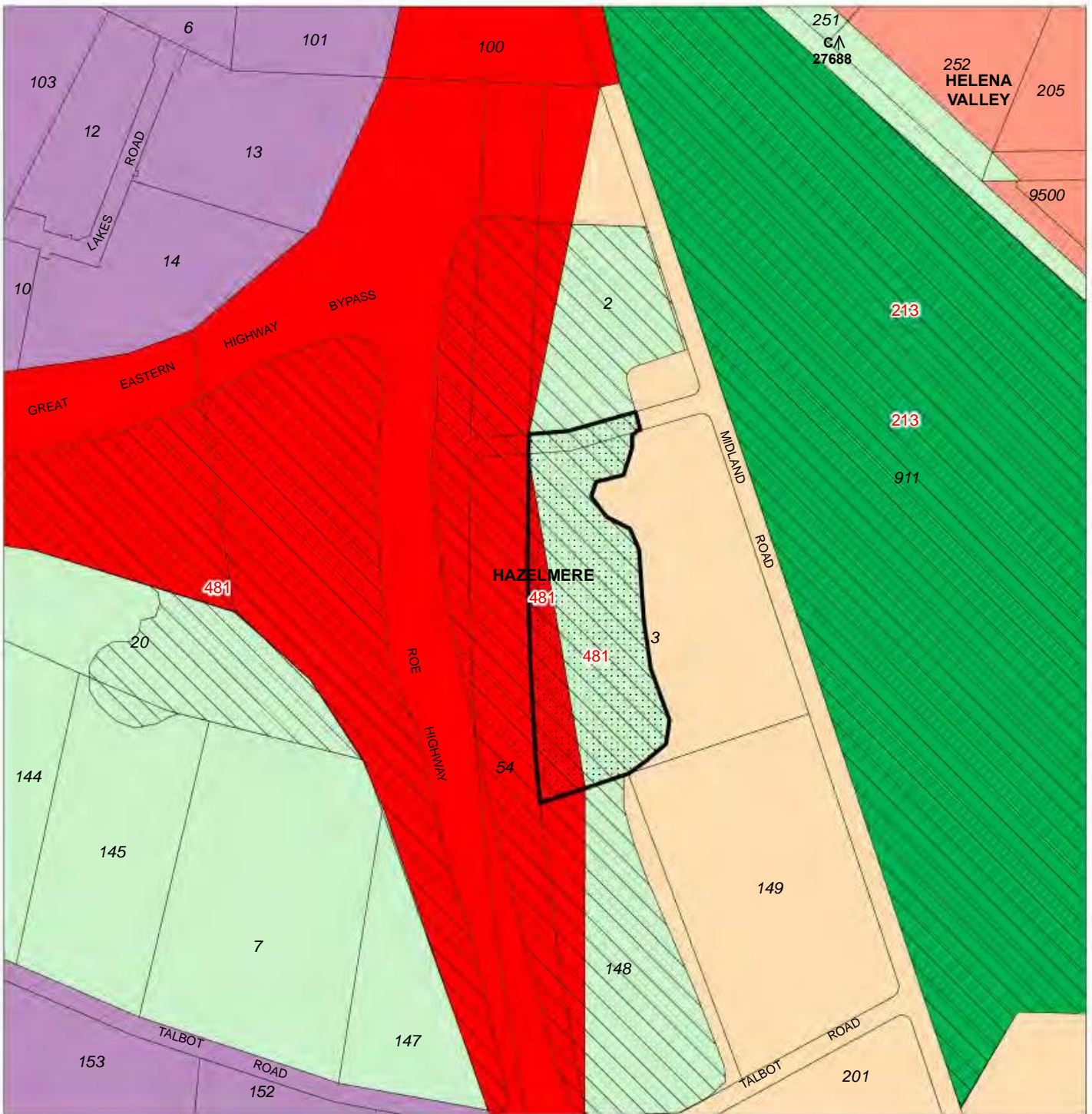
Department of Planning



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**Bush Forever Omnibus (North)
Proposed Minor Amendment
as advertised**

31 May 2016








Proposal 20

Proposed Amendment:

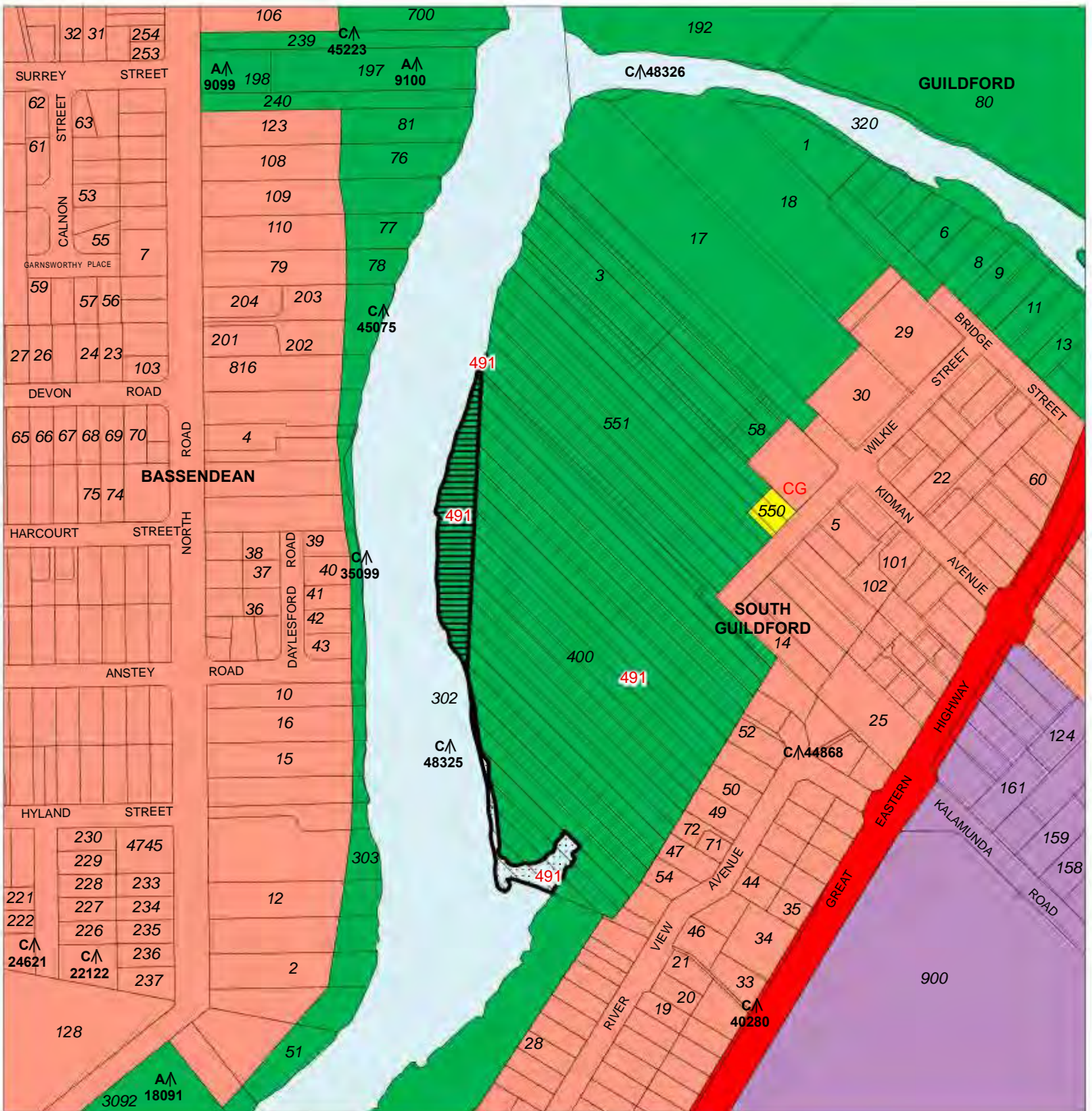
Notice of Delegation

 (Site No) Bush Forever area removal

Existing Region Scheme:

- | | |
|--|--|
|  Industrial |  Urban deferred |
|  Parks and recreation |  (Site No) Bush forever areas |
|  Primary regional roads | |
|  Rural | |
|  Urban | |

Oracle reference no: 2882
File number: 833/02/01/0065P
Version number: 1




Bush Forever Omnibus (North) Proposed Minor Amendment as advertised


31 May 2016

Proposal 21

Proposed Amendment:

Notice of Delegation

 (Site No) Bush Forever area addition

 (Site No) Bush Forever area removal

Existing Region Scheme:

-  Industrial
-  Parks and recreation
-  Primary regional roads
-  CG Public purposes - Commonwealth Government
-  Urban
-  Waterways
-  (Site No) Bush forever areas

Oracle reference no: 2882

File number: 833/02/01/0065P

Version number: 1

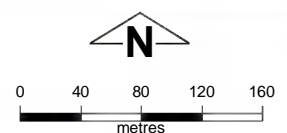


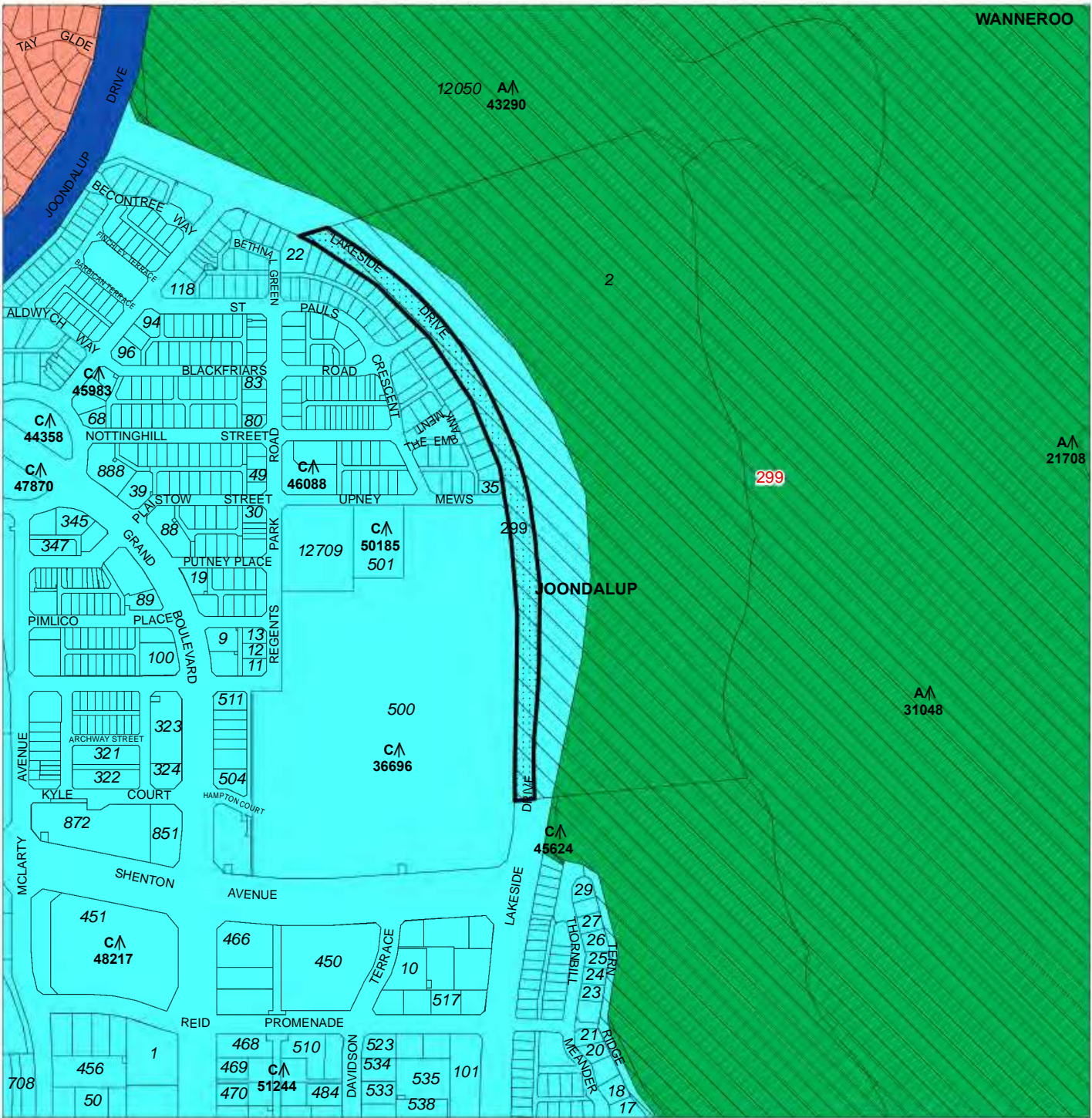
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**Bush Forever Omnibus (North)
Proposed Minor Amendment
as advertised**

31 May 2016

Proposal 22

Proposed Amendment:

Notice of Delegation

 (Site No) Bush forever area removal

Existing Region Scheme:

-  Central city area
-  Other regional roads
-  Parks and recreation
-  Urban
-  (Site No) Bush forever areas

Oracle reference no: 2882

File number: 833/02/01/0065P

Version number: 1

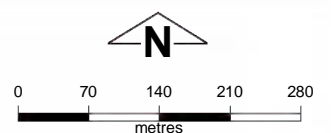


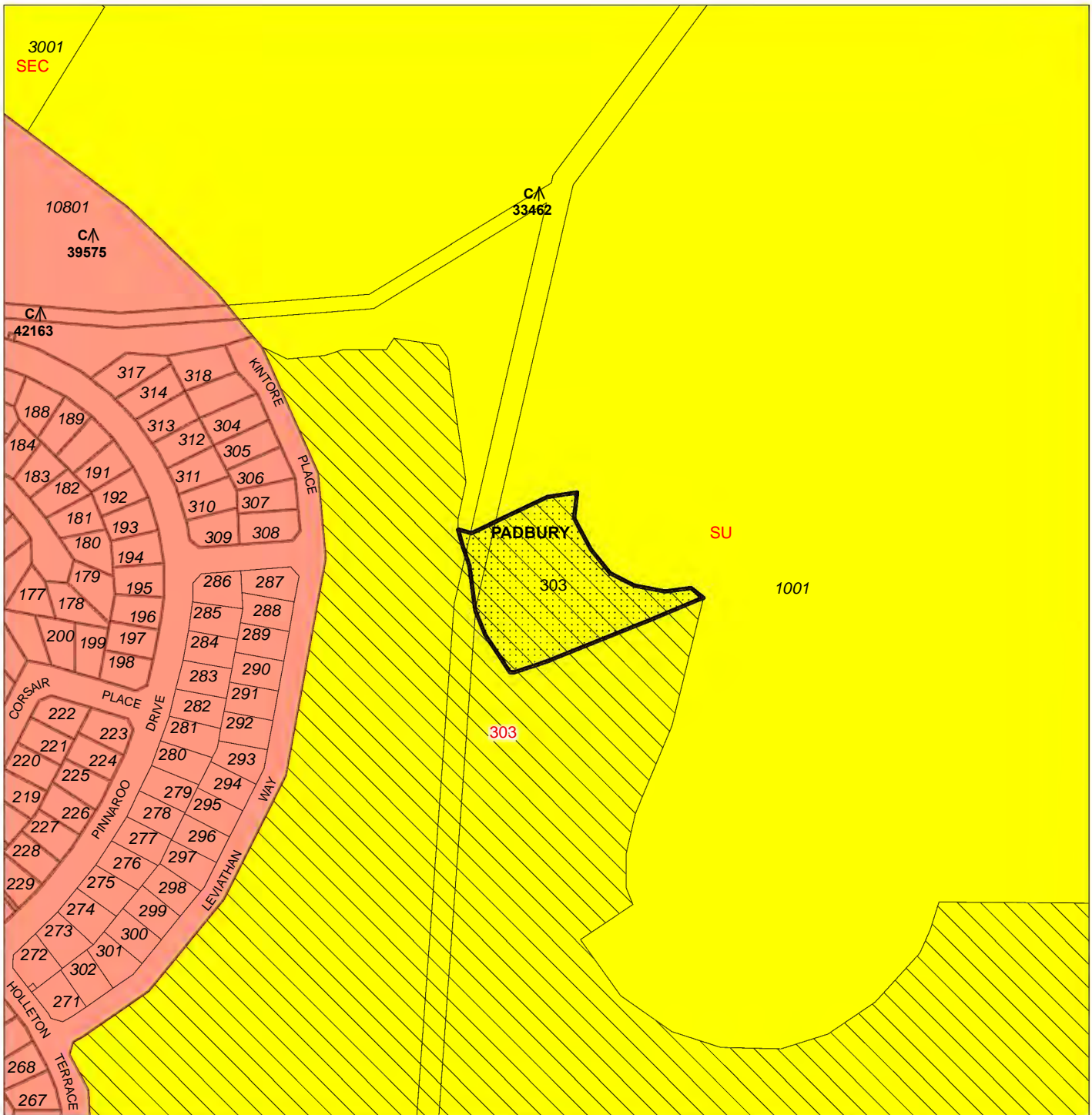
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**Bush Forever Omnibus (North)
Proposed Minor Amendment
as advertised**

31 May 2016





Proposal 23

Proposed Amendment:

Notice of Delegation

 (Site No) Bush forever area removal

Existing Region Scheme:

-  SU Public purposes - special uses
-  SEC Public purposes - State Energy Commission
-  Urban
-  (Site No) Bush forever areas

Oracle reference no: 2882

File number: 833/02/01/0065P

Version number: 1

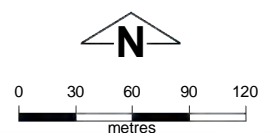


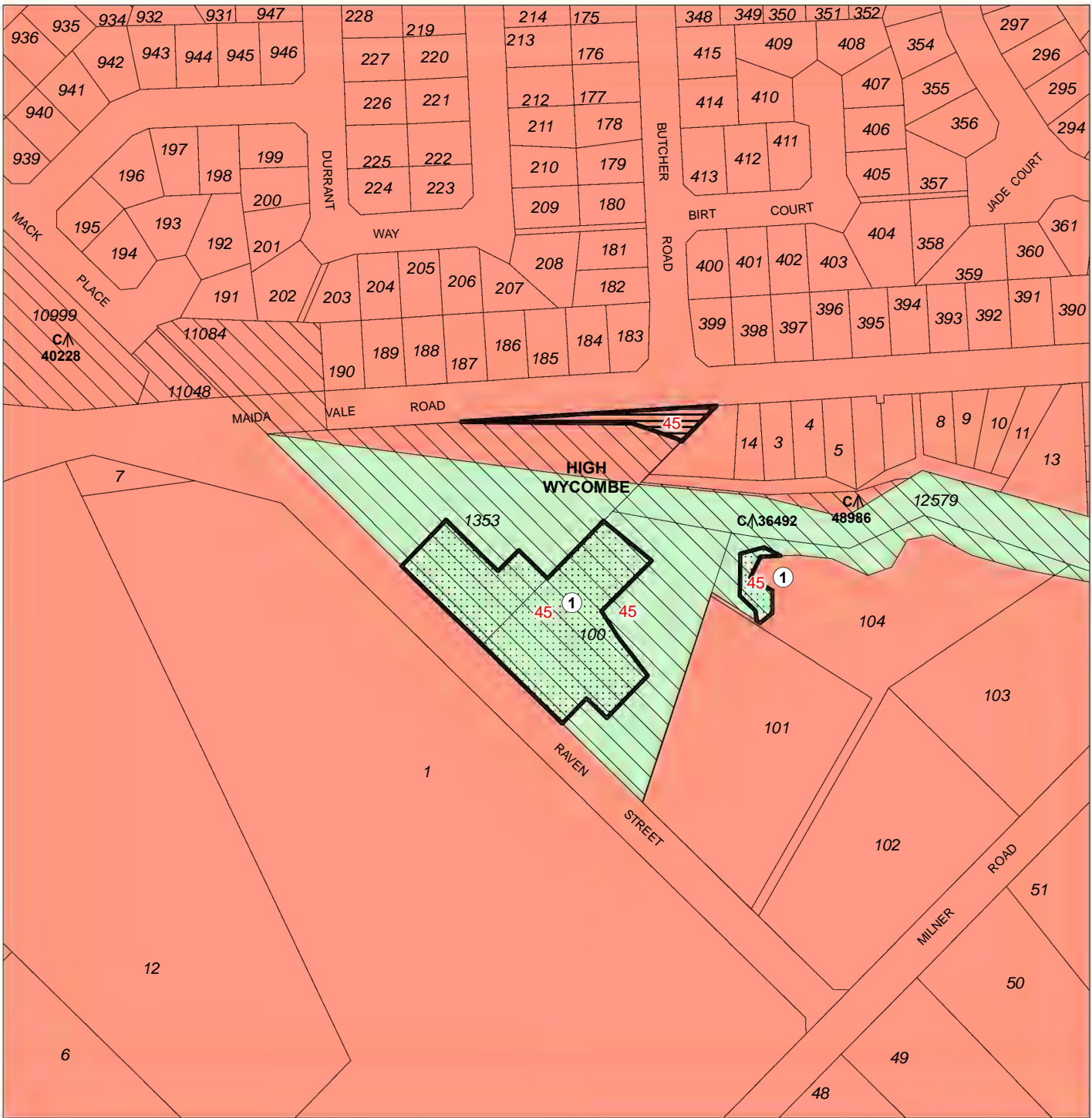
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Bush Forever Omnibus (North) Proposed Minor Amendment as advertised


31 May 2016


Proposal 24

Proposed Amendment:

 Urban zone

Notice of Delegation


 (Site No) Bush Forever area addition

 (Site No) Bush Forever area removal

Existing Region Scheme:

 Rural

 Urban

 (Site No) Bush forever areas

Oracle reference no: 2882

File number: 833/02/01/0065P

Version number: 1

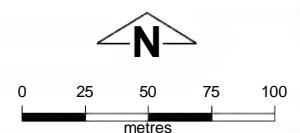


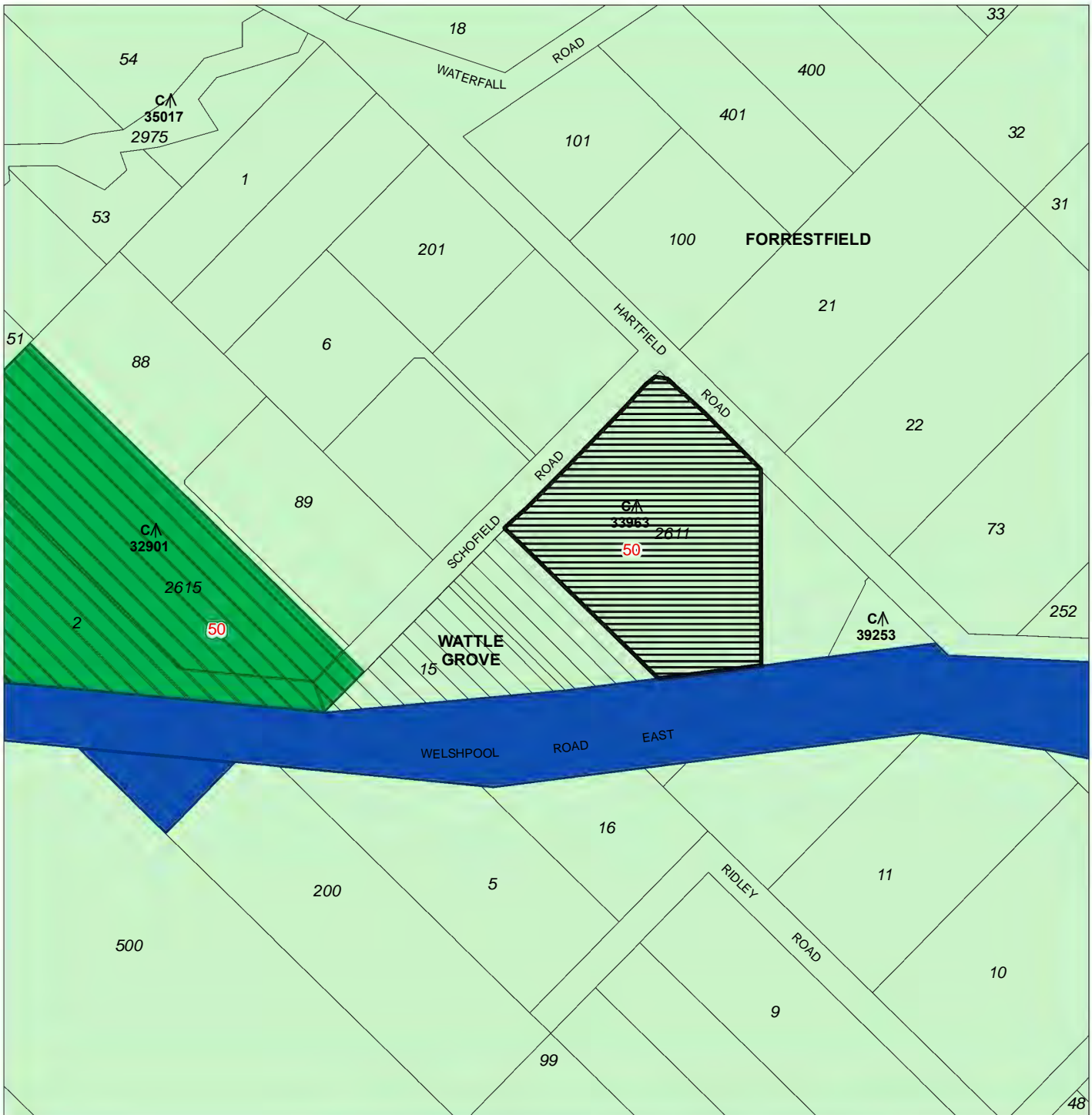
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**Bush Forever Omnibus (North)
Proposed Minor Amendment
as advertised**

31 May 2016


Proposal 25


Proposed Amendment:

Notice of Delegation


 (Site No) Bush Forever area addition

Existing Region Scheme:

 Other regional roads

 Parks and recreation

 Rural

 (Site No) Bush forever areas

Oracle reference no: 2882

File number: 833/02/01/0065P

Version number: 1

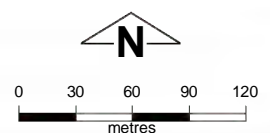


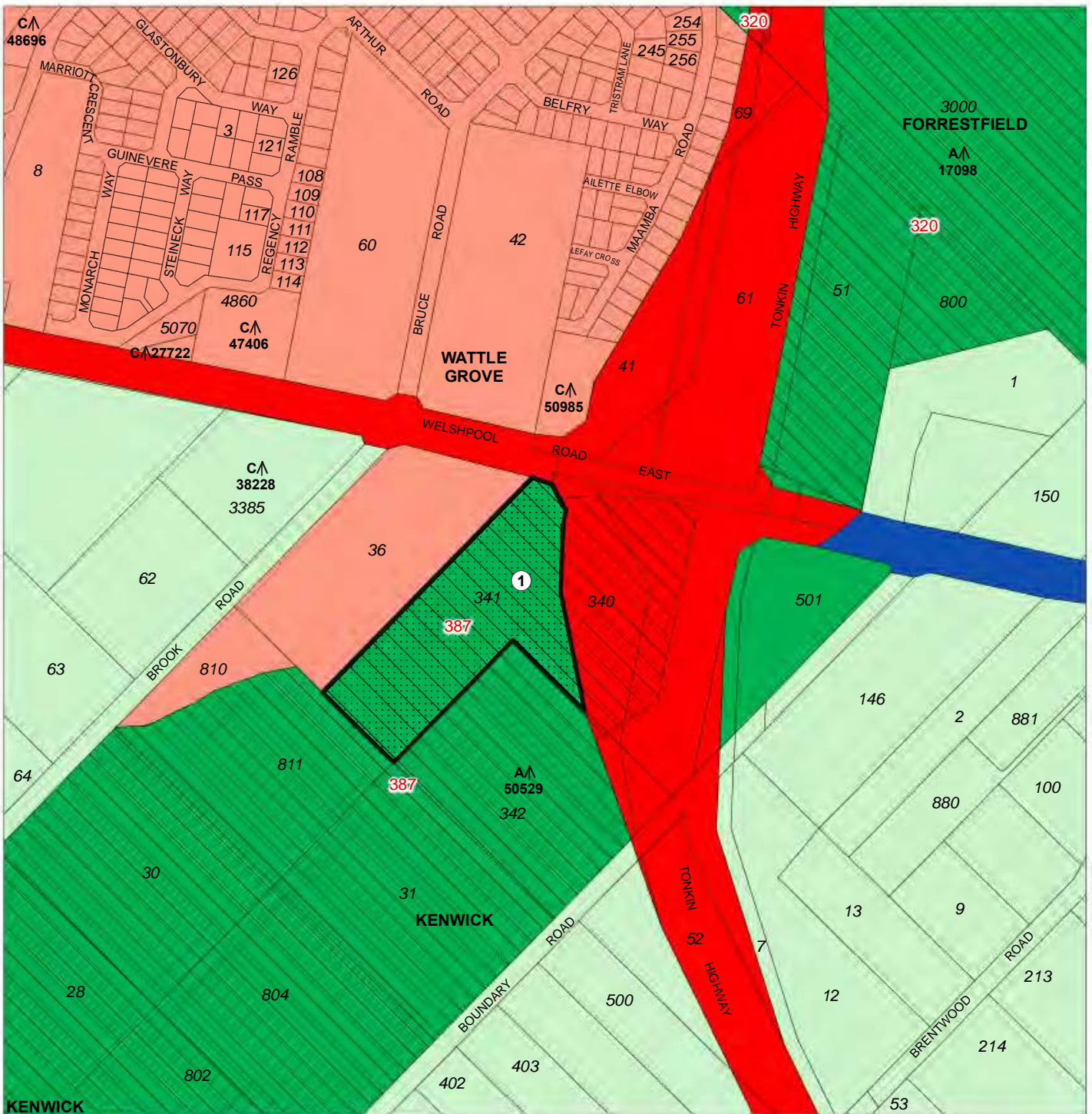
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Bush Forever Omnibus (North) Proposed Minor Amendment as advertised


31 May 2016

Proposal 26


Proposed Amendment:


 Urban zone

Notice of Delegation

 (Site No) Bush Forever area removal

Existing Region Scheme:


 Other regional roads

 Parks and recreation

 Primary regional roads

 Rural

 Urban

 (Site No) Bush forever areas

Oracle reference no: 2882

File number: 833/02/01/0065P

Version number: 1

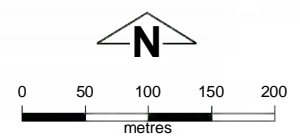


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Forrestfield North District Structure Plan

Spring flora and vegetation survey

Prepared for
Shire of Kalamunda
by Strategen

March 2016

Forrestfield North District Structure Plan

Spring flora and vegetation survey

Strategen is a trading name of
Strategen Environmental Consultants Pty Ltd
Level 1, 50 Subiaco Square Road Subiaco WA 6008
ACN: 056 190 419

March 2016

Limitations

Scope of services

This report ("the report") has been prepared by Strategen Environmental Consultants Pty Ltd (Strategen) in accordance with the scope of services set out in the contract, or as otherwise agreed, between the Client and Strategen. In some circumstances, a range of factors such as time, budget, access and/or site disturbance constraints may have limited the scope of services. This report is strictly limited to the matters stated in it and is not to be read as extending, by implication, to any other matter in connection with the matters addressed in it.

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Environmental conclusions

Within the limitations imposed by the scope of services, the preparation of this report has been undertaken and performed in a professional manner, in accordance with generally accepted environmental consulting practices. No other warranty, whether express or implied, is made.

Client: Shire of Kalamunda

Report Version	Revision No.	Purpose	Strategen author/reviewer	Submitted to Client	
				Form	Date
Draft Report	Rev A	For review by Client	D Panickar / D Newsome	Electronic	21 Jan 2016
Final Report	Rev 0	Issued for use	D Panickar / D Newsome	Electronic	27 Jan 2016
Final report	Rev 1	Issued for use	D Panickar / D Newsome	Electronic	4 Mar 2016

Filename: SKA15321_01 R001 Rev 1 - 4 March 2016

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Appendix 2 Photographic record of vegetation types
Appendix 3 Desktop assessment results (Parks and Wildlife 2007-, DotE 2015b)
Appendix 4 Conservation significant flora and ecological community definitions
Appendix 5 FCT analysis report

1. Introduction

This report presents the findings of a spring flora and vegetation survey undertaken for the strategic planning area known as Forrestfield North in the Shire of Kalamunda (Figure 1).

1.1 Background

The Shire of Kalamunda (SoK) has prepared the draft Forrestfield North District Structure Plan (DSP) in response to the State Governments decision to proceed with the Forrestfield Airport Link including the Forrestfield Train Station. The DSP considers the planning land use opportunities surrounding the new station in Forrestfield.

The subject area identified under the DSP consists of four planning precincts:

- Precinct 1 is the area identified for Transit Oriented Development adjacent to the future train station
- Precincts 2 and 3 are in the process of being re-zoned to Urban under the Metropolitan Region Scheme
- Precinct 4 is zoned Industrial Development under the provisions of the Shire's Local Planning Scheme 3 and is currently being developed in accordance with the zone.

The DSP area contains Bush Forever site 45. Landowners within Bush Forever site 45 have suggested that the environmental values associated with their properties are no longer present and the identification of their land as Bush Forever should be removed. The Shire made the commitment to review the environmental values of Bush Forever sites.

An Environmental Review has previously been undertaken for Precincts 2 and 3 and a Foreshore Assessment of Poison Gully Creek to the North. The original Environmental Review was informed by a flora and vegetation assessment; however ten properties within Precincts 2 and 3 were unable to be surveyed. Of the ten properties that were not previously surveyed, approximately seven contain some native vegetation that has not been previously assessed and therefore forms part of the scope of these works.

The survey area comprises the following properties as depicted in Figure 2:

- 15 Raven Street, High Wycombe
- 9 Raven Street, High Wycombe
- 32 and 55 Brae Road, High Wycombe
- 231 Maida Vale Road, High Wycombe
- 15 Milner Road, High Wycombe
- 105 Sultana Road, High Wycombe
- Bush Forever Site 45 (Poison Gully Bushland), which in addition to a number of the lots listed above, contained parts of Lots 80 and 85 Brae Rd.

1.2 Scope

The scope of this flora and vegetation survey was to undertake a desktop assessment and field assessment within the survey area.

The objectives were to:

- conduct a desktop survey for Threatened and Priority flora which have been identified as being present in or around the survey area
- collect and identify the vascular plant species present within the survey area
- search areas of suitable habitat for Threatened and/or Priority flora
- define and map the native vegetation communities present within the survey area
- map vegetation condition within the survey area
- provide recommendations on the local and regional significance of the vegetation communities
- prepare a report summarising the findings.

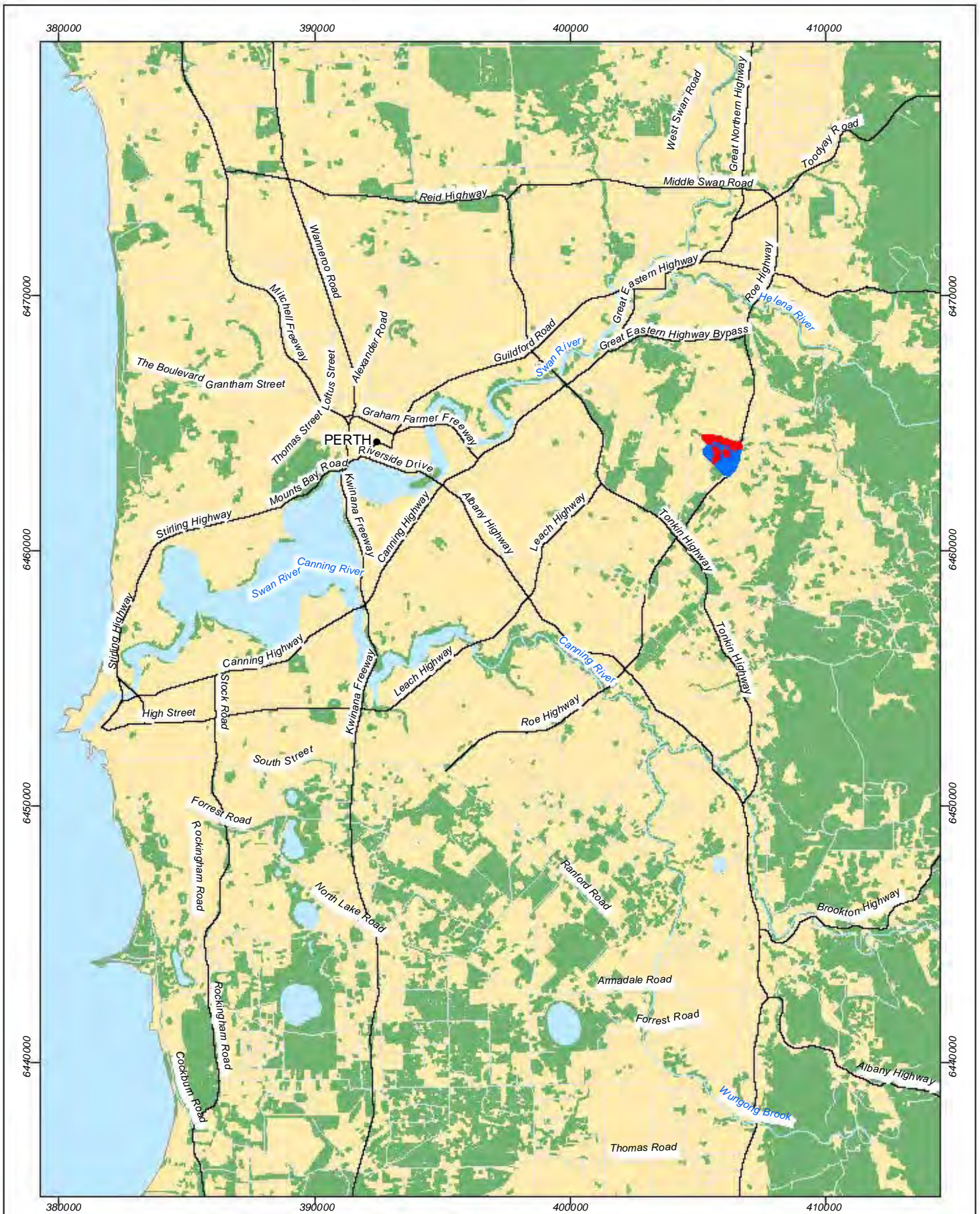


Figure 1: Regional location

Scale 1:200,000 at A4



Coordinate System: GDA 1994 MGA Zone 50
 Note that positional errors may occur in some areas
 Date: 24/12/2015
 Author: JCrute
 Source: Topography: Geoscience Australia 2011.



Legend

- Town
- Major road
- Minor road
- Major river
- Lakes
- Native vegetation
- Survey area
- DSP area



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Figure 2: The survey area

Scale 1:7,500 A3x3
 Meters
 50
 Coordinate System: GDA 1994 MGA Zone 50
 Note that positional errors may occur in some areas
 Date: 3/03/2016
 Author: JC/rute
 Source: Aerial image: ESRI online, approx. 2012.
 File: Q:\Corral\2015\BKA153214\Map_documents\B201RevA\BKA15321_01_R001_RevA_F002_A3.mxd

- Legend**
- Survey area
 - DSP area
 - Bush Forever site 45



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2. Context

2.1 Legislative context

This biological survey has been conducted with reference to the following Australian and Western Australian legislation:

- *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) – Australian Government
- *Wildlife Conservation Act 1950* (WC Act) – State
- *Environmental Protection Act 1986* (EP Act) – State
- *Biosecurity and Agriculture Management Act 2007* (BAM Act) – State.

2.1.1 Conservation significant flora and ecological communities

Conservation significant flora and ecological communities are determined at a state and federal legislative level. Threatened species are listed under the EPBC Act at the Australian Government level and under the WC Act at the State level (Appendix 4). Priority species are listed by the Department of Parks and Wildlife (Parks and Wildlife) and include species of ‘significant conservation value’ (Appendix 4).

Threatened Ecological Communities (TECs) are listed under both the EPBC Act and EP Act (Appendix 4). Priority Ecological Communities (PECs) are listed by Parks and Wildlife and include species of significant conservation value (Appendix 4).

2.1.2 Environmentally Sensitive Areas

Environmentally Sensitive Areas (ESAs) are protected under the EP Act, and include the following:

- World Heritage areas
- areas included on the National Estate Register
- defined wetlands and associated buffers
- vegetation within 50 m of a listed Threatened species
- TECs.

2.1.3 Protection of native vegetation

Native vegetation is defined under the EP Act as “indigenous aquatic or terrestrial vegetation, and includes dead vegetation unless that dead vegetation is of a class declared by regulation to be excluded from this definition but does not include vegetation in a plantation”.

This definition of native vegetation does not include vegetation that was intentionally sown, planted or propagated unless either of the following applies:

- (a) the vegetation was sown, planted or propagated as required under the EP Act or another written law
- (b) the vegetation is of a class declared by regulation to be included in this definition.

Native vegetation can only be cleared with a clearing permit, unless for some circumstances where exemptions apply pursuant to the EP Act and the Environmental Protection (Clearing of Native Vegetation) Regulations 2004 (the Regulations). Clearing permits issued pursuant to the Regulations may be issued as area permits or purpose permits. Exemptions for clearing under Regulation 5 of the Regulations do not apply within ESAs.

2.1.4 Introduced species

The BAM Act provides for management and control of listed organisms, including introduced flora species (weeds). Species listed as declared pests under the BAM Act are classified under three categories:

- C1 Exclusion: Pests assigned under this category are not established in Western Australia, and control measures are to be taken to prevent them entering and establishing in the State
- C2 Eradication: Pests assigned under this category are present in Western Australia in low enough numbers or in sufficiently limited areas that their eradication is still a possibility
- C3 Management: Pests assigned under this category are established in Western Australia, but it is feasible, or desirable, to manage them in order to limit their damage. Control measures can prevent a C3 pest from increasing in population size or density or moving from an area in which it is established into an area that is currently free of that pest.

Under the BAM Act, land managers are required to manage populations of declared pests as outlined under the relevant category.

2.2 Environmental setting

2.2.1 Soils and topography

The survey area is located within the Swan Coastal Plain 2 (SWA2 – Swan Coastal Plain subregion) of Western Australia (Mitchell *et al.* 2002). The Swan Coastal Plain comprises five major geomorphologic systems that lie parallel to the coast, namely (from west to east) the Quindalup Dunes, Spearwood Dunes, Bassendean Dunes, Pinjarra Plain and Ridge Hill Shelf (Churchward & McArthur 1980; Gibson *et al.* 1994). Each major system is composed of further subdivisions in the form of detailed geomorphologic units (Churchward & McArthur 1980; Semeniuk 1990; Gibson *et al.* 1994). Beard (1990) describes the Swan Coastal Plain as a low-lying coastal plain, often swampy, with sandhills also containing dissected country rising to the duricrusted Dandaragan plateau on Mesozoic, mainly sandy, yellow soils.

2.2.2 Climate

The Forrestfield locality experiences a Mediterranean climate characterised by mild, wet winters and warm to hot, dry summers. The nearest Bureau of Meteorology (BoM) weather station at Perth Airport (Station No. 9021) provides average monthly climate statistics for the Forrestfield locality (Figure 3). Average annual rainfall recorded at Perth Airport since 1944 is 769.5 mm (BoM 2015). Rainfall may occur at any time of year; however, most occurs in winter in association with cold fronts from the southwest. Highest temperatures occur between January and March, with average monthly maximums ranging from 29.7°C in March to 32°C in February (BoM 2015). Lowest temperatures occur between June and September, with average monthly minimums ranging from 8°C in July to 9°C in September (BoM 2015).

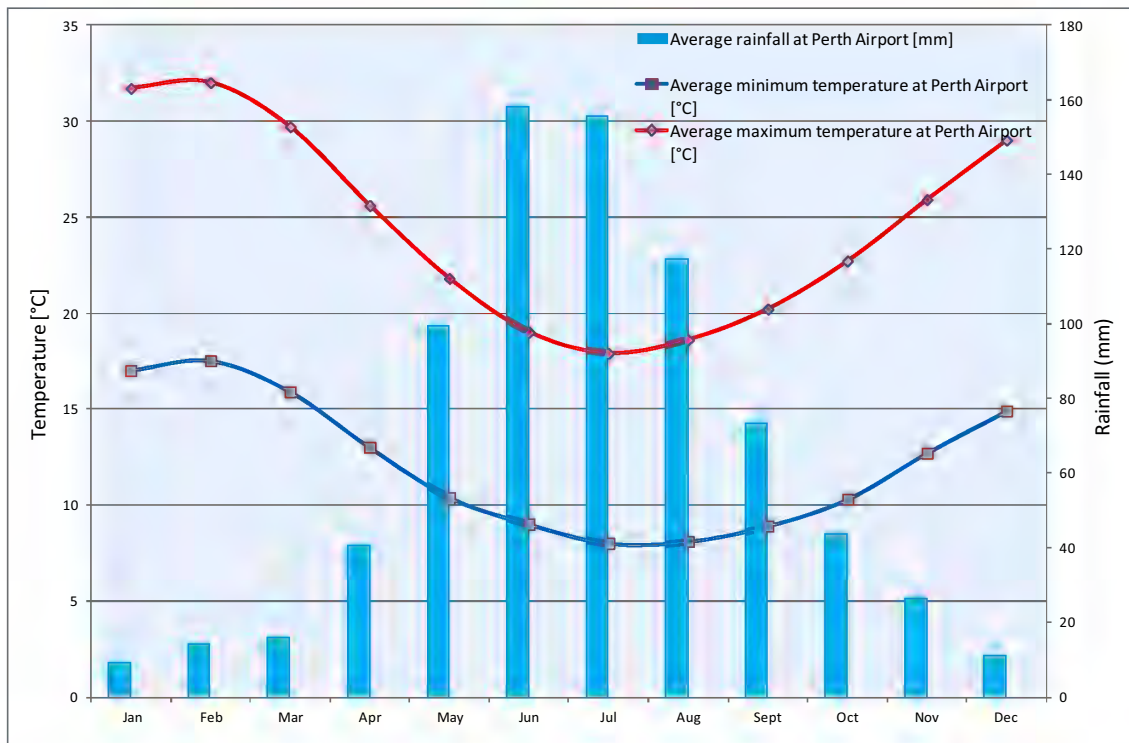


Figure 3: Mean monthly climatic data (temperature and rainfall) for Perth Airport

2.2.3 Regional vegetation

Vegetation occurring within the region was initially mapped at a broad scale (1:1 000 000) by Beard during the 1970s. This dataset has formed the basis of several regional mapping systems, including physiographic regions defined by Beard (1981); System 6 Vegetation Complex mapping undertaken by Heddele et al. (1980); the biogeographical region dataset (Interim Biogeographical Regionalisation for Australia, IBRA) for Western Australia (DotE 2015a).

Beard (1990) Botanical Subdistrict

The survey area occurs within the Drummond Botanical Subdistrict which is characterised by low *Banksia* woodlands on leached sands; *Melaleuca* swamps on poorly-drained depressions; and *Eucalyptus gomphocephala* (Tuart), *Eucalyptus marginata* (Jarrah) and *Corymbia calophylla* (Marri) woodlands on less leached soils (Beard 1990).

IBRA subregion

IBRA describes a system of 85 'biogeographic regions' (bioregions) and 403 subregions covering the entirety of the Australian continent (Thackway & Cresswell 1995). Bioregions are defined on the basis of climate, geology, landforms, vegetation and fauna.

The survey area occurs within the Swan Coastal Plain 2 IBRA subregion which is dominated by *Banksia* or Tuart on sandy soils, *Casuarina obesa* on outwash plains and paperbark (*Melaleuca*) in swampy areas (Mitchell et al. 2002).

System 6 mapping

System 6 mapping refers to vegetation mapping undertaken at a Vegetation Complex scale by Heddle *et al.* (1980). This is the primary source of information used to calculate potential impacts of proposals to clear native vegetation on the Swan Coastal Plain. The survey area occurs at the interface of the Forrestfield and Southern River vegetation complexes as depicted in Figure 4. These complexes can be described as:

- Forrestfield: vegetation ranges from open forest of *Corymbia calophylla* – *Eucalyptus wandoo* – *E. marginata* to open forest of *E. marginata* – *C. calophylla* – *A. fraseriana* – *Banksia* spp. with fringing woodland of *E. rudis* in the gullies that dissect this landform
- Southern River: open woodland of Marri-Jarrah-banksia on the elevated areas and a fringing woodland of *Eucalyptus rudis*-*Melaleuca raphiophylla* along the streams.

At a finer scale, the survey area falls within the following vegetation system associations as defined in Government of Western Australia (2014) and displayed in Figure 4:

- Bassendean 1001: Medium very sparse woodland; jarrah, with low woodland; banksia & casuarina
- Bassendean 1009: Medium woodland; marri & river gum
- Bassendean 1018: Mosaic: Medium forest; jarrah-marri / Low woodland; banksia / Low forest; teatree / Low woodland; *Casuarina obesa*
- Bassendean 3: Medium forest; jarrah-marri.

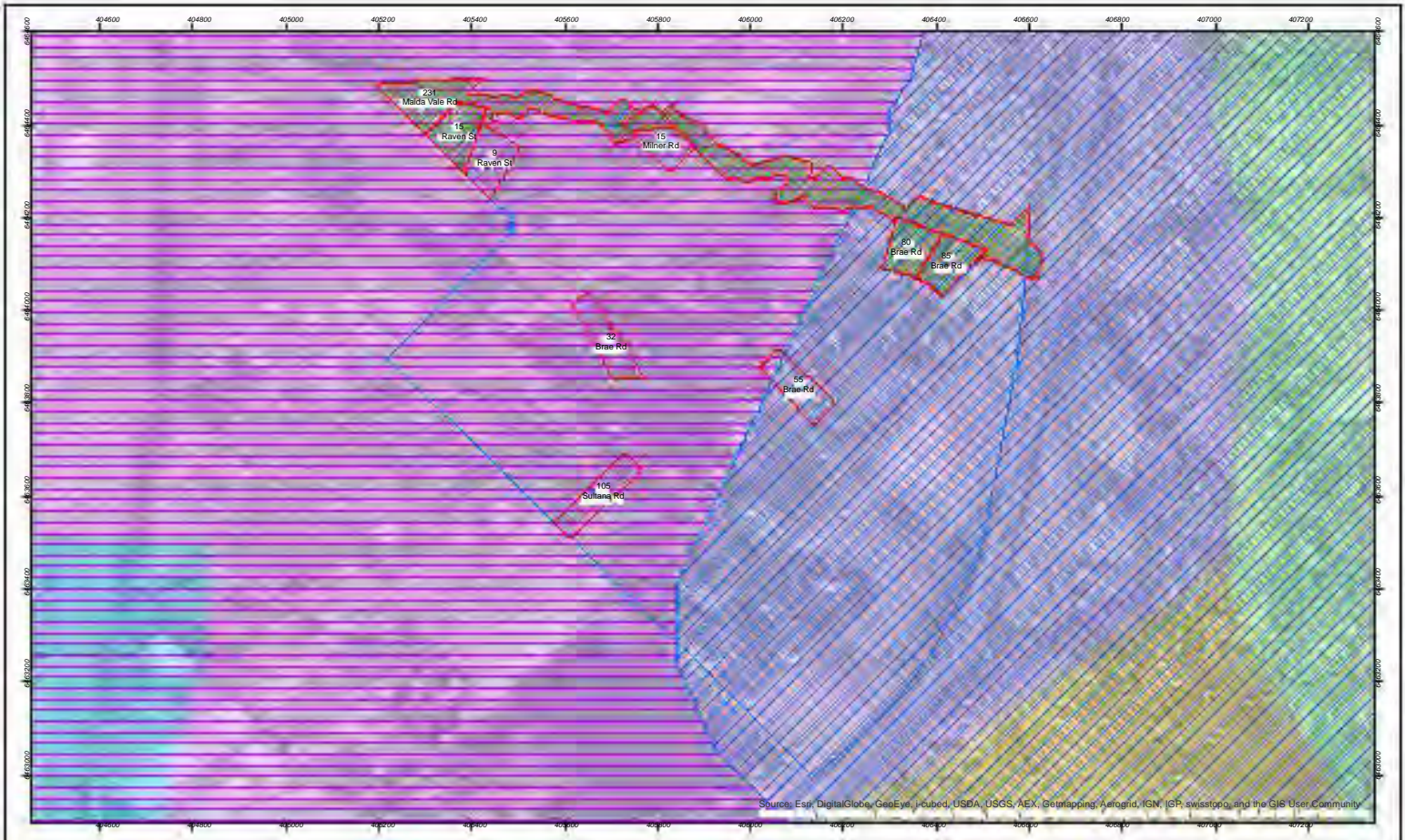


Figure 4: Regional vegetation mapping

Scale: 1:7,500

Coordinate System: GDA 1994 MGA Zone 50
 Note that positional errors may occur in some areas
 Date: 3/03/2016
 Author: J.C. Fuchs
 Source: Aerial image: ESRI online, approx. 2012. Vegetation Beard: DAFWA, 2014. Vegetation Heddle et al: DEC 2012.
 File: G:\Corwall\2015\BASSA\BASSA153214\Map_documents\BASSA153214_01_BASSA_Rev01_F004_A3.mxd

Legend		Vegetation class (Heddle et al)		System association (Beard)	
	Survey area		Forrestfield complex		BASSEDEAN_1001
	Bush Forever site 45		Southern River complex		BASSEDEAN_1009
	DSP area				BASSEDEAN_1018
					BASSEDEAN_3

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3. Methods

3.1 Desktop assessment

A desktop assessment was conducted using Florabase, Parks and Wildlife, and Department of the Environment (DotE) databases to identify the possible occurrence of TECs, PECs and Threatened and Priority flora potentially occurring within the survey area. Reports that document regional flora, vegetation and fauna within the surrounds of the survey area were also reviewed prior to the field assessment.

A database search request was also submitted to the Threatened Communities Branch of Parks and Wildlife to identify any potential TECs or PECs within 5 km of the survey area.

3.2 Field assessment

The field survey was conducted according to standards set out in Guidance Statement 51 (EPA 2004). The assessment of flora and vegetation within the survey area was undertaken by two ecologists from Strategen over the course of two days between 19-20 October 2015. Table 1 identifies staff involved in the field surveys, their role and qualifications. The survey area was traversed on foot to record changes in vegetation structure and type and eight vegetation quadrats were surveyed to identify vegetation types (Appendix 1; Appendix 2).

Table 1: Personnel

Name	Role	Flora collection permit
Mr. D. Panickar Strategen (Senior Ecologist)	Planning, fieldwork, plant identification, data interpretation and report preparation	SL010993
Ms. C. Courtauld Strategen (Ecologist)	Planning, fieldwork, plant identification, data interpretation and report preparation	SL011638

Site selection for vegetation mapping was based on differences in structure and species composition of the communities present within the survey area. Vegetation mapping sites were determined from aerial photographs. The survey area was traversed on foot, allowing for opportunistic sites to be placed where a change in vegetation structure or composition was observed.

Flora and vegetation was described and sampled systematically at each quadrat and additional opportunistic collecting was undertaken wherever previously unrecorded plants were observed. At each site the following floristic and environmental parameters were noted:

- GPS location
- topography
- soil type and colour
- outcropping rocks and their type
- percentage cover and average height of each vegetation stratum.

For each vascular plant species, the average height, number of plants and percent cover were recorded.

All plant specimens collected during the field surveys were identified using appropriate reference material or through comparisons with pressed specimens housed at the Western Australian Herbarium where necessary. Nomenclature of the species recorded is in accordance with Western Australian Herbarium (1998).

3.3 Data analysis and vegetation mapping

Due to the mostly degraded nature and uniform distribution of vegetation within the survey area; quadrat data were grouped into a species by site matrix to delineate individual vegetation types (VTs) present within the survey area. Aerial photography interpretation and field notes taken during the survey were then used to develop VT mapping polygon boundaries over the survey area. These polygon boundaries were then digitised using Geographic Information System (GIS) software.

VT descriptions (though floristic in origin) have been adapted from the National Vegetation Information System (NVIS) Australian Vegetation Attribute Manual Version 6.0 (ESCAVI 2003), a system of describing structural vegetation units (based on dominant taxa). This model follows nationally-agreed guidelines to describe and represent vegetation types, so that comparable and consistent data is produced nation-wide. For the purposes of this report, a VT is considered equivalent to a NVIS sub-association as described in ESCAVI (2003).

Vegetation condition was recorded at all quadrats, and also opportunistically within the survey area during the field assessment where required. Vegetation condition was described using the vegetation condition scale for the South West Botanical Province (Keighery 1994). Vegetation condition polygon boundaries were developed using this information in conjunction with aerial photography interpretation, and were digitised as for vegetation type mapping polygon boundaries.

To identify possible TECs and PECs in the survey area, vegetation quadrats (and subsequently, Vegetation Types) were compared to Floristic Community Types (FCTs) defined by Gibson *et al.* (1994). At present, there is no single consistent method for the determination of FCTs for vegetation data in the Swan Coastal Plain. Therefore, three different multivariate analyses were used to analyse the data collected from the survey area, the results of which were compared to determine the most likely result. This approach is consistent with the requirements of the Department of Parks and Wildlife. These analyses were undertaken by Dr. Shane Chalwell of Plantecology and comprised the following:

- hierarchical clustering
- nearest neighbour
- non-hierarchical clustering.

Hierarchical agglomerative clustering is the usual first stage in classifying vegetation data into community types. This involves calculating the similarity (or more often, the dissimilarity) between plots within the dataset and then sequentially fusing the plots into groups according to their similarity.

Nearest neighbour analysis involves calculating a similarity or dissimilarity matrix for the combined new dataset and simply allocating each new plot to the FCT of the plot from the original dataset that shares the greatest similarity.

Non-hierarchical clustering methods often allow new plot data to be added to previous classifications because they are based on the concept that each group or cluster is represented by a prototype (i.e. a 'type' plot) (Plantecology 2015). Therefore, new observations can be assigned to an existing classification by calculating the distance to the nearest prototype (which may be considered a membership criterion).

Each method of analysis has its own merits and disadvantages, which is why results should be viewed in comparison with each other and combined with site knowledge to determine the most likely outcome. A copy of the analyses undertaken by Plantecology (2015) is provided in Appendix 5.

The degraded nature of some sites within the survey area coupled with the broad nature of FCTs lead many vegetation types to characterise admixtures and transition zones between FCTs. In addition, the survey area was mapped based on extrapolated quadrat data from a single flora assessment, rather than accumulated species data over successive seasons within known vegetation community types as per Gibson *et al.* (1994). Consequently, assigned FCTs within the survey area are inferred and not absolute; i.e. a vegetation code assigned to an FCT is inferred to resemble floristic aspects of that FCT as defined by Gibson *et al.* (1994).

An averaged randomised Species Accumulation Curve, based on accumulated species compared against sites surveyed was used to provide an indication as to the level of adequacy of the survey effort. As the number of survey sites, and correspondingly the size of the area surveyed increases, there should be a diminishing number of new species recorded. At some point, the number of new species recorded becomes essentially asymptotic. As the number of new species being recorded for survey effort expended approaches this asymptotic value, the survey effort can be considered to be adequate.

3.4 Survey limitations and constraints

Table 2 displays the evaluation of the flora and vegetation assessment against a range of potential limitations that may have an effect on that assessment. Based on this evaluation, the assessment has not been subject to constraints that would affect the thoroughness of the assessment and the conclusions reached.

Table 2: Flora and vegetation survey potential limitations and constraints

Potential limitation	Impact on assessment	Comment
Sources of information and availability of contextual information (i.e. pre-existing background versus new material).	Not a constraint.	The survey has been undertaken in the Drummond Botanical Subdistrict on the Swan Coastal Plain which has been well studied and documented with ample literature available (Beard 1990).
Scope (i.e. what life forms, etc., were sampled).	Not a constraint.	Due to the degraded nature and uniform distribution of vegetation within the survey area and timing of the survey (i.e. spring); most life forms are likely to have been sampled adequately during the time of the survey.
Proportion of flora/fauna collected and identified (based on sampling, timing and intensity).	Not a constraint.	The proportion of flora surveyed was adequate. The entire survey area was traversed and flora species were recorded systematically.
Completeness and further work which might be needed (i.e. was the relevant survey area fully surveyed).	Not a constraint	The information collected during the survey was sufficient to assess the vegetation that was present during the time of the survey.
Mapping reliability.	Not a constraint.	Aerial photography of a suitable scale was used to map the survey area and identify potential fauna habitat. Sites were chosen from these aerials to reflect changes in community structure. Opportunistic sites were also used if differences were observed during on ground reconnaissance. Vegetation types were assigned to each site based on topography, soil type and presence/absence and percent foliage cover of vegetation.
Timing, weather, season, cycle.	Not a constraint.	Flora and vegetation surveys are normally conducted following winter rainfall in the South-West Province, ideally during spring (EPA 2004). The field assessment was conducted in October (i.e. spring) in fine weather conditions and therefore these factors are not deemed to be constraints.
Disturbances (fire flood, accidental human intervention, etc.).	Not a constraint.	The survey area and regional surrounds have been subject to disturbance over a significant period of time. Given the wide range of this disturbance, this is not considered to be a limitation within the survey area.
Intensity (in retrospect, was the intensity adequate).	Not a constraint.	The survey area was traversed on foot and all differences in vegetation structure were recorded appropriately.
Resources (i.e. were there adequate resources to complete the survey to the required standard).	Not a constraint.	The available resources were adequate to complete the survey.
Access problems (i.e. ability to access survey area).	Not a constraint.	Existing tracks enabled adequate access to survey the vegetation and fauna within the survey area. Where access was not available by car, the area was easily traversed by foot.
Experience levels (e.g. degree of expertise in species identification to taxon level).	Not a constraint.	All survey personnel have the appropriate training in sampling and identifying the flora of the region.

4. Results

4.1 Desktop assessment results

A total of 764 native vascular plant taxa from 79 plant families have the potential to occur within the survey area (Parks and Wildlife 2007-; DotE 2015b).

4.1.1 Threatened and Priority flora

A desktop survey for Threatened and Priority flora that may potentially occur within the survey area was undertaken using NatureMap (Parks and Wildlife 2007-), the Western Australian Herbarium (Western Australian Herbarium 1998-), and the DotE Protected Matters Search Tool (DotE 2015c).

Flora within Western Australia that is considered to be under threat may be classed as either Threatened flora or Priority flora. Where flora has been gazetted as Threatened flora under the WC Act, the taking of such flora without the written consent of the Minister is an offence. The WC Act defines “to take” flora as to gather, pluck, cut, pull up, destroy, dig up, remove or injure the flora or to cause or permit the same to be done by any means. Parks and Wildlife (2014) contains the current list of Threatened flora in Western Australia.

Priority flora are considered to be species which are potentially under threat, but for which there is insufficient information available concerning their distribution and/or populations to make a proper evaluation of their conservation status. Parks and Wildlife categorises Priority flora according to their conservation priority using five categories, P1 (highest conservation significance) to P5 (lowest conservation significance), to denote the conservation priority status of such species. Priority flora species are regularly reviewed and may have their priority status changed when more information on the species becomes available. Appendix 4 defines levels of Threatened and Priority flora (Western Australian Herbarium 1998-).

At the national level, the EPBC Act lists Threatened species as extinct, extinct in the wild, critically endangered, endangered, vulnerable, or conservation dependent. Appendix 4 defines each of these categories of Threatened species. The EPBC Act prohibits an action that has or will have a significant impact on a listed Threatened species without approval from the Australian Government Minister for the Environment. The current EPBC Act list of Threatened flora may be found on the DotE (2015c) website.

Table 3 shows the Threatened flora potentially occurring within the survey area. The desktop assessment identified 30 Threatened flora and 26 Priority flora species that have the potential to occur within the survey area. Due to the large number of conservation significant flora species identified in the desktop surveys; only Threatened flora have been formally listed within Table 3. Habitat requirements for all Priority flora species identified in the desktop assessment were included within the field survey however. Refer to Appendix 3 for a full list of Threatened and Priority flora species identified within 5 km of the survey area.

Of these, based on specific habitat requirements, 14 Threatened flora species were considered to have the potential to occur (Table 3).

Table 3: Threatened and Priority flora potentially occurring within the survey area

Species	Conservation status		Description	Potential to occur
	EPBC Act	WC Act		
<i>Calectasia cyanea</i>	Threatened – Critically Endangered	Threatened	A rhizomatous, clump forming perennial, herb from 10 to 60 cm tall. Flowers are blue/purple and visible from June to October. Habitat for this species occurs in heathland on flat to gentle slopes on white, grey or yellow sand and gravel (Western Australian Herbarium 1998-, DotE 2015d).	Possible – Preferred soil type/habitat occurs within the survey area.
<i>Darwinia foetida</i>	Threatened – Critically Endangered	Threatened	An erect, spreading shrub to 70 cm tall. Green flowers, visible from October to November. Habitat for this species occurs within wet/winter-damp clay under Myrtaceous shrubland and is restricted to the Muchea area (DotE 2015d).	Unlikely – The survey area occurs outside of the known range of the species.
<i>Ptilotus pyramidatus</i>	Threatened – Critically Endangered	Threatened	A small, perennial herb to 5 cm tall. The erect stem is tufted, unbranched, finely striated, hairy and greyish in colour. Flowers are a greenish-yellow colour and arranged in dense, pyramid-shaped spikes about 2.5 cm long (DotE 2014d). Habitat for this species occurs in seasonally inundated flats (floodplains) in patchy <i>Melaleuca acutifolia</i> open scrub over <i>Verticordia plumosa</i> var. <i>brachyphylla</i> and <i>Hypocalymma angustifolium</i> open heath over <i>Meeboldina cana</i> – <i>Lepironia neesii</i> open rushes and sedges and mid-dense, species-rich native annual herbs and geophytes (DotE 2015d).	Unlikely – Preferred soil type/habitat does not occur within the survey area.
<i>Synaphea</i> sp. Fairbridge Farm (D. Papenfus 696)	Threatened – Critically Endangered	Threatened	A dense, clumped shrub from 25 to 65 cm tall. Flowers are erect axillary spikes, yellow in colour, hairy, openly spaced and are angled upwards in the spike (DotE 2015d). Habitat for this species occurs on the Pinjarra Plain, south of Perth from Serpentine to Dardanup. The five known subpopulations of the species are fragmented and exist within scattered patches of remnant vegetation, in areas which have been extensively cleared for agriculture (DotE 2015d).	Unlikely – The survey area occurs outside of the known range of the species.
<i>Andersonia gracilis</i>	Threatened – Endangered	Threatened	A slender shrub to 50 cm tall with few, spreading branches. Flowers are pink to pale mauve. Habitat for this species occurs within seasonally damp, black sandy clay flats near swamps (Western Australian Herbarium 1998-; DotE 2015d).	Unlikely – Preferred soil type/habitat does not occur within the survey area.
<i>Banksia mimica</i>	Threatened – Endangered	Threatened	A prostrate, rhizomatous shrub with underground stems and leaves up to 41 cm long. Flowers are yellow-brown and visible from December to February (Western Australian Herbarium 1998-; DotE 2015d). Habitat for this species occurs in three disjunct populations at Mogumber in the north, the Darling Range east of Perth and the Whicher Range, south-east of Busselton on flat to gentle slopes on grey and white sand in open <i>Banksia</i> woodlands (DotE 2015d).	Unlikely – The survey area occurs outside of the known range of the species.
<i>Caladenia huegelii</i>	Threatened – Endangered	Threatened	A slender orchid from 30 to 50 cm tall. One or two striking flowers characterised by a greenish-cream lower petal with a maroon tip. Other petals are cream with red or pink suffusions. Habitat for this species occurs within well-drained, deep sandy soils in low mixed <i>Banksia</i> , <i>Allocasuarina</i> and Jarrah woodlands (Western Australian Herbarium 1998-, DotE 2015d).	Possible – Preferred soil type/habitat occurs within the survey area.

Species	Conservation status		Description	Potential to occur
	EPBC Act	WC Act		
<i>Calytrix breviseta</i> subsp. <i>breviseta</i>	Threatened – Endangered	Threatened	A slender orchid to 45 cm tall. Unusually flattened flowers, marked with brown blotches on their under surface. Habitat for this species occurs in areas subject to winter inundation within dense heath with scattered Myrtaceous trees (DotE 2015d).	Possible – Preferred soil type/habitat occurs within the survey area.
<i>Chamelaucium</i> sp. Gingin (N.G. Marchant 6)	Threatened – Endangered	Threatened	An open straggly shrub from 1 to 2 m tall. Flowers are pale pinkish-white, and the buds are tinged a deeper pink. Habitat for this species is confined to the Gingin/Chittering area, where it has a range of only 3 km (DotE 2015d).	Unlikely – The survey area occurs outside of the known range of the species.
<i>Darwinia apiculata</i>	Threatened – Endangered	Threatened	A densely branched, rounded shrub from 40 to 50 cm tall with red, slender young branchlets. Flowers are green & yellow/red and visible in October. Habitat for this species occurs in open Jarrah-Marri woodland on shallow, gravelly soil over laterite, open heathland over sandy loams with granite boulders and hilltops and slopes, in red clay or gravel soils (Western Australian Herbarium 1998-, DotE 2015d).	Possible – Preferred soil type/habitat occurs within the survey area.
<i>Diuris purdiei</i>	Threatened – Endangered	Threatened	A slender orchid to 45 cm tall. Unusually flattened flowers, marked with brown blotches on their under surface. Habitat for this species occurs in areas subject to winter inundation within dense heath with scattered Myrtaceous trees (DotE 2015d).	Unlikely – Preferred soil type/habitat does not occur within the survey area.
<i>Drakaea elastica</i>	Threatened – Endangered	Threatened	A slender orchid to 30 cm tall with a prostrate, round to heart shaped leaf. Singular, bright green, glossy flower. Habitat for this species is within bare patches of white sand over dark sandy loams on damp areas mostly in <i>Kunzea glabrescens</i> thickets (DotE 2015d).	Unlikely – Preferred soil type/habitat does not occur within the survey area.
<i>Eucalyptus balanites</i>	Threatened – Endangered	Threatened	A mallee to 5 m tall. Bark is rough and flaky. Flowers are white and visible October to December, or from January to February (Western Australian Herbarium 1998-). Habitat for this species is sandy soils with lateritic gravel in two disjunct populations in Badgingarra and the City of Armadale (DotE 2015d).	Unlikely – The survey area occurs outside of the known range of the species.
<i>Grevillea curviloba</i> subsp. <i>incurva</i>	Threatened – Endangered	Threatened	A prostrate to erect shrub from 0.1 m to 2.5 m tall. Flowers are white-cream and visible from August to September. Habitat for this species is sand and sandy loam substrates in winter-wet heath (Western Australian Herbarium 1998-).	Possible – Preferred soil type/habitat occurs within the survey area.
<i>Lasiopetalum pterocarpum</i>	Threatened – Endangered	Threatened	An open, multi-stemmed shrub to 1.2 m tall. Flowers are pink and visible from August to December. Habitat for this species occurs in dark red-brown loam or clayey sand over granite on sloping banks near creeklines (Western Australian Herbarium 1998-).	Possible – Preferred soil type/habitat occurs within the survey area.
<i>Lepidosperma rostratum</i>	Threatened – Endangered	Threatened	A rhizomatous sedge to 30 cm in diameter. Stems are circular in cross section and flowers are spike-like and up to 4 cm long. Habitat for this species occurs in sandy soils among low heath comprised of <i>Banksia telmatiaea</i> and <i>Calothamnus hirsutus</i> in winter-wet swamps (Western Australian Herbarium 1998-, DotE 2015d).	Unlikely – Preferred soil type/habitat does not occur within the survey area.

Species	Conservation status		Description	Potential to occur
	EPBC Act	WC Act		
<i>Macarthuria keigheryi</i>	Threatened – Endangered	Threatened	An erect or spreading perennial herb or shrub from 20 to 40 cm tall. Flowers are visible from September to March. Habitat for this species occurs on white or grey sand in low-lying, winter-wet areas among heathland and jarrah- <i>Banksia</i> woodland (Western Australian Herbarium 1998-, DotE 2015d).	Possible – Preferred soil type/habitat occurs within the survey area.
<i>Synaphea stenoloba</i>	Threatened – Endangered	Threatened	A caespitose shrub from 30 to 45 cm tall. Flowers are yellow and visible from August to October. Habitat for this species occurs on sandy or sandy clay soils in winter-wet flats or on granite (Western Australian Herbarium 1998-, DotE 2015d).	Possible – Preferred soil type/habitat occurs within the survey area.
<i>Thelymitra dedmaniarum</i>	Threatened – Endangered	Threatened	A tuberous, perennial orchid to 80 cm tall. Flowers yellow and visible from November to January. Habitat for this species is in open Wandoo woodland on red-brown sandy loam on granite (Western Australian Herbarium 1998-, DotE 2015d).	Unlikely – Preferred soil type/habitat does not occur within the survey area.
<i>Thelymitra stellata</i>	Threatened – Endangered	Threatened	A tuberous, terrestrial orchid to 25 cm tall. Flowers are yellow and brown and visible from October to November. Habitat for this species is low heath and scrub in Jarrah and Wandoo woodland; on ridges, slopes, flats, riverbanks and breakaways (Western Australian Herbarium 1998-, DotE 2015d).	Possible – Preferred soil type/habitat occurs within the survey area.
<i>Trithuria occidentalis</i>	Threatened – Endangered	Threatened	Sokoloff et al. (2008) describes <i>Trithuria occidentalis</i> as having fruits with a maximum width in their distal part; dry mature fruits that dehisce by separating three longitudinal ribs; dry mature seeds clearly sculptured. Habitat for this species is within very open shrubland of <i>Melaleuca lateritia</i> , partly submerged on the edge of shallow, winter - wet claypans. <i>Trithuria occidentalis</i> is currently known from one confirmed location near Ellenbrook. There is also a possible second location in Upper Swan in which the species has not been recorded since 1978 (Sokoloff et al. 2008).	Unlikely – The survey area occurs outside of the known range of the species.
<i>Acacia anomala</i>	Threatened – Vulnerable	Threatened	A slender, rush-like shrub from 20 to 50 cm tall. Flowers are yellow and visible from August to September. Habitat for this species occurs in low open woodland or forest dominated by <i>Eucalyptus marginata</i> , <i>E. wandoo</i> , <i>E. accedens</i> and <i>Corymbia calophylla</i> on laterite in shallow sand, loam, clay or gravel (Western Australian Herbarium 1998-, DotE 2015d).	Possible – Preferred soil type/habitat occurs within the survey area.
<i>Acacia aphylla</i>	Threatened – Vulnerable	Threatened	A divaricately branched, spinescent, glaucous shrub from 0.9 to 2.5 m tall. Flowers are yellow and visible from August to October. Habitat for this species occurs in open forest dominated by <i>Eucalyptus marginata</i> and <i>Corymbia calophylla</i> , or woodland dominated by <i>E. loxophleba</i> associated with laterite and granite outcrops on hillsides (Western Australian Herbarium 1998-, DotE 2015d).	Unlikely – Preferred soil type/habitat does not occur within the survey area.
<i>Anigozanthos viridis</i> subsp. <i>terraspectans</i>	Threatened – Vulnerable	Threatened	Rhizomatous perennial herb from 5 to 20 cm tall. Flowers are green/yellow-green and visible from August to September. Habitat for this species is grey sand and clay loam substrate in winter-wet depressions (Western Australian Herbarium 1998-).	Possible – Preferred soil type/habitat occurs within the survey area.

Species	Conservation status		Description	Potential to occur
	EPBC Act	WC Act		
<i>Anthocercis gracilis</i>	Threatened – Vulnerable	Threatened	An erect, spindly shrub to 1 m tall. Flowers are yellow-green and visible from September to October. Habitat for this species occurs on sandy or loamy soils associated with granite outcrops (Western Australian Herbarium 1998-).	Unlikely – Preferred soil type/habitat does not occur within the survey area.
<i>Conospermum undulatum</i>	Threatened – Vulnerable	Threatened	An erect compact shrub from 0.6 to 2.0 m high. Flowers are white and visible May to October. Habitat for this species is grey or yellow-orange clayey substrate (Western Australian Herbarium 1998-).	Possible – Preferred soil type/habitat occurs within the survey area.
<i>Diuris drummondii</i>	Threatened – Vulnerable	Threatened	A tuberous orchid to from 0.5 to 1.05 m tall. Flowers are yellow and visible from November to January. Habitat for this species occurs in low-lying depressions or swamps (Western Australian Herbarium 1998-).	Unlikely – Preferred soil type/habitat does not occur within the survey area.
<i>Diuris micrantha</i>	Threatened – Vulnerable	Threatened	A slender orchid to 60 cm tall. Flowers are yellow with reddish-brown markings and visible from September to October. Habitat for this species occurs within clay-loam substrates in winter-wet depressions or swamps (DotE 2015d).	Unlikely – Preferred soil type/habitat does not occur within the survey area.
<i>Drakaea micrantha</i>	Threatened – Vulnerable	Threatened	A tuberous, terrestrial orchid to 30 cm tall. The species can be identified by its silvery-grey heart shaped leaf with prominent green veins. The species produces a singular red and yellow flower. Habitat for this species occurs within cleared, open sandy patches (Brown <i>et al.</i> 1998).	Possible – Preferred soil type/habitat occurs within the survey area.
<i>Eleocharis keigheryi</i>	Threatened – Vulnerable	Threatened	A rhizomatous, clumped perennial grass-like herb to 40 cm tall. Flowers are green and visible from August to November. Habitat for this species occurs in clay or sandy loam in freshwater creeks and claypans (Western Australian Herbarium 1998-).	Possible – Preferred soil type/habitat occurs within the survey area.

4.1.2 Threatened and Priority Ecological Communities

A TEC is defined under the EP Act as an ecological community listed, designated or declared under a written law or a law of the Australian Government as Threatened, Endangered or Vulnerable. There are four State categories of TECs (DEC 2010)¹:

- presumed totally destroyed (PD)
- critically endangered (CR)
- endangered (EN)
- vulnerable (VU).

A description of each of these TEC categories is presented in Appendix 4. TECs are gazetted as such (Parks and Wildlife 2015a) and some Western Australian TECs are listed as Threatened under the EPBC Act.

Under the EPBC Act, a person must not undertake an action that has or will have a significant impact on a listed TEC without approval from the Australian Government Minister for the Environment, unless those actions are not prohibited under the EPBC Act. A description of each of these categories of TECs is presented in Appendix 4. The current EPBC Act list of TECs can be located on the DoE (2015b) website.

Ecological communities identified as Threatened, but not listed as TECs, are classified as Priority Ecological Communities (PECs). These communities are under threat, but there is insufficient information available concerning their distribution to make a proper evaluation of their conservation status. Parks and Wildlife categorises PECs according to their conservation priority, using five categories, P1 (highest conservation significance) to P5 (lowest conservation significance), to denote the conservation priority status of such ecological communities. Appendix 4 defines PECs (DEC 2010). A list of current PECs can be viewed at the Parks and Wildlife (2015b) website.

Five TECs were identified as occurring within 500 m of the DSP area as displayed Figure 5 and listed below:

- SCP 20a (TEC listed under the WC Act)
- SCP 20b (TEC listed under the WC Act)
- SCP 3a (TEC listed under the EPBC Act)
- SCP 3b (TEC listed under the WC Act)
- SCP 20c (TEC listed under the EPBC Act).

An additional three TECs and one PEC were identified within a 5 km radius of the DSP area as listed below:

- SCP 07 (TEC listed under the EPBC Act)
- SCP 02 (TEC listed under the WC Act)
- SCP 3c (TEC listed under the EPBC Act)
- Central Northern Darling Scarp Granite Shrubland Community (Priority 4 PEC).

Mapped boundaries of TECs and PECs do not necessarily represent the actual extent of their respective communities and are rather a broad scale indication of where the communities have been previously mapped plus an additional buffer. Figure 5 displays the boundaries of SCP 20a, SCP 3a, SCP 3b and SCP 20c occurring within the all lots within the survey area.

¹The Department of Environment and Conservation is still listed as the author of all TEC and PEC databases and have been referred to as such in this document instead of the Department of Parks and Wildlife (Parks and Wildlife).



Figure 5: Location of TECs and PECs within 500 m of the survey area

Scale: 1:12,500 - A3

Meters

Coordinate System: GDA 1994 MGA Zone 50
 Note that positional errors may occur in some areas
 Date: 3/03/2016
 Author: JCrute
 Source: Aerial image: ESRI online, approx. 2012. TEC-PEC: DPAW 2015.
 Path: G:\Corwall\2015\BMA\BMA153214\Map_documents\BMA153214_01_R001_Rev4_F05_A3.mxd

Legend

Survey area	500m buffer	(TEC EPBC Act)	TEC (WC Act)
Bush Forever site 45	SCP3a	SCP3b	SCP20a
DSP area	SCP20c	SCP20b	SCP20b



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4.1.3 Wetlands

A search of the *Geomorphic Wetlands of the Swan Coastal Plain Database* shows that the northern extent of the DSP area, including a portion of Poison Gully Creek is classified as a Palusplain Resource Enhancement (RE) wetland, (UFI 15880) (Landgate 2015).

4.1.4 Bush Forever

Bush Forever Site 45 (Poison Gully Bushland, High Wycombe) occurs within the northern portion of the DSP area. This Bush Forever Site is associated with Poison Gully Creek and vegetation on private lots adjacent to the creek.

4.2 Field survey results

4.2.1 Native flora

A total of 62 native vascular plant taxa from 43 plant genera and 21 plant families were recorded within the survey area. The majority of taxa were recorded within the Fabaceae (11 taxa) and Proteaceae (11 taxa) families (Appendix 1).

4.2.2 Threatened and Priority flora

No Threatened or Priority flora species pursuant to Schedule 1 of the WC Act and as listed by section 178 of the EPBC Act, Parks and Wildlife (2014) and Western Australian Herbarium (1998-) were recorded within the survey area. One Threatened flora species, *Conospermum undulatum* was previously recorded within Lot 231 of the survey area; however was not observed during this survey. Table 4 displays the previously recorded location of *C. undulatum* within the survey area.

Table 4: Locations of Threatened and Priority flora species recorded within the survey area

Species	Conservation status		GPS location (GDA 94) Zone 50	
	EPBC Act	WC Act	Easting	Northing
<i>Conospermum undulatum</i>	Threatened – Vulnerable	Threatened	405266	6464464

4.2.3 Introduced (exotic) taxa

A total of 29 introduced (exotic) taxa were recorded within the survey area (Appendix 1).

Two of these species (*Zantedeschia aethiopica* [Arum Lily] and *Asparagus asparagoides* [Bridal Creeper]) are Declared Plant species in Western Australia pursuant to section 22 of the *Biosecurity and Agriculture Management Act 2007* (BAM Act) according to the Western Australian Department of Agriculture and Food (DAFWA 2015). Table 5 and Figure 6 display the species recorded and their locations within the survey area.

Table 5: Locations of Declared Plant species pursuant to section 22 of the BAM Act recorded within the survey area

Species	GPS location (GDA 94) Zone 50	
	Easting	Northing
<i>Asparagus asparagoides</i>	406420	6464075
	406467	6464155
	406303	6464235
	406522	6464175
<i>Zantedeschia aethiopica</i>	405387	6464389
	405421	6464435
	405758	6464394
	406130	6464293



Figure 6: Locations of Declared Plant species pursuant to section 22 of the BAM Act within the survey area

Scale: 1:7,500 - A3

Meters

Coordinate System: GDA 1994 MGA Zone 50
 Note that positional errors may occur in some areas
 Date: 3/03/2016
 Author: JCrute
 Source: Aerial image: ESRI online, approx. 2012.
 File: G:\Corwall\2015\BAM\BAM\15211\A3Map_documents\RD01\Rev4\DKA1521_01_R001_Rev4_F006_A3.mxd

Legend

Species

- *Asparagus asparagoides*
- *Zantedeschia aethiopica*

Survey area

Bush Forever site 45

DSP area

strategen
 info@strategen.com.au
 www.strategen.com.au

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4.2.4 Accumulated species – sites surveyed (species-area curve)

The species-area curve (Figure 7), based on a species accumulation analysis was used to evaluate the adequacy of sampling (Colwell 2013). The asymptotic value was determined using Michaelis-Menten modelling. Using this analysis, the incidence based coverage estimator of species richness (ICE) was calculated to be 138.68 (Chao 2005). Based on this value, and the total of 93 species recorded during the survey; it is hypothesised that approximately 67% of the flora species potentially present within the survey area were recorded.

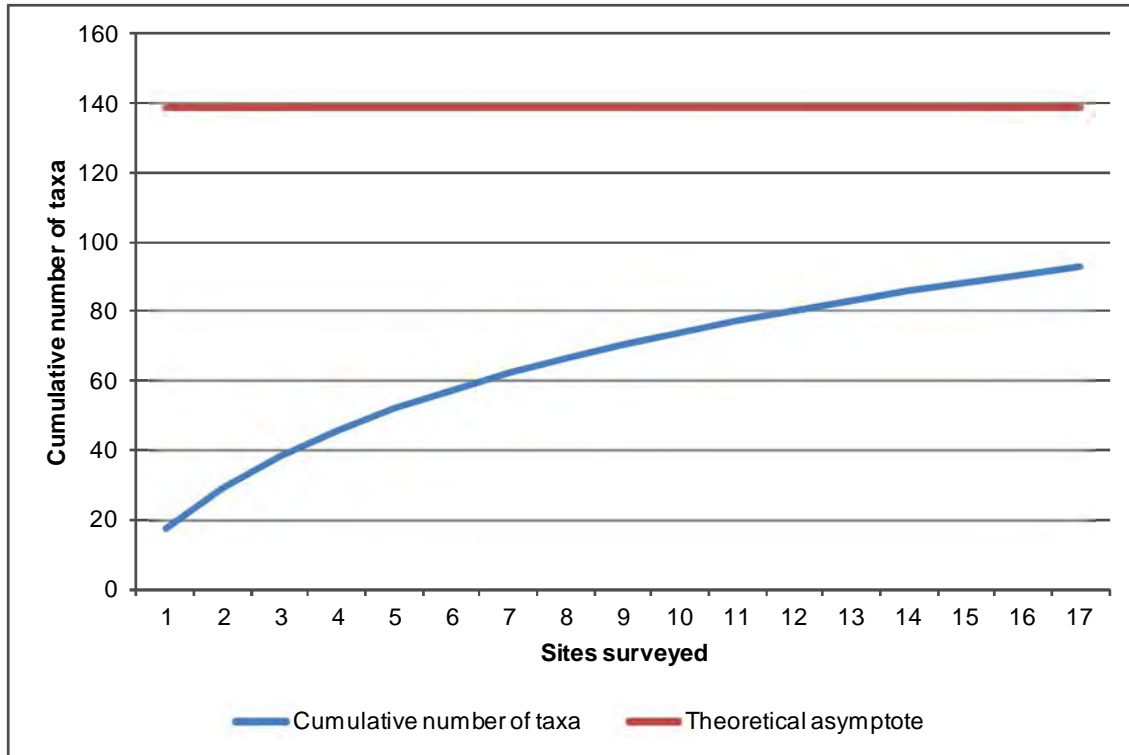


Figure 7: Averaged randomised Species Accumulation Curve

4.2.5 Vegetation types

Seven native vegetation types (VTs) were defined and mapped within the survey area (Appendix 1; Figure 8) and are summarised in Table 6. Areas containing vegetation in parkland cleared or highly degraded state have not been counted as unique native VTs but have been included in Table 6 for area calculations. Total areas occupied within the survey area by each of the identified VTs are set out in Table 7.

Table 6: Vegetation Types

Vegetation Type	Description
1	<i>Eucalyptus marginata</i> , <i>Corymbia calophylla</i> and <i>Allocasuarina fraseriana</i> tall woodland over <i>Gastrolobium capitatum</i> , <i>Xanthorrhoea preissii</i> and <i>Allocasuarina humilis</i> mid sparse shrubland over <i>Banksia dallanneyi</i> , <i>Xanthorrhoea gracilis</i> , <i>Tetraria octandra</i> , <i>Ehrharta calycina</i> and <i>Briza maxima</i> low shrubland/grassland mix on grey sandy loam soils.
2	<i>Corymbia calophylla</i> tall woodland over <i>*Arundo donax</i> , <i>*Tipuana tipu</i> and <i>Trymalium odoratissimum</i> thicket over <i>Gastrolobium capitatum</i> and <i>*Watsonia meriana</i> shrubland over <i>Banksia nivea</i> and <i>Banksia dallanneyi</i> low shrubland over a mat of <i>*Tropaeolum majus</i> along the Poison Gully creekline on clay soils.
3	<i>Eucalyptus marginata</i> , <i>Corymbia calophylla</i> , <i>Allocasuarina fraseriana</i> and <i>Banksia attenuata</i> woodland over <i>Gompholobium tomentosum</i> , <i>Lambertia multiflora</i> , <i>Xanthorrhoea preissii</i> , <i>Stirlingia latifolia</i> and <i>Synaphea petiolaris</i> shrubland over <i>Mesomelaena tetragona</i> , <i>Tetraria capillaris</i> and <i>Lepidosperma leptostachyum</i> sedgeland on sandy loam soils.
4	<i>Eucalyptus marginata</i> , <i>Xylomelum occidentale</i> , <i>Acacia saligna</i> and <i>Banksia menziesii</i> open woodland over <i>*Briza maxima</i> and <i>*Ehrharta calycina</i> tall grassland on sandy loam soils.
5	<i>Corymbia calophylla</i> and <i>Eucalyptus rudis</i> tall woodland over <i>Trymalium odoratissimum</i> thicket over <i>Acacia pulchella</i> , <i>Hibbertia hypericoides</i> and <i>Xanthorrhoea preissii</i> mid sparse shrubland over <i>*Ehrharta calycina</i> , <i>*Cynodon dactylon</i> , <i>*Gladiolus caryophyllaceus</i> and <i>Tetraria octandra</i> grassland/herbland on clay soils within Poison Gully.
6	<i>Corymbia calophylla</i> woodland over <i>Trymalium odoratissimum</i> and <i>Acacia pulchella</i> thicket over <i>Xanthorrhoea preissii</i> mid sparse shrubland over <i>Banksia dallanneyi</i> low sparse shrubland <i>*Ehrharta calycina</i> , <i>*Briza maxima</i> , <i>*Cynodon dactylon</i> grassland on clay loam soils above the Poison Gully banks.
7	<i>Eucalyptus marginata</i> woodland over <i>Xanthorrhoea preissii</i> tall sparse shrubland over <i>*Ehrharta calycina</i> and <i>*Briza maxima</i> tall grassland on sandy loam soils.
P	Parkland cleared areas
C	Cleared areas.

Vegetation type coverage

The total area mapped within the survey area was 16.08 ha which includes parkland cleared and fully cleared areas (Table 7). The dominant native VT within the survey area was VT 5 which can be broadly described as a *Corymbia calophylla* and *Eucalyptus rudis* tall woodlands within Poison Gully.

Table 7: Area (ha) covered by each VT within the survey area

VT	Area (ha)	Percentage of the Survey area
1	0.97	6.05
2	0.99	6.17
3	0.85	5.27
4	0.98	6.07
5	6.25	38.85
6	0.68	4.20
7	1.27	7.90
P	2.39	14.89
C	1.70	10.57
TOTAL	16.08	100



Figure 8: Vegetation Types (VTs) mapped within the survey area



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4.2.6 Vegetation condition

The survey area shows signs of having been degraded for a long period of time. Urban development within the survey area and surrounds has led to degradation of vegetation with impacts including:

- invasive species
- clearing of vegetation
- bank destabilisation.

Some areas of vegetation were in significantly better condition than others and as such, vegetation condition within the survey ranged from Excellent to Completely Degraded (Keighery 1994; Figure 9; Table 8).

Table 9 gives a numerical breakdown of the area occupied by each vegetation condition rating within the survey area.

Table 8: Vegetation condition scale (Keighery 1994)

Condition rating	Description
Pristine (1)	Pristine or nearly so, no obvious sign of disturbance.
Excellent (2)	Vegetation structure intact, disturbance affecting individual species and weeds are non-aggressive species.
Very Good (3)	Vegetation structure altered obvious signs of disturbance. For example, disturbance to vegetation structure caused by repeated fires, the presence of some more aggressive weeds, dieback, logging and grazing.
Good (4)	Vegetation structure significantly altered by obvious signs of multiple disturbances. Retains basic vegetation structure or ability to regenerate it. For example, disturbance to vegetation structure caused by very frequent fires, the presence of some very aggressive weeds at high density, partial clearing, dieback, grazing.
Degraded (5)	Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management. For example, disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and grazing.
Completely Degraded (6)	The structure of the vegetation is no longer intact and the area is completely or almost completely without native species. These areas are often described as 'parkland cleared' with the flora comprising weed or crop species with isolated native trees or shrubs.

Table 9: Area (ha) covered by each vegetation condition category within the survey area

Vegetation Condition	Area (ha)	Percentage of the Survey area
Excellent	0.48	3.00
Very Good – Excellent	0.49	3.05
Very Good	0.21	1.31
Good	1.44	8.97
Good – Degraded	0.98	6.07
Degraded	0.98	6.08
Completely Degraded	8.58	53.37
Cleared	2.92	18.15
Total	16.08	100

4.3 FCT similarity analysis

Remnant vegetation of the southern Swan Coastal Plain was surveyed and mapped by Gibson *et al.* (1994) to provide an understanding of the major floristic types and transitions across the region. The major FCTs were defined by classifying the data collected according to the similarities in species composition between plots. When determining the FCT of a new record, a floristic analysis of species composition provides the most robust method that is consistent with the original classification.

Obvious limitations are associated with determining and mapping the presence of FCTs within the survey area. Structurally, vegetation has been modified due to widespread and sustained weed invasion which has resulted in the understorey being almost completely replaced by exotic species in some areas. As a result, species richness (per quadrat) in the current survey was markedly lower than that recorded by Gibson *et al.* (1994). In addition, vegetation mapping requires the extrapolation of quadrat data to generalise vegetation communities and map 'like' vegetation over relatively small spatial scales. Significant groupings of quadrats and resultant delineation of vegetation communities are primarily determined *a-priori*. Comparing this type of data with that of Gibson *et al.* (1994), which contains accumulated species data over successive seasons within known vegetation communities across the Swan Coastal Plain, is problematic.

At present, there is no single consistent method for the determination of FCTs for vegetation data in the Swan Coastal Plain. Therefore, three different methods were used to analyse the data collected from the survey area, the results of which were compared to determine the most likely result (refer to section 3.3).

The following results have been interpreted from Plantecology (2015), which is presented in Appendix 5.

The low numbers of native species recorded from the survey area attributed to degradation resulted in an inconclusive assignment of any specific FCT to vegetation within the survey area.

Vegetation within the following lots bear some resemblance to FCTs, however results are not conclusive due to the low numbers of species recorded:

- 32 Brae Road: FCT 3b (i.e. VT 3)
- 231 Maida Vale Road: FCT 3b (i.e. VT 1)
- 15 Milner Road: FCT 20a (i.e. VT 1)²
- 80 Brae Road (within Bush Forever Site 45): 3c (i.e. VT 7)
- Eastern portion of Bush Forever Site 45: FCT 3c (i.e. VT 6).

² VT 1 bore resemblance to two FCTs.

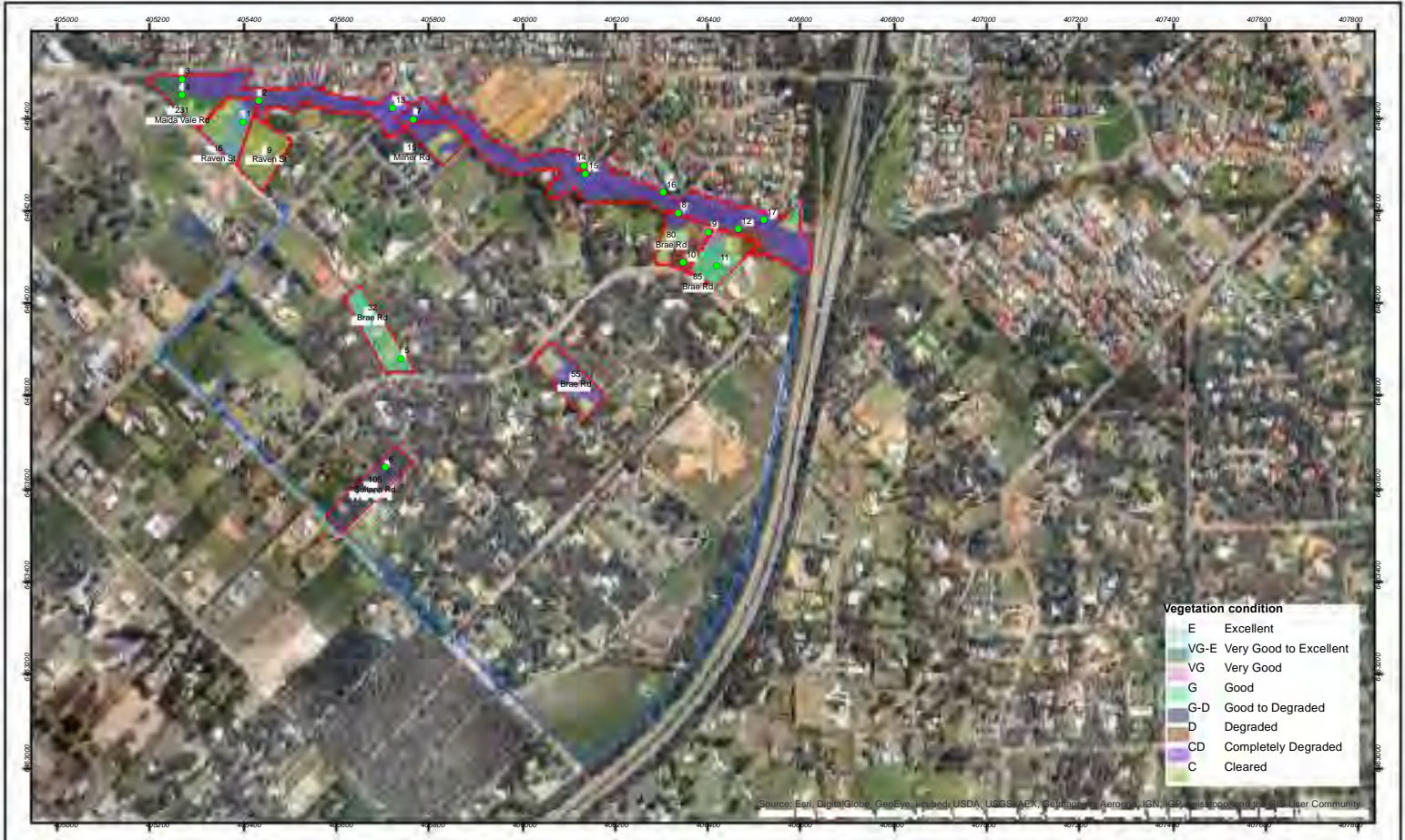


Figure 9: Vegetation condition within the survey area

Scale 1:7,500 at A3

Coordinate System: GDA 1994 MGA Zone 50
 Note that positional errors may occur in some areas
 Date: 4/23/2016
 Author: JC/rds
 Source: Background aerial image: ESRI online, approx. 2012; Aerial image: Landgate 2011.
 Path: Q:\Data\2016\BVA\BVA132016\Map_documents\BVA132016\BVA132016_05_R001_Bush_F009_A3.mxd

Legend

- Sites
- Survey area
- DSP area
- Bush Forever site 45

Vegetation condition	
E	Excellent
VG-E	Very Good to Excellent
VG	Very Good
G	Good
G-D	Good to Degraded
D	Degraded
CD	Completely Degraded
C	Cleared



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4.3.1 Threatened and Priority Ecological Communities

Five TECs were identified as occurring within 500 m of the DSP area as displayed Figure 5 and listed below:

- SCP 20a (TEC listed under the WC Act)
- SCP 20b (TEC listed under the WC Act)
- SCP 3a (TEC listed under the EPBC Act)
- SCP 3b (TEC listed under the WC Act)
- SCP 20c (TEC listed under the EPBC Act).

The highly degraded nature of the survey area makes a comparison between VTs and FCTs highly problematic, however, there is a possibility that FCT 20a '*Banksia attenuata* woodlands over species rich dense shrublands' (a listed TEC under the WC Act) and FCT 3b '*Corymbia calophylla* – *Eucalyptus marginata* woodlands on sandy clay soils of the southern Swan Coastal Plain' (a listed TEC under the WC Act) occur within the survey area, albeit in a highly degraded state. Additionally, results of the FCT analyses also suggest that SCP 3c '*Corymbia calophylla* – *Xanthorrhoea preissii* woodlands and shrublands, Swan Coastal Plain' (a listed TEC under the EPBC Act) may also occur within the survey area. The degraded nature of vegetation within the survey area however, leaves these determinations open to interpretation.

Table 10 presents a numerical breakdown of the similarity between vegetation within the survey area to known FCTs. It is evident that the level of species diversity within the survey area is significantly lower than that within recorded FCTs. Additionally, a large amount of typical FCT species identified in Gibson *et al.* (1994) are missing from mapped vegetation types within the survey area. These two factors considerably reduce the likelihood of vegetation within the survey area being resemblant of known FCTs and subsequently TECs.

Table 10: Comparison between VTs and known FCTs

VT	FCT resemblance	Number of species recorded in VT	Number of species recorded in FCT	FCT typical species missing from VT (Gibson et al. 1994)
VT 1	SCP 3b	43	323	<i>Bossiaea eriocarpa</i> , <i>Banksia nivea</i> , <i>Burchardia congesta</i> , <i>Caesia micrantha</i> , <i>Chamaescilla corymbosa</i> , <i>Conostylis juncea</i> , <i>Drosera erythrorhiza</i> , <i>Drosera stolonifera</i> , <i>Lepidosperma angustatum</i> , <i>Lomandra hermaphrodita</i> , <i>Mesomelaena tetragona</i> , <i>Sowerbaea laxiflora</i> .
VT 1	SCP 20a	43	261	<i>Banksia attenuata</i> , <i>Bossiaea eriocarpa</i> , <i>Conostephium pendulum</i> , <i>Hibbertia huegelii</i> , <i>Petrophile linearis</i> , <i>Scaevola repens</i> , <i>Alexgeorgea nitens</i> , <i>Burchardia congesta</i> , <i>Drosera erythrorhiza</i> , <i>Drosera menziesii</i> subsp. <i>penicillaris</i> , <i>Lomandra hermaphrodita</i> , <i>Lyginia barbata</i> .
VT 3	SCP 3b	27	323	<i>Banksia nivea</i> , <i>Burchardia congesta</i> , <i>Caesia micrantha</i> , <i>Chamaescilla corymbosa</i> , <i>Conostylis juncea</i> , <i>Drosera erythrorhiza</i> , <i>Drosera stolonifera</i> , <i>Lepidosperma angustatum</i> , <i>Lomandra hermaphrodita</i> , <i>Sowerbaea laxiflora</i> .
VT 6	SCP 3c	30	227	<i>Burchardia congesta</i> , <i>Cyathochaeta avenacea</i> .
VT 7	SCP 3c	25	227	<i>Burchardia congesta</i> , <i>Cyathochaeta avenacea</i> .

5. Discussion

Vegetation within the survey area comprises seven native VTs as well as parkland cleared and fully cleared areas. Transitions between VTs were generally discontinuous, though occasionally abrupt with margins representing admixtures of more than one VT. This discontinuity is primarily due to changes in soil profile and topography, and presence of cleared areas. At a broad scale, the majority of the survey area was observed to be in various states of degradation due to surrounding urban development with vegetation ranging from eucalypt woodlands over relatively dense understorey species, creekline vegetation and highly modified vegetation within large rural-residential lots.

The flora and vegetation assessment conducted within the survey area was undertaken during October, within the prime flowering time for the majority of species within the area. Field reconnaissance involved traversing the entire survey area, which ensures that an accurate representation of all VTs and potential conservation significant flora were obtained.

The number of native and exotic species recorded on the survey area totalled 62 native vascular plant taxa from 43 plant genera and 21 plant families as well as 29 exotic taxa. Two Declared Plant species pursuant to section 22 of the BAM Act (*Zantedeschia aethiopica* [Arum Lily] and *Asparagus asparagoides* [Bridal Creeper]) were recorded within the survey area (DAFWA 2015). The relatively low number of plant species recorded reflects the disturbed nature of the survey area.

No conservation significant species were recorded within the survey area. Effort was made during the field assessment to look for areas of suitable habitat for conservation significant species but none were found, which is likely related to the disturbed nature of the survey area. Given that the survey was conducted within the prime flowering time for majority of the conservation significant species, it is highly unlikely that any conservation significant species are present within the survey area.

Vegetation condition within the survey area ranged from Excellent to Completely Degraded (Keighery 1994), with majority of the survey area (approximately 60%) mapped to be in 'Completely Degraded' or 'Degraded' condition.

On the basis of the statistical analyses undertaken by Plantecology (2015) the following conservation significant floristic community types (FCT) potentially occur within the survey area: FCT 20a '*Banksia attenuata* woodlands over species rich dense shrublands' (a listed TEC under the WC Act), FCT 3b '*Corymbia calophylla* – *Eucalyptus marginata* woodlands on sandy clay soils of the southern Swan Coastal Plain' (a listed TEC under the WC Act) and SCP 3c '*Corymbia calophylla* – *Xanthorrhoea preissii* woodlands and shrublands, Swan Coastal Plain' (a listed TEC under the EPBC Act).

The degraded nature of vegetation within the survey area provides a significant level of uncertainty regarding these designations against potentially significant communities. This is demonstrated by reference to Table 10, where it can be seen that the number of species recorded within each vegetation type are significantly less than number of species known to be associated with each FCT. A number of key species are missing from each FCT type within the survey area which could potentially be attributed to either degradation or the lack of these species within the vegetation, thus excluding these areas from the definition of the identified TECs.

On the basis of Strategen's assessment, it is considered unlikely that the vegetation recorded within the DSP area represents viable representatives of FCT's of conservation significance due to the limited number of species represented. The statistical analysis report provided at Appendix 5 provides detail regarding the level of uncertainty regarding the assignment of FCT's against the results.

Areas containing these potential TECs include:

- 32 Brae Road: FCT 3b
- 231 Maida Vale Road: FCT 3b
- 15 Milner Road: FCT 20a
- 80 and 85 Brae Road (within Bush Forever Site 45): FCT 3c
- Eastern portion of Bush Forever Site 45: FCT 3c.

Consideration is provided on whether the values of Bush Forever site 45 that are within private lots have retained sufficient values for the Bush Forever classification to be retained.

Bush Forever Site 45 was listed due to the following values:

- representation of ecological communities
- rarity
- general criteria for the protection of wetland, streamline and estuarine fringing vegetation and coastal vegetation.

Vegetation within Bush Forever site 45 varied in condition depending on landscape and urban factors (e.g. vegetation was more degraded along the banks of Poison Gully and around urban development). The western portion of Bush Forever site 45, specifically 231 Maida Vale Road and 15 Raven Street, High Wycombe were observed to be in significantly better condition than the remainder of the site within the survey area. The incision formed by Poison Gully was heavily infested by exotic species and would require significant remedial efforts to facilitate the return of native species and vegetation structure. The portion of Bush Forever Site 45 within 80 and 85 Brae Road, High Wycombe was observed to be in a degraded state due to impacts including clearing of vegetation and grazing. These areas were not as degraded as the banks of Poison Gully but contain a large amount of exotic species and in some areas, heavily modified vegetation structure.

An assessment of the values contained within each of the private lots that are listed as wholly or partially within Bush Forever site 45 is provided in Table 11 below. Additionally a recommendation of whether the potential exists for an application to be made to remove the Bush Forever listing over part or all of the property is provided. It should be understood that changes to Bush Forever sites are typically considered in the context of development proposals. The Department of Planning and the Western Australian Planning Commission will need to be approached to determine the most appropriate process through which to make application for an amendment to the boundary of Bush Forever site 45.

Table 11: Bush Forever values on private lots

Property	Vegetation Value	Bush Forever values present	Recommendation
85 Brae Rd	Vegetation potentially aligns with FCT 3c (south and north west of property)	<ul style="list-style-type: none"> • ecological communities • rarity • general criteria for the protection of wetland, streamline and estuarine fringing vegetation and coastal vegetation. 	The majority of the vegetation is in Good or worse condition (cleared or degraded). Whilst some alignment with FCT 3c, the quality of the vegetation south of the dwelling is sufficiently degraded to provide the potential for the Bush Forever designation to be removed entirely or retracted to only include the northern extremity of the property given the proximity of this area to Poison Gully.
80 Brae Rd	Vegetation potentially aligns with FCT 3c (south east and north east of property)	<ul style="list-style-type: none"> • ecological communities • rarity • general criteria for the protection of wetland, streamline and estuarine fringing vegetation and coastal vegetation. 	<p>The vegetation contained within the Bush Forever site is predominantly in a Degraded and Good-Degraded condition, with a small area in Very Good condition in the north east of the site.</p> <p>Given the impacted values of property the potential exists for the Bush Forever designation to be removed entirely or retracted to only include the northern extremity of the property give the proximity of this area to Poison Gully.</p>

Property	Vegetation Value	Bush Forever values present	Recommendation
15 Milner Rd	Within the Bush Forever site the vegetation does not align with potentially significant FCT's.	<ul style="list-style-type: none"> • general criteria for the protection of wetland, streamline and estuarine fringing vegetation and coastal vegetation. 	The portion of the property that is contained within the Bush Forever site is in proximity to Poison Gully and therefore it is considered unlikely that the Bush Forever boundary would be modified.
15 Raven Street	Vegetation potentially aligns with FCT 3b (eastern side of property)	<ul style="list-style-type: none"> • ecological communities • rarity • general criteria for the protection of wetland, streamline and estuarine fringing vegetation and coastal vegetation. 	<p>The western half of the property is cleared and is therefore inconsistent with the Bush Forever designation. Removal of the Bush Forever designation of this portion of the site should be pursued.</p> <p>It is anticipated that a more uniform future development footprint would be pursued. It is considered that the greatest likelihood of successfully removing the Bush Forever designation over the vegetated portion of the property would be achieved by focussing on the vegetation adjacent to Raven Street.</p>
231 Maida Vale Road	Vegetation potentially aligns with FCT 3b (central and western property)	<ul style="list-style-type: none"> • ecological communities • rarity • general criteria for the protection of wetland, streamline and estuarine fringing vegetation and coastal vegetation. 	The portion of the property that is cleared is inconsistent with the Bush Forever designation. It is considered unlikely that removal of the Bush Forever designation would be successful over any other portion of the property.

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Appendix 1
Vascular plant taxa recorded by site
and vegetation type

Species	Sites																
	1	4	2	3	5	6	7	8	12	13	14	15	16	17	9	10	11
<i>Acacia celastrifolia</i>													X				
<i>Acacia pulchella</i>	X		X	X				X	X			X	X	X	X		X
<i>Acacia saligna</i>						X				X							X
<i>Allocasuarina fraseriana</i>		X			X												
<i>Allocasuarina humilis</i>	X	X													X		X
<i>Anigozanthos manglesii</i>	X	X			X										X		
* <i>Arundo donax</i>			X	X													
* <i>Asparagus asparagoides</i>														X			X
* <i>Avena fatua</i>										X	X	X		X			
<i>Banksia attenuata</i>					X												
<i>Banksia dallanneyi</i>	X	X	X	X				X	X			X	X	X	X	X	X
<i>Banksia menziesii</i>						X											
<i>Banksia nivea</i>		X	X	X													
<i>Bossiaea eriocarpa</i>					X												
* <i>Briza maxima</i>	X	X			X	X		X	X	X	X	X	X	X	X	X	X
* <i>Briza minor</i>									X								
<i>Burchardia congesta</i>		X			X										X	X	
<i>Caustis dioica</i>		X													X		
<i>Chamelaucium uncinatum</i> (P)		X															
<i>Conostylis setosa</i>	X	X															
<i>Corymbia calophylla</i>	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X
* <i>Corymbia maculata</i>										X							
* <i>Cynodon dactylon</i>								X	X		X	X	X	X	X		
* <i>Cyperus eragrostis</i>										X							
<i>Dasyogon bromeliifolius</i>		X															
<i>Daviesia decurrens</i>					X												
<i>Daviesia preissii</i>		X															
<i>Desmocladius fasciculatus</i>	X	X															
<i>Dianella revoluta</i>								X	X			X	X				
* <i>Ehrharta calycina</i>	X	X			X	X		X	X			X	X	X	X	X	X
<i>Eucalyptus marginata</i>	X	X			X	X										X	X
<i>Eucalyptus rudis</i>							X	X	X	X	X	X	X				
* <i>Euphorbia terracina</i>										X							
* <i>Freesia alba</i> x <i>leichtlinii</i>														X	X	X	
* <i>Fumaria capreolata</i>							X			X							X
<i>Gastrolobium bilobum</i>								X	X			X	X				
<i>Gastrolobium capitatum</i>	X	X	X	X										X			
* <i>Gladiolus caryophyllaceus</i>	X	X			X			X	X			X	X			X	X
<i>Gompholobium tomentosum</i>					X												
<i>Haemodorum laxum</i>		X			X												X
<i>Haemodorum spicatum</i>					X												
<i>Hakea trifurcata</i>													X	X			
<i>Hakea undulata</i>														X			
<i>Hibbertia commutata</i>	X																
<i>Hibbertia hypericoides</i>	X	X			X			X	X			X	X				
<i>Hovea? trisperma</i>		X															
* <i>Hyparrhenia hirta</i>										X							
* <i>Hypochaeris glabra</i>	X				X					X						X	
* <i>Ipomoea cairica</i>						X						X					
<i>Isolepis cernua</i> var. <i>setiformis</i>	X																
* <i>Juncus acutus</i>										X							
<i>Kennedia coccinea</i>					X								X			X	
<i>Lambertia multiflora</i>					X												
<i>Lasiopetalum floribundum</i>														X			
<i>Lechenaultia biloba</i>	X																
<i>Lepidosperma leptostachyum</i>		X			X									X			

Legend
VT1
VT2
VT3
VT4
VT5
VT6
VT7

Species	1	4	2	3	5	6	7	8	12	13	14	15	16	17	9	10	11
* <i>Lysimachia arvensis</i>	x									x							
<i>Melaleuca nesophila</i> (P)		x															
<i>Melaleuca preissiana</i>										x							
<i>Melaleuca radula</i>													x				
<i>Melaleuca raphiophylla</i>										x							
<i>Mesomelaena pseudostygia</i>	x	x													x	x	
<i>Mesomelaena tetragona</i>					x						x						
<i>Neurachne alopecuroidea</i>															x		
Orchidaceae sp.																	x
* <i>Oxalis pes-caprae</i>										x	x						
<i>Patersonia occidentalis</i>	x	x															
<i>Petrophile striata</i>															x	x	
* <i>Ricinus communis</i>			x	x													
<i>Scaevola calliptera</i>					x												
* <i>Solanum nigrum</i>							x										
* <i>Sonchus oleraceus</i>										x							
<i>Stirlingia latifolia</i>	x	x			x												
<i>Stylidium piliferum</i>		x															
<i>Stylidium</i> sp.		x															
<i>Synaphea petiolaris</i>					x												
<i>Tetraria capillaris</i>	x				x										x		x
<i>Tetraria octandra</i>	x	x	x	x	x			x	x			x	x		x	x	
<i>Thomasia macrocarpa</i>	x			x					x	x		x	x		x		
<i>Thysanotus manglesianus</i>															x	x	
* <i>Tipuana tipu</i>			x	x													
<i>Trachymene pilosa</i>		x															x
* <i>Tropaeolum majus</i>			x	x			x			x	x				x		
<i>Trymalium ledifolium</i>															x		
<i>Trymalium odoratissimum</i>			x	x				x	x	x	x	x	x		x	x	
* <i>Typha orientalis</i>											x	x					
* <i>Ursinia anthemoides</i>		x															
* <i>Urtica urens</i>			x	x													
* <i>Watsonia meriana</i>	x		x	x							x	x			x		
<i>Xanthorrhoea gracilis</i>	x				x												x
<i>Xanthorrhoea preissii</i>	x	x			x			x	x			x	x		x	x	x
<i>Xylomelum occidentale</i>						x											
* <i>Zantedeschia aethiopica</i>			x	x			x				x						

* denotes introduced (exotic) species (Western Australian Herbarium 1998-)

P = Planted species

Appendix 2
Photographic record of vegetation
types



Plate 1: Site 1 (VT 1)



Plate 2: Site 2 (VT 2)



Plate 3: Site 3 (VT2)



Plate 4: Site 4 (VT 1)



Plate 5: Site 5 (VT 3)



Plate 6: Site 6 (VT 4)



Plate 7: Site 7 (VT 5)



Plate 8: Site 8 (VT 5)



Plate 9: Site 9 (VT 6)



Plate 10: VT 7



Plate 11: Site 11 (VT 7)

Appendix 3
Desktop assessment results (Parks and
Wildlife 2007-, DotE 2015b)

NatureMap Species Report

Created By Daniel Panickar on 20/10/2015

Kingdom Plantae

Current Names Only Yes

Core Datasets Only Yes

Method 'By Circle'

Centre 116°00' 19" E,31°57' 11" S

Buffer 5km

Group By Family

Family	Species	Records
Alstroemeriaceae	1	1
Amaranthaceae	3	6
Anarthraceae	2	10
Apiaceae	9	33
Apocynaceae	1	1
Araceae	3	5
Araliaceae	2	18
Archidiaceae	1	1
Asparagaceae	30	140
Asphodelaceae	1	1
Asteraceae	35	103
Boraginaceae	2	3
Boryaceae	1	5
Brassicaceae	2	2
Bryaceae	4	6
Byblidaceae	1	4
Campanulaceae	6	17
Caprifoliaceae	1	1
Caryophyllaceae	3	3
Casuarinaceae	3	14
Celastraceae	3	10
Centrolepidaceae	5	13
Chenopodiaceae	1	1
Colchicaceae	4	20
Commelinaceae	1	1
Convolvulaceae	1	2
Crassulaceae	3	4
Cupressaceae	1	1
Cyperaceae	46	147
Dasypogonaceae	5	24
Dicranaceae	2	3
Dilleniaceae	11	61
Dioscoreaceae	1	2
Ditrichaceae	2	2
Droseraceae	16	49
Elaeocarpaceae	4	9
Ericaceae	22	78
Euphorbiaceae	6	14
Fabaceae	89	343
Funariaceae	1	1
Gentianaceae	3	6
Geraniaceae	1	2
Goodeniaceae	13	59
Haemodboraceae	25	130
Haloragaceae	2	14
Hemerocallidaceae	12	63
Hydrocharitaceae	1	1
Hypoxidaceae	2	2
Iridaceae	16	52
Juncaceae	2	3
Juncaginaceae	1	1
Lamiaceae	7	23
Lauraceae	5	20
Lentibulariaceae	1	1
Linaceae	1	3
Loganiaceae	1	1
Loranthaceae	2	2
Lythraceae	1	1
Malvaceae	7	29
Menyanthaceae	2	3
Molluginaceae	2	19
Myrtaceae	51	156
Oleaceae	2	6
Oleaceae	1	1
Onagraceae	1	1
Orchidaceae	42	107
Orobanchaceae	3	5
Oxalidaceae	4	7
Papaveraceae	1	1
Philydraceae	2	3
Phyllanthaceae	3	9
Phytolaccaceae	1	1
Pittosporaceae	5	9
Plantaginaceae	2	2
Poaceae	41	124

Polygalaceae	2	8
Polygonaceae	3	3
Portulacaceae	2	4
Pottiaceae	2	5
Primulaceae	1	1
Proteaceae	67	477
Pteridaceae	3	9
Ranunculaceae	1	3
Restionaceae	13	49
Rhamnaceae	6	19
Rubiaceae	3	6
Rutaceae	10	26
Salviniaceae	1	1
Santalaceae	1	1
Sapindaceae	1	3
Scrophulariaceae	1	2
Semotophyllaceae	1	2
Solanaceae	1	1
Stylidiaceae	29	107
Tecophilaeaceae	1	1
Thymelaeaceae	7	16
Verbenaceae	1	1
Violaceae	1	5
Xanthorrhoeaceae	4	20
Zamiaceae	1	5
TOTAL	764	2801

Name ID	Species Name	Naturalised	Conservation Code	Endemic To Query Area
Alstroemeriaceae				
1.	20755 <i>Alstroemeria psittacina</i>	Y		
Amaranthaceae				
2.	2648 <i>Alternanthera denticulata</i> (Lesser Joyweed)			
3.	2720 <i>Ptilotus esquamatus</i>			
4.	2742 <i>Ptilotus manglesii</i> (Pom Poms, Mulamula)			
Anarthriaceae				
5.	1097 <i>Lyginia barbata</i>			
6.	18049 <i>Lyginia imberbis</i>			
Apiaceae				
7.	6205 <i>Actinotus leucocephalus</i> (Flannel Flower)			
8.	6218 <i>Daucus glochidiatus</i> (Australian Carrot)			
9.	15446 <i>Eryngium pinnatifidum</i> subsp. <i>pinnatifidum</i>			
10.	6222 <i>Homalosciadium homalocarpum</i>			
11.	6245 <i>Pentapeltis peltigera</i>			
12.	6255 <i>Platysace juncea</i>			
13.	11132 <i>Platysace ramosissima</i>		P3	
14.	6284 <i>Xanthosia candida</i>			
15.	6289 <i>Xanthosia huegelii</i>			
Apocynaceae				
16.	6587 <i>Gomphocarpus fruticosus</i> (Narrowleaf Cottonbush)	Y		
Araceae				
17.	28342 <i>Landoltia punctata</i> (Thin Duckweed)			
18.	1051 <i>Lemna disperma</i> (Duckweed)			
19.	1049 <i>Zantedeschia aethiopica</i> (Arum Lily)	Y		
Araliaceae				
20.	6226 <i>Hydrocotyle callicarpa</i> (Small Pennywort)			
21.	6280 <i>Trachymene pilosa</i> (Native Parsnip)			
Archidiaceae				
22.	32314 <i>Archidium rehmannii</i>			
Asparagaceae				
23.	8779 <i>Asparagus asparagoides</i> (Bridal Creeper)	Y		
24.	1280 <i>Chamaescilla corymbosa</i> (Blue Squill)			
25.	11299 <i>Chamaescilla corymbosa</i> var. <i>corymbosa</i>			
26.	8788 <i>Chamaescilla versicolor</i>			
27.	1287 <i>Dichopogon capillipes</i>			
28.	1289 <i>Dichopogon preissii</i>			
29.	11911 <i>Laxmannia ramosa</i> subsp. <i>ramosa</i>			
30.	11464 <i>Laxmannia sessiliflora</i> subsp. <i>australis</i>			
31.	1309 <i>Laxmannia squarrosa</i>			
32.	1223 <i>Lomandra caespitosa</i> (Tufted Mat Rush)			
33.	1228 <i>Lomandra hermaphrodita</i>			
34.	1232 <i>Lomandra micrantha</i> (Small-flower Mat-rush)			
35.	14542 <i>Lomandra micrantha</i> subsp. <i>micrantha</i>			
36.	1234 <i>Lomandra nigricans</i>			
37.	1236 <i>Lomandra odora</i> (Tiered Matrush)			
38.	1239 <i>Lomandra preissii</i>			
39.	1240 <i>Lomandra purpurea</i> (Purple Mat Rush)			
40.	1243 <i>Lomandra sericea</i> (Silky Mat Rush)			
41.	1245 <i>Lomandra spartea</i>			
42.	1246 <i>Lomandra suaveolens</i>			
43.	1312 <i>Sowerbaea laxiflora</i> (Purple Tassels)			
44.	1318 <i>Thysanotus arbuscula</i>			
45.	1330 <i>Thysanotus fastigiatus</i>			
46.	1338 <i>Thysanotus manglesianus</i> (Fringed Lily)			
47.	1339 <i>Thysanotus multiflorus</i> (Many-flowered Fringe Lily)			
48.	1343 <i>Thysanotus patersonii</i>			
49.	1351 <i>Thysanotus spartea</i>			
50.	1354 <i>Thysanotus tenellus</i>			
51.	1357 <i>Thysanotus thyrsoides</i>			
52.	1358 <i>Thysanotus triandrus</i>			
Asphodelaceae				
53.	1364 <i>Asphodelus fistulosus</i> (Onion Weed)	Y		

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
Asteraceae				
54.	7927 <i>Chrysanthemoides monilifera</i> (Boneseed)	Y		
55.	11900 <i>Chrysanthemoides monilifera</i> subsp. <i>monilifera</i>	Y		
56.	7945 <i>Cotula coronopifolia</i> (Waterbuttons)	Y		
57.	13354 <i>Craspedia variabilis</i>			
58.	7953 <i>Crepis foetida</i> (Foetid Hawksbeard)	Y		
59.	8450 <i>Eclipta prostrata</i>	Y		
60.	12741 <i>Hyalosperma cotula</i>			
61.	8086 <i>Hypochoeris glabra</i> (Smooth Catsear)	Y		
62.	9352 <i>Hypochoeris radicata</i> (Flat Weed)	Y		
63.	18585 <i>Lagenophora huegelii</i>			
64.	13284 <i>Lawrencella rosea</i>			
65.	8106 <i>Millotia tenuifolia</i> (Soft Millotia)			
66.	14344 <i>Millotia tenuifolia</i> var. <i>tenuifolia</i> (Soft Millotia)			
67.	8143 <i>Olearia paucidentata</i> (Autumn Scrub Daisy)			
68.	8175 <i>Podolepis gracilis</i> (Slender Podolepis)			
69.	8177 <i>Podolepis lessonii</i>			
70.	8182 <i>Podotroche angustifolia</i> (Sticky Longheads)			
71.	13255 <i>Pterochaeta paniculata</i>			
72.	8195 <i>Quinetia urvillei</i>			
73.	13300 <i>Rhodanthe citrina</i>			
74.	15035 <i>Rhodanthe corymbosa</i>			
75.	8205 <i>Senecio gilbertii</i>		P1	
76.	8206 <i>Senecio glomeratus</i> (Cluster-headed Fireweed)			
77.	20663 <i>Senecio multicaulis</i> subsp. <i>multicaulis</i>			
78.	20161 <i>Senecio pinnatifolius</i>			
79.	8224 <i>Siloxerus filifolius</i>			
80.	8225 <i>Siloxerus humifusus</i> (Procumbent Siloxerus)			
81.	14583 <i>Siloxerus multiflorus</i>			
82.	8231 <i>Sonchus oleraceus</i> (Common Sowthistle)	Y		
83.	8251 <i>Trichocline spathulata</i> (Native Gerbera)			
84.	8255 <i>Ursinia anthemoides</i> (Ursinia)	Y		
85.	38388 <i>Ursinia anthemoides</i> subsp. <i>anthemoides</i>	Y		
86.	8257 <i>Vellereophyton dealbatum</i> (White Cudweed)	Y		
87.	15725 <i>Verbesina encelioides</i>	Y		
88.	44861 <i>Xerochrysum macranthum</i>			
Boraginaceae				
89.	6681 <i>Echium plantagineum</i> (Paterson's Curse)	Y		
90.	6686 <i>Halgania corymbosa</i>		P3	
Boryaceae				
91.	1273 <i>Borya sphaerocephala</i> (Pincushions)			
Brassicaceae				
92.	3016 <i>Heliophila pusilla</i>	Y		
93.	3061 <i>Raphanus raphanistrum</i> (Wild Radish)	Y		
Bryaceae				
94.	32375 <i>Gemmabryum chrysonuron</i>			
95.	32380 <i>Gemmabryum pachythecum</i>			
96.	44608 <i>Rosulabryum billardieri</i>			
97.	32432 <i>Schizymenium bryoides</i>			
Byblidaceae				
98.	3178 <i>Byblis gigantea</i> (Rainbow Plant)		P3	
Campanulaceae				
99.	7396 <i>Isotoma hypocrateriformis</i> (Woodbridge Poison)			
100.	7403 <i>Lobelia heterophylla</i> (Wing-seeded Lobelia)			
101.	7406 <i>Lobelia rhombifolia</i> (Tufted Lobelia)			
102.	7407 <i>Lobelia rhytidosperra</i> (Wrinkled-seeded Lobelia)			
103.	7384 <i>Wahlenbergia capensis</i> (Cape Bluebell)	Y		
104.	7389 <i>Wahlenbergia preissii</i>			
Caprifoliaceae				
105.	35322 <i>Centranthus ruber</i> subsp. <i>ruber</i>	Y		
Caryophyllaceae				
106.	19825 <i>Petrorhagia dubia</i>	Y		
107.	2909 <i>Silene gallica</i> (French Catchfly)	Y		
108.	2912 <i>Spergula arvensis</i> (Corn Spurry)	Y		
Casuarinaceae				

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
109.	1728 <i>Allocasuarina fraseriana</i> (Sheoak, Kondil)			
110.	1732 <i>Allocasuarina humilis</i> (Dwarf Sheoak)			
111.	1739 <i>Allocasuarina thuyoides</i> (Horned Sheoak)			
Celastraceae				
112.	4733 <i>Stackhousia monogyna</i>			
113.	9070 <i>Stackhousia pubescens</i> (Downy Stackhousia)			
114.	4737 <i>Tripterococcus brunonis</i> (Winged Stackhousia)			
Centrolepidaceae				
115.	1117 <i>Aphelia cyperoides</i>			
116.	43548 <i>Aphelia</i> sp. Albany (B.G. Briggs 596)			
117.	1121 <i>Centrolepis aristata</i> (Pointed Centrolepis)			
118.	1125 <i>Centrolepis drummondiana</i>			
119.	1131 <i>Centrolepis inconspicua</i>			
Chenopodiaceae				
120.	33480 <i>Dysphania pumilio</i> (Clammy Goosefoot)			
Colchicaceae				
121.	12770 <i>Burchardia congesta</i>			
122.	1385 <i>Burchardia multiflora</i> (Dwarf Burchardia)			
123.	1394 <i>Wurmbea dioica</i> (Early Nancy)			
124.	12072 <i>Wurmbea dioica</i> subsp. <i>alba</i>			
Commelinaceae				
125.	1162 <i>Cartonema philydroides</i>			
Convolvulaceae				
126.	6614 <i>Convolvulus remotus</i>			
Crassulaceae				
127.	11563 <i>Crassula colorata</i> var. <i>colorata</i>			
128.	11349 <i>Crassula decumbens</i> var. <i>decumbens</i>			
129.	3139 <i>Crassula exserta</i>			
Cupressaceae				
130.	36520 <i>Callitris acuminata</i> (Dwarf Cypress)			
Cyperaceae				
131.	744 <i>Baumea laxa</i>			
132.	760 <i>Caustis dioica</i>			
133.	763 <i>Chorizandra enodis</i> (Black Bristlerush)			
134.	768 <i>Cyathochaeta avenacea</i>			
135.	769 <i>Cyathochaeta clandestina</i>			
136.	17618 <i>Cyathochaeta equitans</i>			
137.	783 <i>Cyperus congestus</i> (Dense Flat-sedge)	Y		
138.	792 <i>Cyperus eragrostis</i> (Umbrella Sedge)	Y		
139.	894 <i>Fimbristylis velata</i>			
140.	907 <i>Gahnia trifida</i> (Coast Saw-sedge)			
141.	20200 <i>Isolepis cernua</i> var. <i>setiformis</i>			
142.	917 <i>Isolepis marginata</i> (Coarse Club-rush)			
143.	925 <i>Lepidosperma angustatum</i>			
144.	41620 <i>Lepidosperma asperatum</i>			
145.	931 <i>Lepidosperma drummondii</i>			
146.	936 <i>Lepidosperma leptostachyum</i>			
147.	940 <i>Lepidosperma pubisquamum</i>			
148.	945 <i>Lepidosperma squamatum</i>			
149.	947 <i>Lepidosperma tenue</i>			
150.	955 <i>Mesomelaena pseudostygia</i>			
151.	957 <i>Mesomelaena tetragona</i> (Semaphore Sedge)			
152.	971 <i>Schoenus andrewsii</i>			
153.	975 <i>Schoenus bifidus</i>			
154.	978 <i>Schoenus brevisetis</i>			
155.	979 <i>Schoenus caespititius</i>			
156.	982 <i>Schoenus clandestinus</i>			
157.	984 <i>Schoenus curvifolius</i>			
158.	986 <i>Schoenus efoliatus</i>			
159.	991 <i>Schoenus grammatophyllus</i>			
160.	17606 <i>Schoenus griffinianus</i>		P3	
161.	996 <i>Schoenus laevigatus</i>			
162.	998 <i>Schoenus latitans</i>			
163.	1002 <i>Schoenus nanus</i> (Tiny Bog Rush)			
164.	1007 <i>Schoenus pedicellatus</i>			
165.	1008 <i>Schoenus pennisetis</i>			

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
			P3	
166.	1009 <i>Schoenus pleiostemoneus</i>			
167.	1011 <i>Schoenus rigens</i>			
168.	1013 <i>Schoenus sculptus</i> (Gimlet Bog-rush)			
169.	1016 <i>Schoenus subbarbatus</i> (Bearded Bog-rush)			
170.	1017 <i>Schoenus subbulbosus</i>			
171.	1019 <i>Schoenus subflavus</i> (Yellow Bog-rush)			
172.	1020 <i>Schoenus sublateralis</i>			
173.	1026 <i>Schoenus unispiculatus</i>			
174.	1034 <i>Tetraria capillaris</i> (Hair Sedge)			
175.	1036 <i>Tetraria octandra</i>			
176.	43207 <i>Tricostularia exsul</i>			
Dasypogonaceae				
177.	1213 <i>Calectasia cyanea</i> (Blue Tinsel Lily)		T	
178.	19309 <i>Calectasia narragara</i>			
179.	1218 <i>Dasypogon bromeliifolius</i> (Pineapple Bush)			
180.	1220 <i>Dasypogon obliquifolius</i>			
181.	1221 <i>Kingia australis</i> (Kingia, Pulonok)			
Dicranaceae				
182.	32461 <i>Campylopus bicolor</i> var. <i>bicolor</i>			
183.	32338 <i>Campylopus introflexus</i>	Y		
Dilleniaceae				
184.	5108 <i>Hibbertia acerosa</i> (Needle Leaved Guinea Flower)			
185.	5112 <i>Hibbertia aurea</i>			
186.	5114 <i>Hibbertia commutata</i>			
187.	19778 <i>Hibbertia glomerata</i> subsp. <i>darlingensis</i>			
188.	5134 <i>Hibbertia huegelii</i>			
189.	5135 <i>Hibbertia hypericoides</i> (Yellow Buttercups)			
190.	5153 <i>Hibbertia pachyrrhiza</i>			
191.	5169 <i>Hibbertia serrata</i> (Serrate Leaved Guinea Flower)			
192.	5171 <i>Hibbertia spicata</i>			
193.	11481 <i>Hibbertia spicata</i> subsp. <i>spicata</i>			
194.	5173 <i>Hibbertia subvaginata</i>			
Dioscoreaceae				
195.	1509 <i>Dioscorea hastifolia</i> (Warrine, Waram)			
Ditrichaceae				
196.	32347 <i>Ditrichum difficile</i>			
197.	32351 <i>Eccremidium pulchellum</i>			
Droseraceae				
198.	3092 <i>Drosera bulbosa</i> (Red-leaved Sundew)			
199.	13204 <i>Drosera callistos</i>			
200.	3095 <i>Drosera erythrorhiza</i> (Red Ink Sundew)			
201.	13217 <i>Drosera erythrorhiza</i> subsp. <i>erythrorhiza</i>			
202.	3098 <i>Drosera glanduligera</i> (Pimpernel Sundew)			
203.	3106 <i>Drosera macrantha</i> (Bridal Rainbow)			
204.	14298 <i>Drosera macrantha</i> subsp. <i>macrantha</i>			
205.	3109 <i>Drosera menziesii</i> (Pink Rainbow)			
206.	13216 <i>Drosera menziesii</i> subsp. <i>penicillaris</i>			
207.	15710 <i>Drosera miniata</i> (Orange Sundew)			
208.	3118 <i>Drosera pallida</i> (Pale Rainbow)			
209.	29178 <i>Drosera porrecta</i>			
210.	3125 <i>Drosera pycnoblata</i> (Pearly Sundew)			
211.	8911 <i>Drosera rosulata</i>			
212.	3131 <i>Drosera stolonifera</i> (Leafy Sundew)			
213.	3135 <i>Drosera zonaria</i> (Painted Sundew)			
Elaeocarpaceae				
214.	4524 <i>Platytheca galioides</i>			
215.	4535 <i>Tetradthea hirsuta</i> (Black Eyed Susan)			
216.	4537 <i>Tetradthea nuda</i>			
217.	14333 <i>Tetradthea</i> sp. <i>Granite</i> (S. Patrick SP1224)		P3	
Ericaceae				
218.	6300 <i>Andersonia aristata</i> (Rice Flower)			
219.	6312 <i>Andersonia involucrata</i>			
220.	6314 <i>Andersonia lehmanniana</i>			
221.	11471 <i>Andersonia lehmanniana</i> subsp. <i>lehmanniana</i>			
222.	6323 <i>Astroloma ciliatum</i> (Candle Cranberry)			

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
223.	6334 <i>Astroloma pallidum</i> (Kick Bush)			
224.	6337 <i>Astroloma stomarrhena</i> (Red Swamp Cranberry)			
225.	6339 <i>Astroloma xerophyllum</i>			
226.	6347 <i>Conostephium minus</i> (Pink-tipped Pearl flower)			
227.	6348 <i>Conostephium pendulum</i> (Pearl Flower)			
228.	6349 <i>Conostephium preissii</i>			
229.	6367 <i>Leucopogon capitellatus</i>			
230.	6374 <i>Leucopogon conostephioides</i>			
231.	6397 <i>Leucopogon glaucifolius</i>			
232.	6427 <i>Leucopogon parviflorus</i> (Coast Beard-heath)			
233.	6436 <i>Leucopogon propinquus</i>			
234.	6439 <i>Leucopogon pulchellus</i> (Beard-heath)			
235.	6444 <i>Leucopogon sprengeloides</i>			
236.	40803 <i>Leucopogon squarrosus</i> subsp. <i>squarrosus</i>			
237.	6456 <i>Lysinema ciliatum</i> (Curry Flower)			
238.	34736 <i>Lysinema pentapetalum</i>			
239.	6476 <i>Styphelia tenuiflora</i> (Common Pinheath)			

Euphorbiaceae

240.	4598 <i>Beyeria lechenaultii</i> (Pale Turpentine Bush)			
241.	4638 <i>Euphorbia peplus</i> (Petty Spurge)	Y		
242.	4662 <i>Monotaxis grandiflora</i> (Diamond of the Desert)			
243.	19585 <i>Monotaxis grandiflora</i> var. <i>grandiflora</i>			
244.	4713 <i>Stachystemon axillaris</i> (Leafy Stachystemon)			
245.	4716 <i>Stachystemon vermicularis</i>			

Fabaceae

246.	15429 <i>Acacia alata</i> var. <i>alata</i>			
247.	3219 <i>Acacia anomala</i> (Grass Wattle)		T	
248.	3220 <i>Acacia aphylla</i> (Leafless Rock Wattle)		T	
249.	15466 <i>Acacia applanata</i>			
250.	15469 <i>Acacia barbinervis</i> subsp. <i>barbinervis</i>			
251.	3307 <i>Acacia divergens</i>			
252.	11229 <i>Acacia drummondii</i> subsp. <i>affinis</i>		P3	
253.	3323 <i>Acacia ericifolia</i>			
254.	3331 <i>Acacia extensa</i> (Wiry Wattle)			
255.	3382 <i>Acacia incrassata</i>			
256.	15721 <i>Acacia lasiocarpa</i> var. <i>sedifolia</i>			
257.	3454 <i>Acacia nervosa</i> (Rib Wattle)			
258.	3464 <i>Acacia obovata</i>			
259.	3502 <i>Acacia pulchella</i> (Prickly Moses)			
260.	15481 <i>Acacia pulchella</i> var. <i>glaberrima</i>			
261.	15483 <i>Acacia pulchella</i> var. <i>pulchella</i>			
262.	3504 <i>Acacia pycnantha</i> (Golden Wattle)	Y		
263.	3527 <i>Acacia saligna</i> (Orange Wattle, Kudjong)			
264.	3541 <i>Acacia sessilis</i>			
265.	3574 <i>Acacia teretifolia</i>			
266.	3591 <i>Acacia urophylla</i>			
267.	3602 <i>Acacia willdenowiana</i> (Grass Wattle)			
268.	3710 <i>Bossiaea eriocarpa</i> (Common Brown Pea)			
269.	3714 <i>Bossiaea ornata</i> (Broad Leaved Brown Pea)			
270.	18156 <i>Chamaecytisus palmensis</i> (Tagasaste)	Y		
271.	8971 <i>Chorizema cordatum</i>			
272.	3753 <i>Chorizema dicksonii</i> (Yellow-eyed Flame Pea)			
273.	19861 <i>Cristonia biloba</i>			
274.	35838 <i>Cristonia biloba</i> subsp. <i>biloba</i>			
275.	17368 <i>Crotalaria agatiflora</i> subsp. <i>agatiflora</i>	Y		
276.	3793 <i>Daviesia angulata</i>			
277.	3799 <i>Daviesia cordata</i> (Bookleaf)			
278.	3805 <i>Daviesia decurrens</i> (Prickly Bitter-pea)			
279.	19747 <i>Daviesia decurrens</i> subsp. <i>decurrens</i>			
280.	3807 <i>Daviesia divaricata</i> (Marno)			
281.	18560 <i>Daviesia divaricata</i> subsp. <i>divaricata</i>			
282.	3815 <i>Daviesia horrida</i> (Prickly Bitter-pea)			
283.	3824 <i>Daviesia nudiflora</i>			
284.	16585 <i>Daviesia nudiflora</i> subsp. <i>nudiflora</i>			
285.	3832 <i>Daviesia physodes</i>			
286.	3833 <i>Daviesia podophylla</i>			
287.	3834 <i>Daviesia polyphylla</i>			
288.	3835 <i>Daviesia preissii</i>			
289.	3845 <i>Daviesia triflora</i>			

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
290.	3872 <i>Euchilopsis linearis</i> (Swamp Pea)			
291.	3887 <i>Gastrolobium acutum</i>			
292.	3895 <i>Gastrolobium calycinum</i> (York Road Poison)			
293.	20475 <i>Gastrolobium capitatum</i>			
294.	20513 <i>Gastrolobium dilatatum</i>			
295.	3912 <i>Gastrolobium oxylobioides</i> (Champion Bay Poison)			
296.	3923 <i>Gastrolobium spathulatum</i> (Poison Bush)			
297.	3936 <i>Genista linifolia</i> (Flaxleaf Broom)	Y		
298.	10909 <i>Gompholobium confertum</i>			
299.	3950 <i>Gompholobium knightianum</i>			
300.	3951 <i>Gompholobium marginatum</i>			
301.	3954 <i>Gompholobium polymorphum</i>			
302.	3955 <i>Gompholobium preissii</i>			
303.	3956 <i>Gompholobium shuttleworthii</i>			
304.	3957 <i>Gompholobium tomentosum</i> (Hairy Yellow Pea)			
305.	3964 <i>Hovea chorizemifolia</i> (Holly-leaved Hovea)			
306.	3966 <i>Hovea pungens</i> (Devil's Pins, Puyenak)			
307.	3968 <i>Hovea trisperma</i> (Common Hovea)			
308.	12907 <i>Hovea trisperma</i> var. <i>grandiflora</i>			
309.	12859 <i>Hovea trisperma</i> var. <i>trisperma</i>			
310.	3992 <i>Isotropis cuneifolia</i> (Granny Bonnets)			
311.	19700 <i>Isotropis cuneifolia</i> subsp. <i>cuneifolia</i>			
312.	3997 <i>Jacksonia alata</i>			
313.	4010 <i>Jacksonia floribunda</i> (Holly Pea)			
314.	4018 <i>Jacksonia lehmannii</i>			
315.	4025 <i>Jacksonia restioides</i>			
316.	4027 <i>Jacksonia sericea</i> (Waldjumi)		P4	
317.	4029 <i>Jacksonia sternbergiana</i> (Stinkwood, Kapur)			
318.	4037 <i>Kennedia coccinea</i> (Coral Vine)			
319.	4044 <i>Kennedia prostrata</i> (Scarlet Runner)			
320.	4045 <i>Kennedia stirlingii</i> (Bushy Kennedia)			
321.	11289 <i>Labichea lanceolata</i> subsp. <i>lanceolata</i>			
322.	3669 <i>Labichea punctata</i> (Lance-leaved Cassia)			
323.	4063 <i>Lotus uliginosus</i> (Greater Lotus)	Y		
324.	4065 <i>Lupinus angustifolius</i> (Narrowleaf Lupin)	Y		
325.	4067 <i>Lupinus luteus</i> (Yellow Lupin)	Y		
326.	4172 <i>Pultenaea ericifolia</i>			
327.	4205 <i>Sphaerolobium linophyllum</i>			
328.	4206 <i>Sphaerolobium macranthum</i>			
329.	4207 <i>Sphaerolobium medium</i>			
330.	4251 <i>Templetonia drummondii</i>			
331.	17145 <i>Trifolium angustifolium</i> var. <i>angustifolium</i>	Y		
332.	4291 <i>Trifolium arvense</i> (Hare's Foot Clover)	Y		
333.	4292 <i>Trifolium campestre</i> (Hop Clover)	Y		
334.	17763 <i>Trifolium campestre</i> var. <i>campestre</i> (Hop Clover)	Y		

Funariaceae

335. 32370 *Funaria hygrometrica*

Gentianaceae

336. 6539 *Centaurium erythraea* (Common Centaury) Y
 337. 6542 *Centaurium tenuiflorum* Y
 338. 6543 *Cicendia filiformis* (Slender Cicendia) Y

Geraniaceae

339. 4335 *Erodium cygnorum* (Blue Heronsbill)

Goodeniaceae

340. 7420 *Dampiera alata* (Winged-stem Dampiera)
 341. 7454 *Dampiera linearis* (Common Dampiera)
 342. 29362 *Goodenia coerulea*
 343. 12520 *Goodenia fasciculata*
 344. 7568 *Lechenaultia biloba* (Blue Leschenaultia)
 345. 7572 *Lechenaultia expansa*
 346. 7602 *Scaevola calliptera*
 347. 7603 *Scaevola canescens* (Grey Scaevola)
 348. 7613 *Scaevola glandulifera* (Viscid Hand-flower)
 349. 7635 *Scaevola pilosa* (Hairy Fan-flower)
 350. 7636 *Scaevola platyphylla* (Broad-leaved Fanflower)
 351. 12585 *Scaevola repens*
 352. 13182 *Scaevola repens* var. *repens*

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
Haemodoraceae				
353.	11470 <i>Anigozanthos bicolor</i> subsp. <i>bicolor</i>			
354.	1409 <i>Anigozanthos humilis</i> (Catspaw)			
355.	1411 <i>Anigozanthos manglesii</i> (Mangles Kangaroo Paw, Kurulbrang)			
356.	11261 <i>Anigozanthos manglesii</i> subsp. <i>manglesii</i>			
357.	1417 <i>Blanca canescens</i> (Winter Bell)			
358.	1418 <i>Conostylis aculeata</i> (Prickly Conostylis)			
359.	1420 <i>Conostylis androstemma</i> (Trumpets)			
360.	1423 <i>Conostylis aurea</i> (Golden Conostylis)			
361.	1429 <i>Conostylis caricina</i>			
362.	1436 <i>Conostylis juncea</i>			
363.	1454 <i>Conostylis setigera</i> (Bristly Cottonhead)			
364.	11597 <i>Conostylis setigera</i> subsp. <i>setigera</i>			
365.	1455 <i>Conostylis setosa</i> (White Cottonhead)			
366.	1464 <i>Haemodorum brevisepalum</i>			
367.	1465 <i>Haemodorum discolor</i>			
368.	1468 <i>Haemodorum laxum</i>			
369.	1469 <i>Haemodorum loratum</i>		P3	
370.	1470 <i>Haemodorum paniculatum</i> (Mardja)			
371.	1472 <i>Haemodorum simplex</i>			
372.	1474 <i>Haemodorum sparsiflorum</i>			
373.	1475 <i>Haemodorum spicatum</i> (Mardja)			
374.	1478 <i>Phlebocarya ciliata</i>			
375.	1479 <i>Phlebocarya filifolia</i>			
376.	1482 <i>Tribonanthes brachypetala</i>			
377.	1483 <i>Tribonanthes longipetala</i>			
Haloragaceae				
378.	6149 <i>Gonocarpus cordiger</i>			
379.	6161 <i>Gonocarpus pithyoides</i>			
Hemerocallidaceae				
380.	23474 <i>Agrostocrinum hirsutum</i>			
381.	1261 <i>Agrostocrinum scabrum</i> (Blue Grass Lily)			
382.	1264 <i>Arnocrinum preissii</i>			
383.	1276 <i>Caesia micrantha</i> (Pale Grass Lily)			
384.	1277 <i>Caesia occidentalis</i>			
385.	1259 <i>Dianella revoluta</i> (Blueberry Lily)			
386.	11636 <i>Dianella revoluta</i> var. <i>divaricata</i>			
387.	1298 <i>Johnsonia pubescens</i> (Pipe Lily)			
388.	19632 <i>Johnsonia pubescens</i> subsp. <i>pubescens</i>			
389.	1260 <i>Stypandra glauca</i> (Blind Grass)			
390.	1361 <i>Tricoryne elatior</i> (Yellow Autumn Lily)			
391.	1363 <i>Tricoryne tenella</i>			
Hydrocharitaceae				
392.	168 <i>Ottelia ovalifolia</i> (Swamp Lily)			
Hypoxidaceae				
393.	43760 <i>Pauridia occidentalis</i>			
394.	43762 <i>Pauridia occidentalis</i> var. <i>quadriloba</i>			
Iridaceae				
395.	18279 <i>Babiana angustifolia</i>	Y		
396.	18392 <i>Freesia alba</i> x <i>leichtlinii</i>	Y		
397.	18298 <i>Gladiolus carneus</i>	Y		
398.	1520 <i>Gladiolus caryophyllaceus</i> (Wild Gladiolus)	Y		
399.	1526 <i>Hesperantha falcata</i>	Y		
400.	1533 <i>Ixia paniculata</i>	Y		
401.	19179 <i>Moraea flaccida</i> (One-leaf Cape Tulip)	Y		
402.	11749 <i>Orthrosanthus laxus</i> var. <i>laxus</i> (Morning Iris)			
403.	1546 <i>Patersonia juncea</i> (Rush Leaved Patersonia)			
404.	1550 <i>Patersonia occidentalis</i> (Purple Flag, Koma)			
405.	30472 <i>Patersonia occidentalis</i> var. <i>occidentalis</i>			
406.	1551 <i>Patersonia pygmaea</i> (Pygmy Patersonia)			
407.	14433 <i>Patersonia rudis</i> subsp. <i>rudis</i>			
408.	1556 <i>Romulea rosea</i> (Guildford Grass)	Y		
409.	1558 <i>Sparaxis bulbifera</i>	Y		
410.	18118 <i>Watsonia meriana</i> var. <i>meriana</i>	Y		
Juncaceae				
411.	1180 <i>Juncus capitatus</i> (Capitate Rush)	Y		
412.	11922 <i>Juncus kraussii</i> subsp. <i>australiensis</i>			

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Juncaginaceae				
413.	40660 <i>Cycnogeton huegelii</i>			
Lamiaceae				
414.	6836 <i>Hemiandra incana</i>			
415.	6838 <i>Hemiandra linearis</i> (Speckled Snakebush)			
416.	6839 <i>Hemiandra pungens</i> (Snakebush)			
417.	6856 <i>Hemigenia incana</i> (Silky Hemigenia)			
418.	41020 <i>Hemiphora bartlingii</i> (Woolly Dragon)			
419.	38323 <i>Lavandula stoechas</i> subsp. <i>stoechas</i>	Y		
420.	6930 <i>Stachys arvensis</i> (Staggerweed)	Y		
Lauraceae				
421.	2951 <i>Cassytha flava</i> (Dodder Laurel)			
422.	2952 <i>Cassytha glabella</i> (Tangled Dodder Laurel)			
423.	11501 <i>Cassytha glabella</i> forma <i>casuarinae</i>			
424.	2956 <i>Cassytha pomiformis</i> (Dodder Laurel)			
425.	2957 <i>Cassytha racemosa</i> (Dodder Laurel)			
Lentibulariaceae				
426.	7157 <i>Utricularia violacea</i> (Violet Bladderwort)			
Linaceae				
427.	4363 <i>Linum trigynum</i> (French Flax)	Y		
Loganiaceae				
428.	16825 <i>Phyllangium divergens</i>			
Loranthaceae				
429.	2383 <i>Amyema preissii</i> (Wireleaf Mistletoe)			
430.	2401 <i>Nuytsia floribunda</i> (Christmas Tree, Mudja)			
Lythraceae				
431.	5281 <i>Lythrum hyssopifolia</i> (Lesser Loosestrife)	Y		
Malvaceae				
432.	5013 <i>Guichenotia micrantha</i> (Small Flowered Guichenotia)			
433.	5025 <i>Lasiopetalum bracteatum</i> (Helena Velvet Bush)		P4	
434.	45081 <i>Lasiopetalum glutinosum</i> subsp. <i>glutinosum</i>		P3	
435.	5080 <i>Thomasia foliosa</i>			
436.	5084 <i>Thomasia grandiflora</i> (Large Flowered Thomasia)			
437.	5087 <i>Thomasia macrocarpa</i> (Large Fruited Thomasia)			
438.	5105 <i>Thomasia triphylla</i>			
Menyanthaceae				
439.	36160 <i>Liparophyllum capitatum</i>			
440.	36200 <i>Ornduffia submersa</i>		P4	
Molluginaceae				
441.	2839 <i>Macarthuria australis</i>			
442.	17106 <i>Macarthuria keigheryi</i>		T	
Myrtaceae				
443.	20350 <i>Astartea affinis</i>			
444.	36441 <i>Babingtonia camphorosmae</i> (Camphor Myrtle)			
445.	5390 <i>Beaufortia purpurea</i>		P3	
446.	5395 <i>Callistemon phoeniceus</i> (Lesser Bottlebrush, Dubarda)			
447.	5396 <i>Calothamnus accedens</i>		P4	
448.	5426 <i>Calothamnus quadrifidus</i> (One-sided Bottlebrush, Kwowdjard)			
449.	35816 <i>Calothamnus quadrifidus</i> subsp. <i>quadrifidus</i>			
450.	5429 <i>Calothamnus sanguineus</i> (Silky-leaved Blood flower, Pindak)			
451.	5441 <i>Calytrix aurea</i>			
452.	5458 <i>Calytrix flavescens</i> (Summer Starflower)			
453.	5485 <i>Calytrix variabilis</i>			
454.	5502 <i>Conothamnus trinervis</i>			
455.	17104 <i>Corymbia calophylla</i> (Marri)			
456.	5505 <i>Darwinia apiculata</i> (Scarp Darwinia)		T	
457.	5508 <i>Darwinia citriodora</i> (Lemon-scented Darwinia)			
458.	5531 <i>Darwinia thymoides</i>			
459.	5540 <i>Eremaea fimbriata</i>			
460.	5541 <i>Eremaea pauciflora</i>			
461.	14104 <i>Eremaea pauciflora</i> var. <i>pauciflora</i>			
462.	5688 <i>Eucalyptus laeliae</i> (Darling Range Ghost Gum)			
463.	5708 <i>Eucalyptus marginata</i> (Jarrah, Djara)			
464.	13547 <i>Eucalyptus marginata</i> subsp. <i>marginata</i> (Jarrah)			

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
465.	13548 <i>Eucalyptus marginata</i> subsp. <i>thalassica</i> (Blue-leaved Jarrah)			
466.	13511 <i>Eucalyptus rudis</i> subsp. <i>rudis</i>			
467.	5790 <i>Eucalyptus todtiana</i> (Coastal Blackbutt)			
468.	5797 <i>Eucalyptus wandoo</i> (Wandoo, Wondu)			
469.	5817 <i>Hypocalymma angustifolium</i> (White Myrtle, Kudjid)			
470.	35074 <i>Hypocalymma angustifolium</i> subsp. <i>Dandaragan plateau</i> (S. Patrick 702A)			
471.	5825 <i>Hypocalymma robustum</i> (Swan River Myrtle)			
472.	5847 <i>Leptospermum erubescens</i> (Roadside Teatree)			
473.	5857 <i>Leptospermum spinescens</i>			
474.	13273 <i>Melaleuca incana</i> subsp. <i>incana</i>			
475.	5926 <i>Melaleuca lateritia</i> (Robin Redbreast Bush)			
476.	18394 <i>Melaleuca parviceps</i>			
477.	5958 <i>Melaleuca radula</i> (Graceful Honeymyrtle)			
478.	5959 <i>Melaleuca raphiophylla</i> (Swamp Paperbark)			
479.	5961 <i>Melaleuca scabra</i> (Rough Honeymyrtle, Wurru Bush)			
480.	5964 <i>Melaleuca seriata</i>			
481.	5983 <i>Melaleuca trichophylla</i>			
482.	37683 <i>Melaleuca viminalis</i>		P2	
483.	6019 <i>Rinzia communis</i>			
484.	34296 <i>Rinzia</i> sp. <i>Darling Range</i> (F. Hort 2040)			
485.	6033 <i>Scholtzia involucrata</i> (Spiked Scholtzia)			
486.	20135 <i>Taxandria linearifolia</i>			
487.	15431 <i>Verticordia acerosa</i> var. <i>acerosa</i>			
488.	15432 <i>Verticordia densiflora</i> var. <i>densiflora</i>			
489.	6077 <i>Verticordia drummondii</i> (Drummond's Featherflower)			
490.	6088 <i>Verticordia huegelii</i> (Variegated Featherflower)			
491.	15433 <i>Verticordia huegelii</i> var. <i>huegelii</i>			
492.	14714 <i>Verticordia lindleyi</i> subsp. <i>lindleyi</i>		P4	
493.	6107 <i>Verticordia pennigera</i>			
Olacaceae				
494.	2365 <i>Olax benthamiana</i>			
495.	2367 <i>Olax scalariformis</i>			
Oleaceae				
496.	11937 <i>Olea europaea</i> subsp. <i>europaea</i>	Y		
Onagraceae				
497.	44680 <i>Ludwigia repens</i>	Y		
Orchidaceae				
498.	15330 <i>Caladenia arenicola</i>			
499.	1586 <i>Caladenia discoidea</i> (Dancing Orchid)			
500.	1592 <i>Caladenia flava</i> (Cowslip Orchid)			
501.	15348 <i>Caladenia flava</i> subsp. <i>flava</i>			
502.	17980 <i>Caladenia hiemalis</i>			
503.	15354 <i>Caladenia hirta</i> subsp. <i>hirta</i>			
504.	15361 <i>Caladenia longicauda</i> subsp. <i>calcigena</i>			
505.	15365 <i>Caladenia longicauda</i> subsp. <i>longicauda</i>			
506.	1604 <i>Caladenia macrostylis</i> (Leaping Spider Orchid)			
507.	15503 <i>Caladenia paludosa</i>			
508.	15377 <i>Caladenia reptans</i> subsp. <i>reptans</i>			
509.	18019 <i>Caladenia vulgata</i>			
510.	12943 <i>Diuris brumalis</i>			
511.	11049 <i>Diuris corymbosa</i>			
512.	1634 <i>Diuris laxiflora</i> (Bee Orchid)			
513.	12939 <i>Diuris magnifica</i>			
514.	1644 <i>Elythranthera emarginata</i> (Pink Enamel Orchid)			
515.	15412 <i>Eriochilus dilatatus</i> subsp. <i>multiflorus</i>			
516.	15414 <i>Eriochilus helonomos</i>			
517.	15415 <i>Eriochilus scaber</i> subsp. <i>scaber</i>			
518.	1656 <i>Lyperanthus serratus</i> (Rattle Beak Orchid)			
519.	1658 <i>Microtis atrata</i> (Swamp Mignonette Orchid)			
520.	15419 <i>Microtis media</i> subsp. <i>media</i>			
521.	23500 <i>Paracaleana hortiorum</i>			
522.	20460 <i>Pheladenia deformis</i>			
523.	1671 <i>Prasophyllum elatum</i> (Tall Leek Orchid)			
524.	1672 <i>Prasophyllum fimbria</i> (Fringed Leek Orchid)			
525.	1674 <i>Prasophyllum giganteum</i> (Bronze Leek Orchid)			
526.	1676 <i>Prasophyllum hians</i> (Yawning Leek Orchid)			
527.	1680 <i>Prasophyllum parvifolium</i> (Autumn Leek Orchid)			
528.	10853 <i>Prasophyllum plumiforme</i>			

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
529.	1686 <i>Pterostylis barbata</i> (Bird Orchid)			
530.	1693 <i>Pterostylis recurva</i> (Jug Orchid)			
531.	12217 <i>Pterostylis sanguinea</i>			
532.	16367 <i>Pyrorchis nigricans</i> (Red beaks, Elephants ears)			
533.	1701 <i>Thelymitra antennifera</i> (Vanilla Orchid)			
534.	10856 <i>Thelymitra benthamiana</i> (Leopard Orchid)			
535.	1705 <i>Thelymitra crinita</i> (Blue Lady Orchid)			
536.	20729 <i>Thelymitra magnifica</i> (Crystal Brook Star Orchid)		P1	
537.	10862 <i>Thelymitra stellata</i> (Star Orchid)		T	
538.	1717 <i>Thelymitra variegata</i> (Queen of Sheba)		P3	
539.	20731 <i>Thelymitra vulgaris</i>			
Orobanchaceae				
540.	15037 <i>Bartsia trixago</i>	Y		
541.	7122 <i>Orobanche minor</i> (Lesser Broomrape)	Y		
542.	7089 <i>Parentucellia latifolia</i> (Common Bartsia)	Y		
Oxalidaceae				
543.	30375 <i>Oxalis exilis</i>			
544.	4352 <i>Oxalis glabra</i>	Y		
545.	4354 <i>Oxalis incamata</i>	Y		
546.	4355 <i>Oxalis perennans</i>			
Papaveraceae				
547.	31532 <i>Fumaria muralis</i> subsp. <i>muralis</i>	Y		
Philydraceae				
548.	1172 <i>Philydrella drummondii</i>			
549.	1173 <i>Philydrella pygmaea</i> (Butterfly Flowers)			
Phyllanthaceae				
550.	4675 <i>Phyllanthus calycinus</i> (False Boronia)			
551.	4690 <i>Poranthera huegelii</i>			
552.	4691 <i>Poranthera microphylla</i> (Small Poranthera)			
Phytolaccaceae				
553.	2793 <i>Phytolacca octandra</i> (Red Ink Plant)	Y		
Pittosporaceae				
554.	25788 <i>Billardiera fraseri</i> (Elegant Pronaya)			
555.	3169 <i>Cheiranthra preissiana</i>			
556.	19421 <i>Marianthus bicolor</i> (Painted Marianthus)			
557.	17635 <i>Marianthus drummondianus</i>			
558.	17633 <i>Marianthus erubescens</i>			
Plantaginaceae				
559.	4717 <i>Callitriche stagnalis</i> (Common Starwort)	Y		
560.	7085 <i>Misopates orontium</i> (Lesser Snapdragon)	Y		
Poaceae				
561.	184 <i>Aira caryophyllea</i> (Silvery Hairgrass)	Y		
562.	185 <i>Aira cupaniana</i> (Silvery Hairgrass)	Y		
563.	197 <i>Amphipogon debilis</i>			
564.	199 <i>Amphipogon strictus</i> (Greybeard Grass)			
565.	200 <i>Amphipogon turbinatus</i>			
566.	17233 <i>Austrostipa campylachne</i>			
567.	17234 <i>Austrostipa compressa</i>			
568.	17237 <i>Austrostipa elegantissima</i>			
569.	17241 <i>Austrostipa hemipogon</i>			
570.	17257 <i>Austrostipa variabilis</i>			
571.	231 <i>Avellinia michelii</i>	Y		
572.	233 <i>Avena barbata</i> (Bearded Oat)	Y		
573.	8661 <i>Brachypodium distachyon</i> (False Brome)	Y		
574.	244 <i>Briza maxima</i> (Blowfly Grass)	Y		
575.	245 <i>Briza minor</i> (Shivery Grass)	Y		
576.	41563 <i>Cenchrus purpureus</i> (Elephant Grass)	Y		
577.	306 <i>Dichelachne crinita</i> (Longhair Plumegrass)			
578.	347 <i>Ehrharta calycina</i> (Perennial Veldt Grass)	Y		
579.	349 <i>Ehrharta longiflora</i> (Annual Veldt Grass)	Y		
580.	376 <i>Eragrostis curvula</i> (African Lovegrass)	Y		
581.	379 <i>Eragrostis elongata</i> (Clustered Lovegrass)			
582.	431 <i>Festuca pratensis</i> (Meadow Fescue)	Y		
583.	434 <i>Gastridium phleoides</i> (Nitgrass)	Y		
584.	452 <i>Hyparrhenia hirta</i> (Tambookie Grass)	Y		
585.	20019 <i>Lachnagrostis filiformis</i>			

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586.	14985 <i>Melinis repens</i>	Y		
587.	485 <i>Microlaena stipoides</i> (Weeping Grass)			
588.	492 <i>Neurachne alopecuroidea</i> (Foxtail Mulga Grass)			
589.	527 <i>Paspalum dilatatum</i>	Y		
590.	532 <i>Paspalum urvillei</i> (Vasey Grass)	Y		
591.	40422 <i>Pentameris pallida</i>	Y		
592.	573 <i>Poa drummondiana</i> (Knotted Poa)			
593.	40426 <i>Rytidosperma occidentale</i>			
594.	40427 <i>Rytidosperma setaceum</i>			
595.	636 <i>Stenotaphrum secundatum</i> (Buffalo Grass)	Y		
596.	667 <i>Tetrarrhena laevis</i> (Forrest Ricegrass)			
597.	11112 <i>Tribolium uniolae</i>	Y		
598.	722 <i>Vulpia bromoides</i> (Squirrel Tail Fescue)	Y		
599.	724 <i>Vulpia myuros</i> (Rat's Tail Fescue)	Y		
600.	12052 <i>Vulpia myuros forma megalura</i>	Y		
601.	33101 <i>Vulpia myuros forma myuros</i>	Y		

Polygalaceae

602.	4550 <i>Comesperma calymega</i> (Blue-spike Milkwort)			
603.	4551 <i>Comesperma ciliatum</i>			

Polygonaceae

604.	2412 <i>Muehlenbeckia adpressa</i> (Climbing Lignum)			
605.	16984 <i>Persicaria lapathifolia</i>	Y		
606.	16983 <i>Persicaria maculosa</i>	Y		

Portulacaceae

607.	2848 <i>Calandrinia corrigioloides</i> (Strap Purslane)			
608.	16365 <i>Calandrinia</i> sp. Kenwick (G.J. Keighery 10905)			

Pottiaceae

609.	32315 <i>Barbula calycina</i>			
610.	32438 <i>Syntrichia pagorum</i>			

Primulaceae

611.	36375 <i>Lysimachia arvensis</i> (Pimpernel)	Y		
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Proteaceae

612.	1775 <i>Adenanthos cygnorum</i> (Common Woollybush)			
613.	32682 <i>Banksia armata</i> var. <i>armata</i>			
614.	1800 <i>Banksia attenuata</i> (Slender Banksia, Piara)			
615.	32576 <i>Banksia dallanneyi</i> (Couch Honeypot)			
616.	32580 <i>Banksia dallanneyi</i> var. <i>dallanneyi</i>			
617.	32577 <i>Banksia dallanneyi</i> var. <i>melliculca</i>			
618.	1819 <i>Banksia grandis</i> (Bull Banksia, Pulgarla)			
619.	1822 <i>Banksia ilicifolia</i> (Holly-leaved Banksia)			
620.	1823 <i>Banksia incana</i>			
621.	33399 <i>Banksia incana</i> var. <i>incana</i>			
622.	1834 <i>Banksia menziesii</i> (Firewood Banksia)			
623.	32202 <i>Banksia nivea</i> (Honeypot Dryandra, Pudjarn)			
624.	32138 <i>Banksia pteridifolia</i> subsp. <i>vernalis</i>		P3	
625.	32080 <i>Banksia sessilis</i> var. <i>sessilis</i>			
626.	1852 <i>Banksia telmatiaea</i> (Swamp Fox Banksia)			
627.	15607 <i>Conospermum acerosum</i> subsp. <i>acerosum</i>			
628.	15041 <i>Conospermum canaliculatum</i>			
629.	1875 <i>Conospermum huegelii</i> (Slender Smokebush)			
630.	15520 <i>Conospermum stoechadis</i> subsp. <i>sclerophyllum</i>			
631.	15611 <i>Conospermum stoechadis</i> subsp. <i>stoechadis</i> (Common Smokebush)			
632.	1885 <i>Conospermum triplinervium</i> (Tree Smokebush)			
633.	13999 <i>Conospermum undulatum</i>		T	
634.	1964 <i>Grevillea bipinnatifida</i> (Fuchsia Grevillea)			
635.	19628 <i>Grevillea bipinnatifida</i> subsp. <i>bipinnatifida</i>			
636.	1997 <i>Grevillea endlicheriana</i> (Spindly Grevillea)			
637.	2066 <i>Grevillea pilulifera</i> (Woolly-flowered Grevillea)			
638.	2101 <i>Grevillea synapheae</i> (Catkin Grevillea)			
639.	2128 <i>Hakea amplexicaulis</i> (Prickly Hakea)			
640.	2137 <i>Hakea ceratophylla</i> (Horned Leaf Hakea)			
641.	2143 <i>Hakea conchifolia</i> (Shell-leaved Hakea)			
642.	2149 <i>Hakea cristata</i> (Snail Hakea)			
643.	2152 <i>Hakea cyclocarpa</i> (Ramshorn)			
644.	2158 <i>Hakea erinacea</i> (Hedge-hog Hakea)			
645.	2166 <i>Hakea incrassata</i> (Marble Hakea)			
646.	2175 <i>Hakea lissocarpha</i> (Honey Bush)			

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647.	2185 <i>Hakea myrtoidea</i> (Myrtle Hakea)			
648.	2197 <i>Hakea prostrata</i> (Harsh Hakea)			
649.	2203 <i>Hakea ruscifolia</i> (Candle Hakea)			
650.	31793 <i>Hakea</i> sp. Eastern coastal plain (G.J. Keighery 8014)			
651.	12234 <i>Hakea spathulata</i>			
652.	2206 <i>Hakea stenocarpa</i> (Narrow-fruited Hakea)			
653.	2212 <i>Hakea sulcata</i> (Furrowed Hakea)			
654.	2214 <i>Hakea trifurcata</i> (Two-leaf Hakea)			
655.	2215 <i>Hakea undulata</i> (Wavy-leaved Hakea)			
656.	2221 <i>Isopogon asper</i>			
657.	2228 <i>Isopogon drummondii</i>		P3	
658.	2229 <i>Isopogon dubius</i> (Pincushion Coneflower)			
659.	2237 <i>Isopogon sphaerocephalus</i> (Drumstick Isopogon)			
660.	2249 <i>Lambertia multiflora</i> (Many-flowered Honeysuckle)			
661.	14083 <i>Lambertia multiflora</i> var. <i>darlingensis</i>			
662.	2255 <i>Persoonia angustiflora</i>			
663.	2262 <i>Persoonia elliptica</i> (Spreading Snottygobble)			
664.	2273 <i>Persoonia saccata</i> (Snottygobble)			
665.	2284 <i>Petrophile biloba</i> (Granite Petrophile)			
666.	2299 <i>Petrophile linearis</i> (Pixie Mops)			
667.	2301 <i>Petrophile macrostachya</i>			
668.	2306 <i>Petrophile rigida</i>			
669.	2308 <i>Petrophile seminuda</i>			
670.	2312 <i>Petrophile striata</i>			
671.	2316 <i>Stirlingia latifolia</i> (Blueboy)			
672.	2321 <i>Synaphea acutiloba</i> (Granite Synaphea)			
673.	2323 <i>Synaphea gracillima</i>			
674.	16864 <i>Synaphea petiolaris</i> subsp. <i>petiolaris</i>			
675.	2325 <i>Synaphea pinnata</i> (Helena Synaphea)			
676.	2329 <i>Synaphea spinulosa</i>			
677.	15532 <i>Synaphea spinulosa</i> subsp. <i>spinulosa</i>			
678.	2331 <i>Xylomelum occidentale</i> (Woody Pear, Djandin)			

Pteridaceae

679.	31 <i>Cheilanthes austrotenuifolia</i>			
680.	34 <i>Cheilanthes distans</i> (Bristly Cloak Fern)			
681.	12818 <i>Cheilanthes sieberi</i> subsp. <i>sieberi</i>			

Ranunculaceae

682.	2929 <i>Clematis pubescens</i> (Common Clematis)			
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Restionaceae

683.	1056 <i>Alexgeorgea nitens</i>			
684.	17706 <i>Chordiflex sinuosus</i>			
685.	17692 <i>Cytogonidium leptocarpoides</i>			
686.	17663 <i>Desmocladius asper</i>			
687.	17691 <i>Desmocladius fasciculatus</i>			
688.	17838 <i>Dielsia stenostachya</i>			
689.	1070 <i>Hypolaena exsulca</i>			
690.	17841 <i>Hypolaena pubescens</i>			
691.	1075 <i>Lepidobolus preissianus</i>			
692.	18074 <i>Lepidobolus preissianus</i> subsp. <i>preissianus</i>			
693.	19241 <i>Lepyrodia curvescens</i>		P2	
694.	15562 <i>Lepyrodia riparia</i>			
695.	17747 <i>Meeboldina decipiens</i>			

Rhamnaceae

696.	13470 <i>Cryptandra arbutiflora</i> var. <i>arbutiflora</i>			
697.	4804 <i>Cryptandra nutans</i>			
698.	16197 <i>Stenanthemum emarginatum</i>			
699.	13475 <i>Stenanthemum humile</i>			
700.	13479 <i>Trymalium ledifolium</i> var. <i>rosmarinifolium</i>			
701.	33418 <i>Trymalium odoratissimum</i> subsp. <i>odoratissimum</i>			

Rubiaceae

702.	7321 <i>Galium divaricatum</i>	Y		
703.	18254 <i>Opercularia apiciflora</i>			
704.	18255 <i>Opercularia vaginata</i> (Dog Weed)			

Rutaceae

705.	17497 <i>Asterolasia pallida</i> subsp. <i>pallida</i>			
706.	11503 <i>Boronia crenulata</i> var. <i>crenulata</i>			
707.	4414 <i>Boronia cymosa</i> (Granite Boronia)			

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708.	16618 <i>Boronia humifusa</i>		P1	
709.	4432 <i>Boronia ovata</i>			
710.	4438 <i>Boronia ramosa</i>			
711.	11381 <i>Boronia ramosa</i> subsp. <i>anethifolia</i>			
712.	11564 <i>Boronia ramosa</i> subsp. <i>ramosa</i>			
713.	4444 <i>Boronia tenuis</i> (Blue Boronia)		P4	
714.	18529 <i>Philotheca spicata</i> (Pepper and Salt)			
Salviniaceae				
715.	42902 <i>Azolla rubra</i>			
Santalaceae				
716.	2344 <i>Leptomeria empetriformis</i>			
Sapindaceae				
717.	18589 <i>Diplopeltis huegelii</i> subsp. <i>lehmannii</i>			
Scrophulariaceae				
718.	13405 <i>Phyllopodium cordatum</i>	Y		
Sematophyllaceae				
719.	32433 <i>Sematophyllum homomallum</i>			
Solanaceae				
720.	6983 <i>Physalis peruviana</i> (Cape Gooseberry)	Y		
Stylidiaceae				
721.	7676 <i>Levenhookia pusilla</i> (Midget Stylewort)			
722.	7677 <i>Levenhookia stipitata</i> (Common Stylewort)			
723.	7679 <i>Stylidium adpressum</i> (Trigger-on-stilts)			
724.	7681 <i>Stylidium affine</i> (Queen Triggerplant)			
725.	7684 <i>Stylidium amoenum</i> (Lovely Triggerplant)			
726.	30278 <i>Stylidium androsaceum</i>			
727.	30276 <i>Stylidium bicolor</i>			
728.	7693 <i>Stylidium brunonianum</i> (Pink Fountain Triggerplant)			
729.	7694 <i>Stylidium bulbiferum</i> (Circus Triggerplant)			
730.	7696 <i>Stylidium calcaratum</i> (Book Triggerplant)			
731.	7698 <i>Stylidium caricifolium</i> (Milkmaids)			
732.	7699 <i>Stylidium carnosum</i> (Fleshy-leaved Triggerplant)			
733.	7713 <i>Stylidium dichotomum</i> (Pins-and-needles)			
734.	7716 <i>Stylidium diuroides</i> (Donkey Triggerplant)			
735.	11808 <i>Stylidium diuroides</i> subsp. <i>diuroides</i>			
736.	7719 <i>Stylidium ecome</i> (Foot Triggerplant)			
737.	7736 <i>Stylidium hispidum</i> (White Butterfly Triggerplant)			
738.	7756 <i>Stylidium longitubum</i> (Jumping Jacks)		P3	
739.	7773 <i>Stylidium petiolare</i> (Horn Triggerplant)			
740.	7774 <i>Stylidium piliferum</i> (Common Butterfly Triggerplant)			
741.	7783 <i>Stylidium pycnostachyum</i> (Downy Triggerplant)			
742.	33106 <i>Stylidium recurvum</i>			
743.	7785 <i>Stylidium repens</i> (Matted Triggerplant)			
744.	25806 <i>Stylidium scariosum</i>			
745.	7798 <i>Stylidium schoenoides</i> (Cow Kicks)			
746.	17992 <i>Stylidium</i> sp. <i>Bindoon</i> (K.F. Kenneally 11405)			
747.	25830 <i>Stylidium</i> sp. <i>Darling Range</i> (H. Bowler 371)			
748.	7803 <i>Stylidium striatum</i> (Fan-leaved Triggerplant)		P4	
749.	7806 <i>Stylidium utricularioides</i> (Pink Fan Triggerplant)			
Tecophilaeaceae				
750.	1487 <i>Cyanella hyacinthoides</i>	Y		
Thymelaeaceae				
751.	5231 <i>Pimelea angustifolia</i> (Narrow-leaved Pimelea)			
752.	5232 <i>Pimelea argentea</i> (Silvery Leaved Pimelea)			
753.	11928 <i>Pimelea ciliata</i> subsp. <i>ciliata</i>			
754.	11402 <i>Pimelea imbricata</i> var. <i>piligera</i>			
755.	11182 <i>Pimelea lehmanniana</i> subsp. <i>nervosa</i>			
756.	12041 <i>Pimelea suaveolens</i> subsp. <i>suaveolens</i>			
757.	5268 <i>Pimelea sulphurea</i> (Yellow Banjine)			
Verbenaceae				
758.	19511 <i>Verbena officinalis</i>	Y		
Violaceae				
759.	5216 <i>Hybanthus calycinus</i> (Wild Violet)			
Xanthorrhoeaceae				

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
760.	1249 <i>Xanthorrhoea acanthostachya</i>			
761.	1252 <i>Xanthorrhoea drummondii</i>			
762.	1253 <i>Xanthorrhoea gracilis</i> (Graceful Grass Tree, Mimidi)			
763.	1256 <i>Xanthorrhoea preissii</i> (Grass tree, Palga)			

Zamiaceae

764.	85 <i>Macrozamia riedlei</i> (Zamia, Djiridji)			
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Conservation Codes

- T - Rare or likely to become extinct
- X - Presumed extinct
- IA - Protected under international agreement
- S - Other specially protected fauna
- 1 - Priority 1
- 2 - Priority 2
- 3 - Priority 3
- 4 - Priority 4
- 5 - Priority 5

¹ For NatureMap's purposes, species flagged as endemic are those whose records are wholly contained within the search area. Note that only those records complying with the search criterion are included in the calculation. For example, if you limit records to those from a specific datasource, only records from that datasource are used to determine if a species is restricted to the query area.



EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected.

Information on the coverage of this report and qualifications on data supporting this report are contained in the caveat at the end of the report.

Information is available about [Environment Assessments](#) and the EPBC Act including significance guidelines, forms and application process details.

Report created: 15/12/15 17:48:44

[Summary](#)

[Details](#)

[Matters of NES](#)

[Other Matters Protected by the EPBC Act](#)

[Extra Information](#)

[Caveat](#)

[Acknowledgements](#)



This map may contain data which are ©Commonwealth of Australia (Geoscience Australia), ©PSMA 2010

[Coordinates](#)

Buffer: 10.0Km



Summary

Matters of National Environmental Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the [Administrative Guidelines on Significance](#).

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance:	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	4
Listed Threatened Species:	57
Listed Migratory Species:	24

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at <http://www.environment.gov.au/heritage>

A [permit](#) may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Land:	5
Commonwealth Heritage Places:	None
Listed Marine Species:	27
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Commonwealth Reserves Marine:	None

Extra Information

This part of the report provides information that may also be relevant to the area you have nominated.

State and Territory Reserves:	16
Regional Forest Agreements:	1
Invasive Species:	49
Nationally Important Wetlands:	3
Key Ecological Features (Marine)	None

Details

Matters of National Environmental Significance

Listed Threatened Ecological Communities

[[Resource Information](#)]

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Name	Status	Type of Presence
Claypans of the Swan Coastal Plain	Critically Endangered	Community likely to occur within area
Corymbia calophylla - Kingia australis woodlands on heavy soils of the Swan Coastal Plain	Endangered	Community known to occur within area
Shrublands and Woodlands of the eastern Swan Coastal Plain	Endangered	Community known to occur within area
Subtropical and Temperate Coastal Saltmarsh	Vulnerable	Community likely to occur within area

Listed Threatened Species

[[Resource Information](#)]

Name	Status	Type of Presence
Birds		
Anous tenuirostris melanops Australian Lesser Noddy [26000]	Vulnerable	Species or species habitat may occur within area
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat known to occur within area
Calyptorhynchus banksii naso Forest Red-tailed Black-Cockatoo, Karrak [67034]	Vulnerable	Species or species habitat may occur within area
Calyptorhynchus baudinii Baudin's Black-Cockatoo, Long-billed Black-Cockatoo [769]	Vulnerable	Roosting known to occur within area
Calyptorhynchus latirostris Carnaby's Black-Cockatoo, Short-billed Black-Cockatoo [59523]	Endangered	Breeding likely to occur within area
Diomedea epomophora epomophora Southern Royal Albatross [25996]	Vulnerable	Species or species habitat likely to occur within area
Diomedea epomophora sanfordi Northern Royal Albatross [82331]	Endangered	Species or species habitat likely to occur within area
Diomedea exulans amsterdamensis Amsterdam Albatross [82330]	Endangered	Species or species habitat may occur within area
Diomedea exulans exulans Tristan Albatross [82337]	Endangered	Species or species habitat may occur within area
Diomedea exulans (sensu lato) Wandering Albatross [1073]	Vulnerable	Species or species habitat likely to occur

Name	Status	Type of Presence
Leipoa ocellata Malleefowl [934]	Vulnerable	Species or species habitat likely to occur within area
Macronectes giganteus Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area
Pachyptila turtur subantarctica Fairy Prion (southern) [64445]	Vulnerable	Species or species habitat likely to occur within area
Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area
Thalassarche cauta cauta Shy Albatross, Tasmanian Shy Albatross [82345]	Vulnerable	Species or species habitat may occur within area
Thalassarche cauta steadi White-capped Albatross [82344]	Vulnerable	Species or species habitat likely to occur within area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area
Thalassarche melanophris impavida Campbell Albatross [82449]	Vulnerable	Species or species habitat may occur within area
Insects		
Leioproctus douglasiellus a short-tongued bee [66756]	Critically Endangered	Species or species habitat known to occur within area
Mammals		
Bettongia penicillata ogilbyi Woylie [66844]	Endangered	Species or species habitat may occur within area
Dasyurus geoffroii Chuditch, Western Quoll [330]	Vulnerable	Species or species habitat known to occur within area
Pseudocheirus occidentalis Western Ringtail Possum, Ngwayir [25911]	Vulnerable	Species or species habitat may occur within area
Setonix brachyurus Quokka [229]	Vulnerable	Species or species habitat likely to occur within area
Plants		
Acacia anomala Grass Wattle, Chittering Grass Wattle [8153]	Vulnerable	Species or species habitat known to occur within area
Acacia aphylla Leafless Rock Wattle [13553]	Vulnerable	Species or species habitat known to occur within area
Andersonia gracilis Slender Andersonia [14470]	Endangered	Species or species habitat known to occur within area

Name	Status	Type of Presence
Anigozanthos viridis subsp. terraspectans Dwarf Green Kangaroo Paw [3435]	Vulnerable	Species or species habitat may occur within area
Anthocercis gracilis Slender Tailflower [11103]	Vulnerable	Species or species habitat likely to occur within area
Banksia mimica Summer Honeypot [82765]	Endangered	Species or species habitat likely to occur within area
Caladenia huegelii King Spider-orchid, Grand Spider-orchid, Rusty Spider-orchid [7309]	Endangered	Species or species habitat likely to occur within area
Calytrix breviseta subsp. breviseta Swamp Starflower [23879]	Endangered	Species or species habitat known to occur within area
Chamelaucium sp. Gingin (N.G.Marchant 6) Gingin Wax [64649]	Endangered	Species or species habitat may occur within area
Conospermum undulatum Wavy-leaved Smokebush [24435]	Vulnerable	Species or species habitat likely to occur within area
Darwinia apiculata Scarp Darwinia [8763]	Endangered	Species or species habitat likely to occur within area
Darwinia foetida Muccha Bell [83190]	Critically Endangered	Species or species habitat likely to occur within area
Diuris drummondii Tall Donkey Orchid [4365]	Vulnerable	Species or species habitat likely to occur within area
Diuris micrantha Dwarf Bee-orchid [55082]	Vulnerable	Species or species habitat likely to occur within area
Diuris purdiei Purdie's Donkey-orchid [12950]	Endangered	Species or species habitat known to occur within area
Drakaea elastica Glossy-leaved Hammer-orchid, Praying Virgin [16753]	Endangered	Species or species habitat likely to occur within area
Drakaea micrantha Dwarf Hammer-orchid [56755]	Vulnerable	Species or species habitat may occur within area
Eleocharis keigheryi Keighery's Eleocharis [64893]	Vulnerable	Species or species habitat likely to occur within area
Eucalyptus balanites Cadda Road Mallee, Cadda Mallee [24264]	Endangered	Species or species habitat may occur within area
Grevillea curviloba subsp. incurva Narrow curved-leaf Grevillea [64909]	Endangered	Species or species habitat likely to occur within area
Lasiopetalum pterocarpum Wing-fruited Lasiopetalum [64922]	Endangered	Species or species habitat may occur within area

Name	Status	Type of Presence
Lepidosperma rostratum Beaked Lepidosperma [14152]	Endangered	Species or species habitat likely to occur within area
Macarthuria keigheryi Keighery's Macarthuria [64930]	Endangered	Species or species habitat likely to occur within area
Ptilotus pyramidatus Pyramid Mulla-mulla [18216]	Critically Endangered	Species or species habitat known to occur within area
Synaphea sp. Fairbridge Farm (D.Papenfus 696) Selena's Synaphea [82881]	Critically Endangered	Species or species habitat likely to occur within area
Synaphea stenoloba Dwellingup Synaphea [66311]	Endangered	Species or species habitat may occur within area
Thelymitra dedmaniarum Cinnamon Sun Orchid [65105]	Endangered	Species or species habitat likely to occur within area
Thelymitra stellata Star Sun-orchid [7060]	Endangered	Species or species habitat known to occur within area
Trithuria occidentalis Swan Hydatella [42224]	Endangered	Species or species habitat likely to occur within area

Reptiles

Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat known to occur within area
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat known to occur within area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area
Natator depressus Flatback Turtle [59257]	Vulnerable	Species or species habitat known to occur within area

Listed Migratory Species

[Resource Information]

* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.

Name	Threatened	Type of Presence
Migratory Marine Birds		
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Diomedea amsterdamensis Amsterdam Albatross [64405]	Endangered*	Species or species habitat may occur within area
Diomedea dabbenena Tristan Albatross [66471]	Endangered*	Species or species habitat may occur within area
Diomedea epomophora (sensu stricto) Southern Royal Albatross [1072]	Vulnerable*	Species or species habitat likely to occur within area
Diomedea exulans (sensu lato) Wandering Albatross [1073]	Vulnerable	Species or species habitat likely to occur

Name	Threatened	Type of Presence
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered*	Species or species habitat likely to occur within area
Macronectes giganteus Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area
Thalassarche cauta (sensu stricto) Shy Albatross, Tasmanian Shy Albatross [64697]	Vulnerable*	Species or species habitat may occur within area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable*	Species or species habitat may occur within area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area
Thalassarche steadi White-capped Albatross [64462]	Vulnerable*	Species or species habitat likely to occur within area
Migratory Marine Species		
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat known to occur within area
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat known to occur within area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area
Manta alfredi Reef Manta Ray, Coastal Manta Ray, Inshore Manta Ray, Prince Alfred's Ray, Resident Manta Ray [84994]		Species or species habitat may occur within area
Manta birostris Giant Manta Ray, Chevron Manta Ray, Pacific Manta Ray, Pelagic Manta Ray, Oceanic Manta Ray [84995]		Species or species habitat may occur within area
Natator depressus Flatback Turtle [59257]	Vulnerable	Species or species habitat known to occur within area
Migratory Terrestrial Species		
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area
Migratory Wetlands Species		
Ardea alba Great Egret, White Egret [59541]		Breeding known to occur within area
Ardea ibis Cattle Egret [59542]		Species or species habitat may occur within area

Name	Threatened	Type of Presence
Pandion haliaetus Osprey [952]		Breeding known to occur within area
Tringa nebularia Common Greenshank, Greenshank [832]		Species or species habitat likely to occur within area

Other Matters Protected by the EPBC Act

Commonwealth Land [\[Resource Information \]](#)

The Commonwealth area listed below may indicate the presence of Commonwealth land in this vicinity. Due to the unreliability of the data source, all proposals should be checked as to whether it impacts on a Commonwealth area, before making a definitive decision. Contact the State or Territory government land department for further information.

Name

Commonwealth Land -
Defence - AIRTC CANNINGTON
Defence - BUSHMEAD RIFLE RANGE
Defence - BUSHMEAD TRAINING AREA
Defence - PALMER BARRACKS - SOUTH GUILDFORD

Listed Marine Species [\[Resource Information \]](#)

* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.

Name	Threatened	Type of Presence
Birds		
Anous tenuirostris melanops Australian Lesser Noddy [26000]	Vulnerable	Species or species habitat may occur within area
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Ardea alba Great Egret, White Egret [59541]		Breeding known to occur within area
Ardea ibis Cattle Egret [59542]		Species or species habitat may occur within area
Diomedea amsterdamensis Amsterdam Albatross [64405]	Endangered*	Species or species habitat may occur within area
Diomedea dabbenena Tristan Albatross [66471]	Endangered*	Species or species habitat may occur within area
Diomedea epomophora (sensu stricto) Southern Royal Albatross [1072]	Vulnerable*	Species or species habitat likely to occur within area
Diomedea exulans (sensu lato) Wandering Albatross [1073]	Vulnerable	Species or species habitat likely to occur

Name	Threatened	Type of Presence
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered*	Species or species habitat likely to occur within area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat likely to occur within area
Macronectes giganteus Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area
Pachyptila turtur Fairy Prion [1066]		Species or species habitat likely to occur within area
Pandion haliaetus Osprey [952]		Breeding known to occur within area
Rostratula benghalensis (sensu lato) Painted Snipe [889]	Endangered*	Species or species habitat likely to occur within area
Thalassarche cauta (sensu stricto) Shy Albatross, Tasmanian Shy Albatross [64697]	Vulnerable*	Species or species habitat may occur within area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable*	Species or species habitat may occur within area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area
Thalassarche steadi White-capped Albatross [64462]	Vulnerable*	Species or species habitat likely to occur within area
Thinornis rubricollis Hooded Plover [59510]		Species or species habitat may occur within area
Tringa nebularia Common Greenshank, Greenshank [832]		Species or species habitat likely to occur within area
Reptiles		
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat known to occur within area
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat known to occur within area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area

Name	Threatened	Type of Presence
Natator depressus Flatback Turtle [59257]	Vulnerable	Species or species habitat known to occur within area

Extra Information

State and Territory Reserves [\[Resource Information \]](#)

Name	State
Beelu	WA
Gooseberry Hill	WA
Greenmount	WA
Kalamunda	WA
Kenwick Wetlands	WA
Korong	WA
Lesmurdie Falls	WA
Unnamed WA23076	WA
Unnamed WA24657	WA
Unnamed WA28740	WA
Unnamed WA29815	WA
Unnamed WA37997	WA
Unnamed WA45106	WA
Unnamed WA47244	WA
Unnamed WA49079	WA
Unnamed WA49363	WA

Regional Forest Agreements [\[Resource Information \]](#)

Note that all areas with completed RFAs have been included.

Name	State
South West WA RFA	Western Australia

Invasive Species [\[Resource Information \]](#)

Weeds reported here are the 20 species of national significance (WoNS), along with other introduced plants that are considered by the States and Territories to pose a particularly significant threat to biodiversity. The following feral animals are reported: Goat, Red Fox, Cat, Rabbit, Pig, Water Buffalo and Cane Toad. Maps from Landscape Health Project, National Land and Water Resources Audit, 2001.

Name	Status	Type of Presence
Birds		
Acridotheres tristis Common Myna, Indian Myna [387]		Species or species habitat likely to occur within area
Anas platyrhynchos Mallard [974]		Species or species habitat likely to occur within area
Carduelis carduelis European Goldfinch [403]		Species or species habitat likely to occur within area
Columba livia Rock Pigeon, Rock Dove, Domestic Pigeon [803]		Species or species habitat likely to occur within area
Passer domesticus House Sparrow [405]		Species or species habitat likely to occur

Name	Status	Type of Presence
Passer montanus Eurasian Tree Sparrow [406]		within area Species or species habitat likely to occur within area
Streptopelia chinensis Spotted Turtle-Dove [780]		Species or species habitat likely to occur within area
Streptopelia senegalensis Laughing Turtle-dove, Laughing Dove [781]		Species or species habitat likely to occur within area
Sturnus vulgaris Common Starling [389]		Species or species habitat likely to occur within area
Turdus merula Common Blackbird, Eurasian Blackbird [596]		Species or species habitat likely to occur within area
Mammals		
Bos taurus Domestic Cattle [16]		Species or species habitat likely to occur within area
Canis lupus familiaris Domestic Dog [82654]		Species or species habitat likely to occur within area
Capra hircus Goat [2]		Species or species habitat likely to occur within area
Felis catus Cat, House Cat, Domestic Cat [19]		Species or species habitat likely to occur within area
Feral deer Feral deer species in Australia [85733]		Species or species habitat likely to occur within area
Funambulus pennantii Northern Palm Squirrel, Five-striped Palm Squirrel [129]		Species or species habitat likely to occur within area
Mus musculus House Mouse [120]		Species or species habitat likely to occur within area
Oryctolagus cuniculus Rabbit, European Rabbit [128]		Species or species habitat likely to occur within area
Rattus norvegicus Brown Rat, Norway Rat [83]		Species or species habitat likely to occur within area
Rattus rattus Black Rat, Ship Rat [84]		Species or species habitat likely to occur within area
Sus scrofa Pig [6]		Species or species habitat likely to occur within area
Vulpes vulpes Red Fox, Fox [18]		Species or species habitat likely to occur within area
Plants		
Anredera cordifolia Madeira Vine, Jalap, Lamb's-tail, Mignonette Vine,		Species or species

Name	Status	Type of Presence
Anredera, Gulf Madeiravine, Heartleaf Madeiravine, Potato Vine [2643] Asparagus aethiopicus		habitat likely to occur within area
Asparagus Fern, Ground Asparagus, Basket Fern, Sprengi's Fern, Bushy Asparagus, Emerald Asparagus [62425] Asparagus asparagoides		Species or species habitat likely to occur within area
Bridal Creeper, Bridal Veil Creeper, Smilax, Florist's Smilax, Smilax Asparagus [22473]		Species or species habitat likely to occur within area
Asparagus declinatus Bridal Veil, Bridal Veil Creeper, Pale Berry Asparagus Fern, Asparagus Fern, South African Creeper [66908]		Species or species habitat likely to occur within area
Asparagus plumosus Climbing Asparagus-fern [48993]		Species or species habitat likely to occur within area
Brachiaria mutica Para Grass [5879]		Species or species habitat may occur within area
Cenchrus ciliaris Buffel-grass, Black Buffel-grass [20213]		Species or species habitat may occur within area
Chrysanthemoides monilifera Bitou Bush, Boneseed [18983]		Species or species habitat may occur within area
Chrysanthemoides monilifera subsp. monilifera Boneseed [16905]		Species or species habitat likely to occur within area
Eichhornia crassipes Water Hyacinth, Water Orchid, Nile Lily [13466]		Species or species habitat likely to occur within area
Genista linifolia Flax-leaved Broom, Mediterranean Broom, Flax Broom [2800]		Species or species habitat likely to occur within area
Genista monspessulana Montpellier Broom, Cape Broom, Canary Broom, Common Broom, French Broom, Soft Broom [20126]		Species or species habitat likely to occur within area
Genista sp. X Genista monspessulana Broom [67538]		Species or species habitat may occur within area
Lantana camara Lantana, Common Lantana, Kamara Lantana, Large-leaf Lantana, Pink Flowered Lantana, Red Flowered Lantana, Red-Flowered Sage, White Sage, Wild Sage [10892] Lycium ferocissimum African Boxthorn, Boxthorn [19235]		Species or species habitat likely to occur within area
Olea europaea Olive, Common Olive [9160]		Species or species habitat may occur within area
Opuntia spp. Prickly Pears [82753]		Species or species habitat likely to occur within area
Pinus radiata Radiata Pine Monterey Pine, Insignis Pine, Wilding Pine [20780]		Species or species habitat may occur within area
Protasparagus densiflorus Asparagus Fern, Plume Asparagus [5015]		Species or species

Name	Status	Type of Presence
Protasparagus plumosus Climbing Asparagus-fern, Ferny Asparagus [11747]		habitat likely to occur within area Species or species habitat likely to occur within area
Rubus fruticosus aggregate Blackberry, European Blackberry [68406]		Species or species habitat likely to occur within area
Sagittaria platyphylla Delta Arrowhead, Arrowhead, Slender Arrowhead [68483]		Species or species habitat likely to occur within area
Salix spp. except S.babylonica, S.x calodendron & S.x reichardtii Willows except Weeping Willow, Pussy Willow and Sterile Pussy Willow [68497]		Species or species habitat likely to occur within area
Salvinia molesta Salvinia, Giant Salvinia, Aquarium Watermoss, Kariba Weed [13665]		Species or species habitat likely to occur within area
Tamarix aphylla Athel Pine, Athel Tree, Tamarisk, Athel Tamarisk, Athel Tamarix, Desert Tamarisk, Flowering Cypress, Salt Cedar [16018]		Species or species habitat likely to occur within area
Reptiles		
Hemidactylus frenatus Asian House Gecko [1708]		Species or species habitat likely to occur within area
Ramphotyphlops braminus Flowerpot Blind Snake, Brahminy Blind Snake, Cacing Besi [1258]		Species or species habitat likely to occur within area

Nationally Important Wetlands

Name	[Resource Information]
Brixton Street Swamps	State WA
Perth Airport Woodland Swamps	WA
Swan-Canning Estuary	WA

Caveat

The information presented in this report has been provided by a range of data sources as acknowledged at the end of the report.

This report is designed to assist in identifying the locations of places which may be relevant in determining obligations under the Environment Protection and Biodiversity Conservation Act 1999. It holds mapped locations of World and National Heritage properties, Wetlands of International and National Importance, Commonwealth and State/Territory reserves, listed threatened, migratory and marine species and listed threatened ecological communities. Mapping of Commonwealth land is not complete at this stage. Maps have been collated from a range of sources at various resolutions.

Not all species listed under the EPBC Act have been mapped (see below) and therefore a report is a general guide only. Where available data supports mapping, the type of presence that can be determined from the data is indicated in general terms. People using this information in making a referral may need to consider the qualifications below and may need to seek and consider other information sources.

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

For species where the distributions are well known, maps are digitised from sources such as recovery plans and detailed habitat studies. Where appropriate, core breeding, foraging and roosting areas are indicated under 'type of presence'. For species whose distributions are less well known, point locations are collated from government wildlife authorities, museums, and non-government organisations; bioclimatic distribution models are generated and these validated by experts. In some cases, the distribution maps are based solely on expert knowledge.

Only selected species covered by the following provisions of the EPBC Act have been mapped:

- migratory and
- marine

The following species and ecological communities have not been mapped and do not appear in reports produced from this database:

- threatened species listed as extinct or considered as vagrants
- some species and ecological communities that have only recently been listed
- some terrestrial species that overfly the Commonwealth marine area
- migratory species that are very widespread, vagrant, or only occur in small numbers

The following groups have been mapped, but may not cover the complete distribution of the species:

- non-threatened seabirds which have only been mapped for recorded breeding sites
- seals which have only been mapped for breeding sites near the Australian continent

Such breeding sites may be important for the protection of the Commonwealth Marine environment.

Coordinates

-31.97452 116.01127

Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

- [-Office of Environment and Heritage, New South Wales](#)
- [-Department of Environment and Primary Industries, Victoria](#)
- [-Department of Primary Industries, Parks, Water and Environment, Tasmania](#)
- [-Department of Environment, Water and Natural Resources, South Australia](#)
- [-Parks and Wildlife Commission NT, Northern Territory Government](#)
- [-Department of Environmental and Heritage Protection, Queensland](#)
- [-Department of Parks and Wildlife, Western Australia](#)
- [-Environment and Planning Directorate, ACT](#)
- [-Birdlife Australia](#)
- [-Australian Bird and Bat Banding Scheme](#)
- [-Australian National Wildlife Collection](#)
- Natural history museums of Australia
- [-Museum Victoria](#)
- [-Australian Museum](#)
- [-South Australian Museum](#)
- [-Queensland Museum](#)
- [-Online Zoological Collections of Australian Museums](#)
- [-Queensland Herbarium](#)
- [-National Herbarium of NSW](#)
- [-Royal Botanic Gardens and National Herbarium of Victoria](#)
- [-Tasmanian Herbarium](#)
- [-State Herbarium of South Australia](#)
- [-Northern Territory Herbarium](#)
- [-Western Australian Herbarium](#)
- [-Australian National Herbarium, Atherton and Canberra](#)
- [-University of New England](#)
- [-Ocean Biogeographic Information System](#)
- [-Australian Government, Department of Defence](#)
- [Forestry Corporation, NSW](#)
- [-Geoscience Australia](#)
- [-CSIRO](#)
- Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the [Contact Us](#) page.

Appendix 4
Conservation significant flora and
ecological community definitions

Conservation Codes for Western Australia (Western Australian Herbarium 1998-)

Under the *Wildlife Conservation Act* (1950), the Minister for the Environment may declare species of flora to be protected if they are considered to be in danger of extinction, rare or otherwise in need of special protection. Schedules 1 and 2 deal with those that are threatened and those that are presumed extinct, respectively.

T: Threatened Flora (Declared Rare Flora – Extant)

Species which have been adequately searched for and are deemed to be in the wild either rare, in danger of extinction, or otherwise in need of special protection, and have been gazetted as such (Schedule 1 under the *Wildlife Conservation Act 1950*).

Threatened Flora (Schedule 1) are further ranked by the Department according to their level of threat using IUCN Red List Criteria:

- CR: Critically Endangered – considered to be facing an extremely high risk of extinction in the wild
- EN: Endangered – considered to be facing a very high risk of extinction in the wild
- VU: Vulnerable – considered to be facing a high risk of extinction in the wild
- X: Presumed Extinct Flora (Declared Rare Flora – Extinct).

Species that have been adequately searched for and there is no reasonable doubt that the last individual has died, and have been gazetted as such (Schedule 2 under the *Wildlife Conservation Act 1950*).

Priority Flora

Species that have not yet been adequately surveyed to be listed under Schedule 1 or 2 are added to the Priority Flora List under Priorities 1, 2 or 3. These three categories are ranked in order of priority for survey and evaluation of conservation status so that consideration can be given to their declaration as threatened flora or fauna. Species that are adequately known, are rare but not threatened, or meet criteria for Near Threatened, or that have been recently removed from the threatened list for other than taxonomic reasons, are placed in Priority 4. These species require regular monitoring. Conservation Dependent species are placed in Priority 5.

Priority One: Poorly-known Species

Species that are known from one or a few collections or sight records (generally less than 5), all on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, Shire, Westrail and Main Roads WA road, gravel and soil reserves, and active mineral leases and under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes.

Priority Two: Poorly-known Species

Species that are known from one or a few collections or sight records, some of which are on lands not under imminent threat of habitat destruction or degradation, e.g. national parks, conservation parks, nature reserves, State forest, vacant Crown land, water reserves, etc. Species may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes.

Priority Three: Poorly-known Species

Species that are known from collections or sight records from several localities not under imminent threat, or from few but widespread localities with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. Species may be included if they are comparatively well known from several localities but do not meet adequacy of survey requirements and known threatening processes exist that could affect them.

Priority Four: Rare, Near Threatened and other species in need of monitoring

1. Rare: Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection, but could be if present circumstances change. These species are usually represented on conservation lands.
2. Near Threatened: Species that are considered to have been adequately surveyed and that do not qualify for Conservation Dependent, but that are close to qualifying for Vulnerable.
3. Species that have been removed from the list of threatened species during the past 5 years for reasons other than taxonomy.

Priority 5: Conservation Dependent Species

Species that are not threatened but are subject to a specific conservation program, the cessation of which would result in the species becoming threatened within 5 years.

Definition of Threatened Ecological Communities (DEC 2010)

Presumed Totally Destroyed (PD)

An ecological community will be listed as presumed totally destroyed if there are no recent records of the community being extant and either of the following applies:

- records within the last 50 years have not been confirmed despite thorough searches of known or likely habitats or
- all occurrences recorded within the last 50 years have since been destroyed.

Critically Endangered (CR)

An ecological community will be listed as Critically Endangered when it has been adequately surveyed and is found to be facing an extremely high risk of total destruction in the immediate future. This will be determined on the basis of the best available information, by it meeting any one or more of the following criteria:

1. The estimated geographic range, and/or total area occupied, and/or number of discrete occurrences since European settlement have been reduced by at least 90% and either or both of the following apply:
 - (a) geographic range, and/or total area occupied and/or number of discrete occurrences are continuing to decline such that total destruction of the community is imminent (within approximately 10 years)
 - (b) modification throughout its range is continuing such that in the immediate future (within approximately 10 years) the community is unlikely to be capable of being substantially rehabilitated.
2. Current distribution is limited, and one or more of the following apply:
 - (a) geographic range and/or number of discrete occurrences, and/or area occupied is highly restricted and the community is currently subject to known threatening processes which are likely to result in total destruction throughout its range in the immediate future (within approximately 10 years)
 - (b) there are very few occurrences, each of which is small and/or isolated and extremely vulnerable to known threatening processes
 - (c) there may be many occurrences but total area is very small and each occurrence is small and/or isolated and extremely vulnerable to known threatening processes.
3. The ecological community exists only as highly modified occurrences that may be capable of being rehabilitated if such work begins in the immediate future (within approximately 10 years).

Endangered (EN)

An ecological community will be listed as Endangered when it has been adequately surveyed and is not Critically Endangered but is facing a very high risk of total destruction in the near future. This will be determined on the basis of the best available information by it meeting any one or more of the following criteria:

1. The geographic range, and/or total area occupied, and/or number of discrete occurrences have been reduced by at least 70% since European settlement and either or both of the following apply:
 - (a) the estimated geographic range, and/or total area occupied and/or number of discrete occurrences are continuing to decline such that total destruction of the community is likely in the short term future (within approximately 20 years)
 - (b) modification throughout its range is continuing such that in the short term future (within approximately 20 years) the community is unlikely to be capable of being substantially restored or rehabilitated.

2. Current distribution is limited, and one or more of the following apply”
 - (a) geographic range and/or number of discrete occurrences, and/or area occupied is highly restricted and the community is currently subject to known threatening processes which are likely to result in total destruction throughout its range in the short term future (within approximately 20 years)
 - (b) there are few occurrences, each of which is small and/or isolated and all or most occurrences are very vulnerable to known threatening processes
 - (c) there may be many occurrences but total area is small and all or most occurrences are small and/or isolated and very vulnerable to known threatening processes.
3. The ecological community exists only as very modified occurrences that may be capable of being substantially restored or rehabilitated if such work begins in the short-term future (within approximately 20 years).

Vulnerable (VU)

An ecological community will be listed as Vulnerable when it has been adequately surveyed and is not Critically Endangered or Endangered but is facing a high risk of total destruction or significant modification in the medium to long-term future. This will be determined on the basis of the best available information by it meeting any one or more of the following criteria:

1. The ecological community exists largely as modified occurrences that are likely to be capable of being substantially restored or rehabilitated.
2. The ecological community may already be modified and would be vulnerable to threatening processes, is restricted in area and/or range and/or is only found at a few locations.
3. The ecological community may be still widespread but is believed likely to move into a category of higher threat in the medium to long term future because of existing or impending threatening processes.

Definition of Priority Ecological Communities (DEC 2010)

Priority One: Poorly-known ecological communities

Ecological communities with apparently few, small occurrences, all or most not actively managed for conservation (e.g. within agricultural or pastoral lands, urban areas, active mineral leases) and for which current threats exist. Communities may be included if they are comparatively well-known from one or more localities but do not meet adequacy of survey requirements, and/or are not well defined, and appear to be under immediate threat from known threatening processes across their range.

Priority Two: Poorly-known ecological communities

Communities that are known from few small occurrences, all or most of which are actively managed for conservation (e.g. within national parks, conservation parks, nature reserves, State forest, unallocated Crown land, water reserves, etc.) and not under imminent threat of destruction or degradation. Communities may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements, and/or are not well defined, and appear to be under threat from known threatening processes.

Priority Three: Poorly known ecological communities

- communities that are known from several to many occurrences, a significant number or area of which are not under threat of habitat destruction or degradation
- communities known from a few widespread occurrences, which are either large or within significant remaining areas of habitat in which other occurrences may occur, much of it not under imminent threat
- communities made up of large, and/or widespread occurrences, that may or not be represented in the reserve system, but are under threat of modification across much of their range from processes such as grazing by domestic and/or feral stock, and inappropriate fire regimes.

Communities may be included if they are comparatively well known from several localities but do not meet adequacy of survey requirements and/or are not well defined, and known threatening processes exist that could affect them.

Priority Four

Ecological communities that are adequately known, rare but not threatened or meet criteria for Near Threatened, or that have been recently removed from the threatened list. These communities require regular monitoring. These include:

1. Rare. Ecological communities known from few occurrences that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection, but could be if present circumstances change. These communities are usually represented on conservation lands.
2. Near Threatened. Ecological communities that are considered to have been adequately surveyed and that do not qualify for Conservation Dependent, but that are close to qualifying for Vulnerable.
3. Ecological communities that have been removed from the list of threatened communities during the past five years.

Priority Five: Conservation Dependent ecological communities

Ecological communities that are not threatened but are subject to a specific conservation program, the cessation of which would result in the community becoming threatened within five years.

Appendix 5
FCT analysis report

3 December 2015

Daniel Panickar
Consultant
Strategen
Level 1, Subiaco Square Rd
Subiaco, WA 6008

Dear Daniel,

Pursuant to your email of the 9th November 2015, I have undertaken an analysis of the supplied data in order to determine the Floristic Community Type (FCT) of the plant community(ies) present at the Forrestfield site. This letter documents the results of that analysis.

1 Methods

The remnant vegetation of the southern Swan Coastal Plain was surveyed by Gibson *et al.* (1994) to provide an understanding of the major floristic gradients across the region. The major plant communities (or FCTs) were defined by classifying the data according to the similarities in species composition between plots. When determining the FCT of a new record, a floristic analysis of species composition provides the most robust method that is consistent with the original classification.

Presently, a single consistent method for the determination of FCTs for vegetation data in the Swan Coastal Plain is not available. Therefore, it is preferable to use a few different methods and compare the output for the most likely result. All analyses described below were undertaken using R packages Cluster, Vegclust and Vegan.

1.1 Hierarchical Clustering

Hierarchical agglomerative clustering is the usual first stage in classifying vegetation data into community types. This involves calculating the similarity (or more often, the dissimilarity) between plots within the dataset and then sequentially fusing the plots into groups according to their similarity. This type of method was used in the analysis of the original Swan Coastal Plain dataset (Gibson *et al.* 1994), but its use as the basis for assigning new plot data to the regional classification has some drawbacks. Firstly, a hierarchical clustering only applies to the relationships between plots, and the relative distances between them, within that particular dataset. The addition of new data often alters the relative distances and disrupts the clustering output. Secondly, as an unsupervised method, hierarchical clustering does not define rules for the membership of the defined groups, and so the addition of new plots requires the rebuilding of the entire hierarchy (De Cáceres and Wiser 2012).

For the analysis of the Forrestfield data, non-native species were removed from the dataset. Including weeds in the dataset may compromise the assignment to community types by finding similarity to FCTs with a high proportion of weeds (e.g. FCT 6) or a naturally lower native species richness. The data for the Swan Coastal Plain regional survey (Gibson *et al.* 1994) was downloaded from the NatureMap website. This is largely similar to the original survey except for one site (OATES-1), which has now been excluded. The species nomenclature of the original dataset was updated to be consistent with current usage. Where original names could not be matched clearly to the updated usage, those taxa were removed from the analysis. As with the

original classification, singletons (taxa only recorded at one plot) were also removed from the dataset. The new data from the Forrestfield survey was added to the matrix one plot at a time to remove any effect of spatial correlation between the new plots. Each new dataset was then analysed calculating the Bray-Curtis distance coefficient (or resemblance measure) and the flexible beta linkage method ($\beta = -0.1$). Assignment of the Forrestfield plots was to the nearest distinct group by inspection of the resulting dendrogram.

1.2 Nearest Neighbour

Another approach for assigning FCTs is to calculate a similarity or dissimilarity matrix for the combined new dataset and simply allocate each new plot to the FCT of the plot from the original dataset that shares the greatest similarity. There are a number of drawbacks with this method:

- the nearest neighbour may not be a 'near' neighbour;
- results may vary depending on the resemblance measure used; and
- the nearest neighbour may be a transitional site between groups and the similarity to a group as a whole may be limited.

The nearest neighbour to each of the Forrestfield plots was determined by calculating two different resemblance measures for comparison: the Bray-Curtis dissimilarity (a semi-metric distance measure) and the Hellinger distance (a metric distance measure).

1.3 Non-hierarchical clustering

Non-hierarchical clustering methods often allow new plot data to be added to previous classifications because they are based on the concept that each group or cluster is represented by a prototype i.e. either a centroid or a medoid (a 'type' plot) (De Cáceres and Wiser 2012). Therefore, new observations can be assigned to an existing classification by calculating the distance to the nearest prototype (which may be considered a membership criterion). This approach is to be preferred to the hierarchical reconstruction approach because it defines numerical rules that can be consistently applied. However, it also means the original classification needs to be reanalysed using a different method, which can be problematic because not all sites from the original classification may be diagnostic for their respective clusters.

For the analysis of the Forrestfield data, the same updated Swan Coastal Plain dataset was used as for the hierarchical clustering analysis. After calculating a Bray-Curtis distance matrix, the dataset was then analysed using Fuzzy C-Means clustering in the R package 'Vegclust'. A fuzziness coefficient of 1.1 was chosen to minimise influence from noisy data points. FCTs with too few plots to reliably define determine a prototype (e.g. FCT 14 with two plots) were removed from the analysis. Similarly, some plots that were regularly being misclassified (such as those from clusters with large internal heterogeneity) were also removed. The final dataset consisted of 344 plots with 1316 taxa representing 38 FCTs. Each site of the Forrestfield data was then assigned a FCT using function 'vegclass' in the Vegclust package.

It should be noted that this approach for FCT assignment is preliminary and will need to be refined further before it can be used consistently.

2 Results

The low native species richness for many of the Forrestfield plots meant that a FCT could not be determined with any confidence (Table 1; Figures 1-17). For example, Sites 2, 3, 7, 11, 12, 13

and 14 all recorded fewer than 10 native species. In the hierarchical clustering analysis, these sites fused very high in the dendrogram and an association with a particular group could not be reliably determined. The remaining sites also fused high in their respective dendrograms, but most results indicated that a FCT of either 3b or 3c would be an appropriate assignment.

The results of the nearest neighbour analysis was mostly consistent between the two distance measures, often only differing in the order of the nearest sites. Sites 16 and 17 showed the greatest difference between the distance measures. For example, the Hellinger distance shows that two sites from FCT 1b as being near neighbours to Site 17, whereas this result is not indicated at all for the Bray-Curtis measure.

The assignment of FCTs by non-hierarchical clustering did not produce a reasonable result. This approach can be sensitive to low species richness in the dataset being analysed. Where the surveyed vegetation has been disturbed or there is a significant presence of non-native weed species, the native species richness is often reduced. The assignment of community types by non-hierarchical means may then be compromised as absent species are treated as a difference to the defined groups and a greater similarity is found with groups of lower species richness than would otherwise be the case.

Table 1: Results of hierarchical analysis for plots from the Forrestfield survey.

Site	FCT First fusion	FCT of nearest main group fusion	Likely FCT
Site 1	3b	3b	3b
Site 2	-	Cluster with FCT 1 and 3	Undetermined
Site 3	-	Cluster with FCT 1 and 3	Undetermined
Site 4	28	20a/20c	20a
Site 5	3b	20b/3b	3b
Site 6	11/ 17	11/ 17	Undetermined
Site 7	25	11	Undetermined
Site 8	3c	3	3c
Site 9	3c	3c	3c
Site 10	3c	3	3c
Site 11	18	11	Undetermined
Site 12	18	11	Undetermined
Site 13	13	17	Undetermined
Site 14	25	11	Undetermined
Site 15	3c	3	3c
Site 16	18	11	Undetermined
Site 17	3c	3	3c

Table 2: Results of Nearest Neighbour analysis using the Bray-Curtis dissimilarity coefficient

Site	Nearest Neighbour (FCT)	2 nd Nearest Neighbour (FCT)	3 rd Nearest Neighbour (FCT)
Site 1	BURNRD02 (3b)	yarl03 (3b)	KOOLJ-5 (3b)
Site 2	yarl01 (3c)	WATER-3 (3c)	BULL-9 (28)
Site 3	yarl01 (3c)	WATER-3 (3c)	BULL-9 (28)
Site 4	card5 (20b)	talb9 (20c)	BULL-4 (28)
Site 5	BURNRD02 (3b)	KOOLJ-5 (3b)	yarl04 (20b)
Site 6	PAGA-5 (17)	WOODV-2 (28)	low04 (21a)
Site 7	hymus01 (11)	MILT-2 (13)	ELLIS-1 (17)
Site 8	KERO-1 (24)	WATER-3 (3c)	DUCK-1 (3c)
Site 9	WATER-3 (3c)	BURNRD02 (3b)	AMBR-1 (1b)
Site 10	BURNRD02 (3b)	yarl03 (3b)	DEPOT-1 (28)
Site 11	BULL-1 (28)	WATER-3 (3c)	card8 (20b)
Site 12	BULL-1 (28)	card8 (20b)	WATER-3 (3c)
Site 13	MILT-2 (13)	PAGA-5 (17)	hymus01 (11)
Site 14	hymus01 (11)	yarl01 (3c)	ELLEN-7 (6)
Site 15	KERO-1 (24)	WATER-3 (3c)	DUCK-1 (3c)
Site 16	cool 09 (19b)	BULL-1 (28)	YALG-4 (27)
Site 17	yarl01 (3c)	brick6 (3a)	WATER-3 (3c)

Table 3: Results of Nearest Neighbour analysis using the Hellinger dissimilarity coefficient

Site	Nearest Neighbour (FCT)	2 nd Nearest Neighbour (FCT)	3 rd Nearest Neighbour (FCT)
Site 1	BURNRD02 (3b)	yarl03 (3b)	AMBR-1 (1b)
Site 2	yarl01 (3c)	BULL-9 (28)	WATER-3 (3c)
Site 3	yarl01 (3c)	BULL-9 (28)	WATER-3 (3c)
Site 4	card5 (20b)	talb9 (20c)	BULL-4 (28)
Site 5	yarl04 (20b)	BURNRD02 (3b)	KOOLJ-5 (3b)
Site 6	WOODV-2 (28)	low04 (21a)	card9 (20b)
Site 7	hymus01 (11)	MILT-2 (13)	ELLIS-1 (17)
Site 8	KERO-1 (24)	WATER-3 (3c)	AMBR-1 (1b)
Site 9	WATER-3 (3c)	BULL-4 (28)	AMBR-1 (1b)
Site 10	BURNRD02 (3b)	yarl03 (3b)	wicher01_1a
Site 11	BULL-1 (28)	BULL-4 (28)	card5 (20b)
Site 12	BULL-1 (28)	BULL-4 (28)	card5 (20b)
Site 13	hymus01 (11)	MILT-2 (13)	PAGA-5 (17)
Site 14	hymus01 (11)	yarl01 (3c)	ELLEN-7 (6)
Site 15	KERO-1 (24)	WATER-3 (3c)	AMBR-1 (1b)
Site 16	BULL-1 (28)	YALG-2 (26b)	BULL-4 (28)
Site 17	brick6 (3a)	AMBR-1 (1b)	YOON-1 (1b)

3 Discussion

The results the Forrestfield analyses are somewhat equivocal due to the high proportion of weed species in the data. Non-hierarchical assignment of plots to an existing classification is usually the most robust and consistent approach. However, due to the low native species richness, the results of this approach for the Forrestfield site were unreliable.

The assignment of FCTs for many of the plots using hierarchical analysis were also unclear, many sites being undetermined. However, where a plausible assignment was obtained, it was indicated that most of the vegetation within the Forrestfield site is possibly either FCT 3b '*Corymbia calophylla* – *Eucalyptus marginata* woodlands on sandy clay soils of the southern Swan Coastal Plain' or 3c '*Corymbia calophylla* – *Xanthorrhoea preissii* woodlands and shrublands, Swan Coastal Plain'. Both units can be expected to be present as Site 5 contained *Bossiaea eriocarpa*, which is absent from FCT 3c but differentiates FCT 3b from the other subgroups of FCT 3. A different result was indicated for Site 4. The first fusion is with sites from FCT 28, but this FCT occurs mainly on the Spearwood dunes and is unlikely to be correct. A more probable assignment would be to FCT 20a '*Banksia attenuata* woodlands over species rich dense shrublands', but this does not appear to be a close relationship. All three units are known to occur on the eastern side of the Swan Coastal Plain.

All FCTs 3b, 3c and 20a are listed as Threatened Ecological Communities (TECs) under criteria set by the Department of Parks and Wildlife and endorsed by the Minister for Environment. FCT 3b is categorised as Vulnerable, FCT 20a as Endangered and FCT 3c as Critically Endangered. This suggests that most, if not all, the remnant native vegetation within the Forrestfield site may be considered as being a TEC, although the data indicates that the condition of the site is poor.

The results of the Nearest Neighbour analysis were similar for both distance measures and generally supported the results of the hierarchical clustering, as many neighbouring sites are from either FCT 3b or 3c.

4 Summary

The results of the FCT analysis are equivocal and no definite conclusion could be reached from the data due to the low native species richness within the site. Where plausible results could be obtained from the hierarchical analysis, it was indicated that the communities present at the Forrestfield site are possibly be either FCT 3b or FCT 3c.

If you have any queries please do not hesitate to contact me.

Sincerely yours,



Dr Shane Chalwell
Plantecology Consulting.

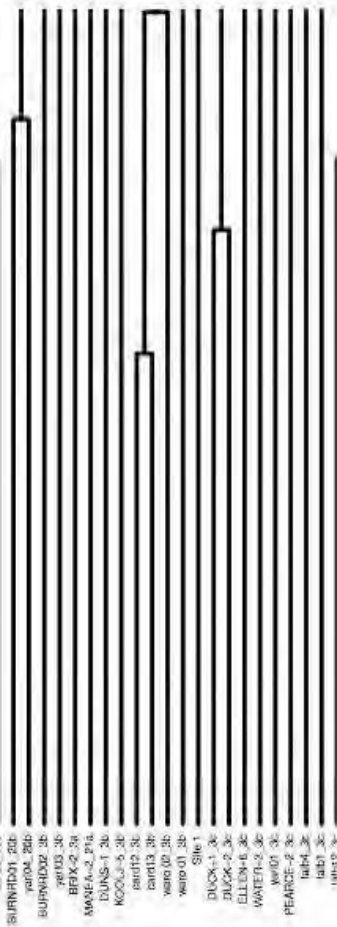


Figure 1: Hierarchical clustering dendrogram showing position of Site 1 (only relevant section shown). FCT membership for original SCP sites appended to the plot name.

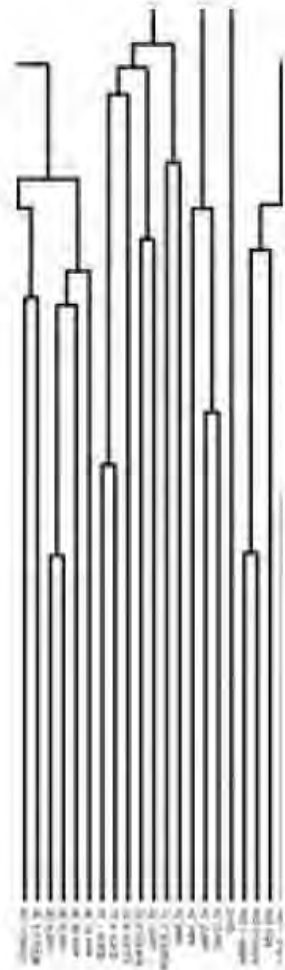


Figure 2: Hierarchical clustering dendrogram showing position of Site 2 (only relevant section shown). FCT membership for original SCP sites appended to the plot name.

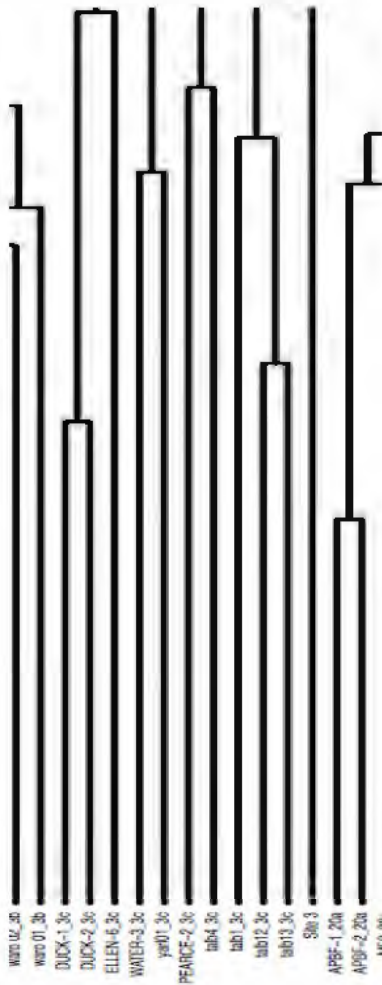


Figure 3: Hierarchical clustering dendrogram showing position of Site 3 (only relevant section shown). FCT membership for original SCP sites appended to the plot name.

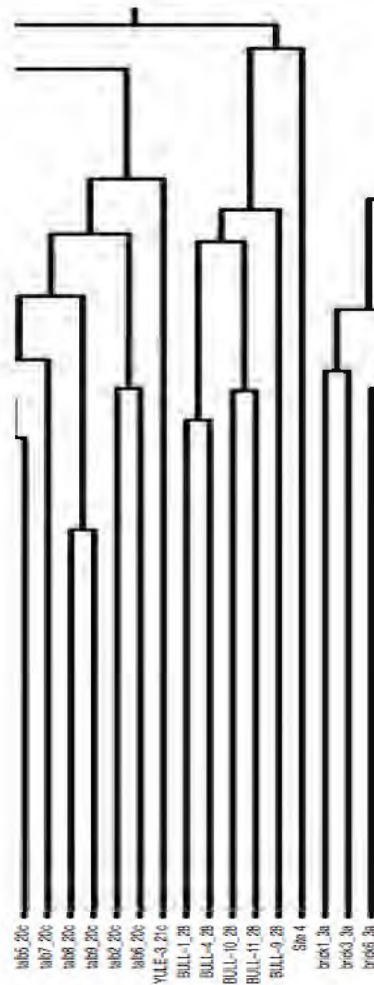


Figure 4: Hierarchical clustering dendrogram showing position of Site 4 (only relevant section shown). FCT membership for original SCP sites appended to the plot name.

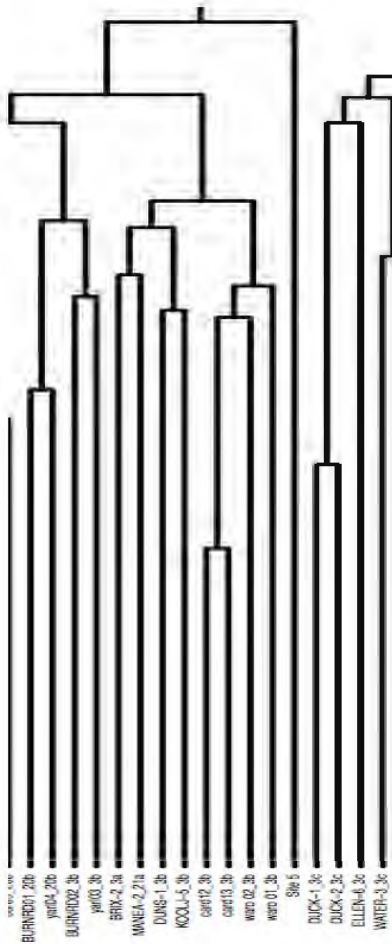


Figure 5: Hierarchical clustering dendrogram showing position of Site 5 (only relevant section shown). FCT membership for original SCP sites appended to the plot name.

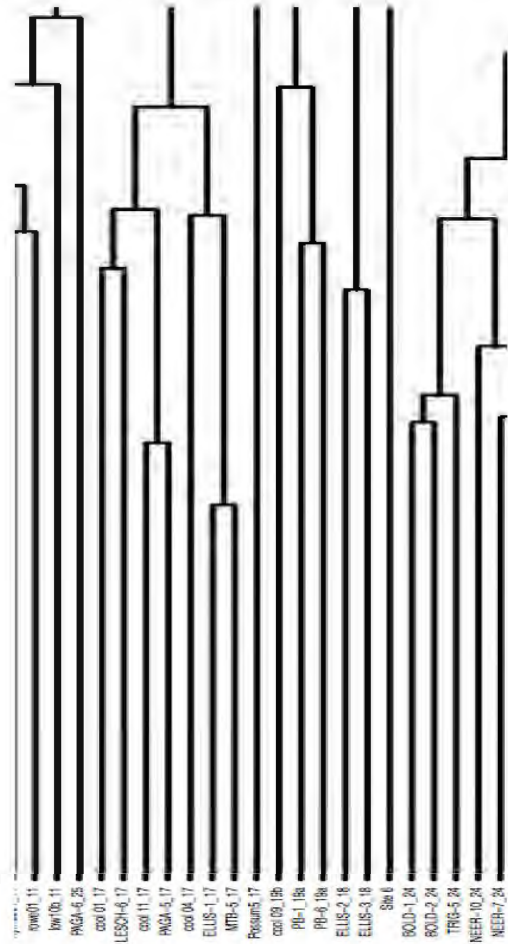


Figure 6: Hierarchical clustering dendrogram showing position of Site 6 (only relevant section shown). FCT membership for original SCP sites appended to the plot name.

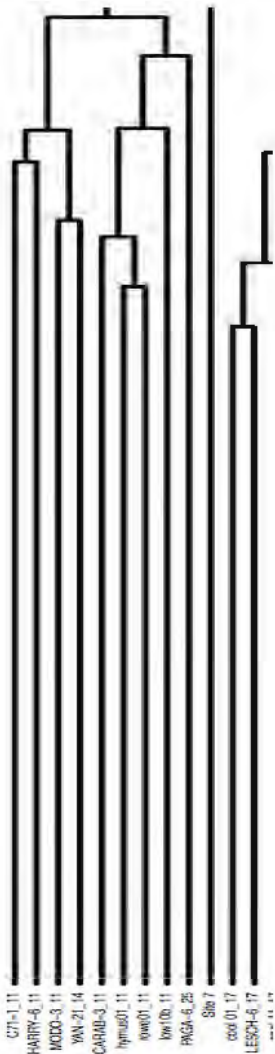


Figure 7: Hierarchical clustering dendrogram showing position of Site 7 (only relevant section shown). FCT membership for original SCP sites appended to the plot name.

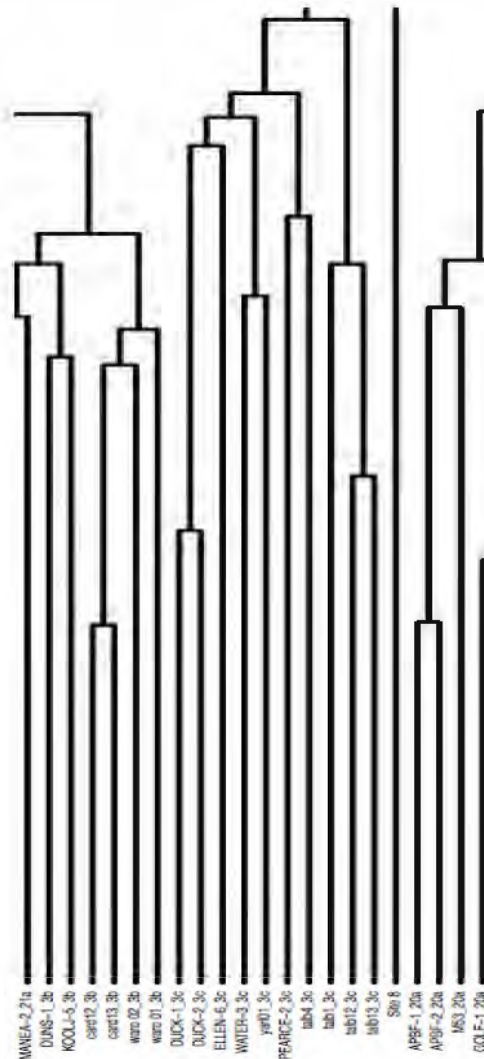


Figure 8: Hierarchical clustering dendrogram showing position of Site 8 (only relevant section shown). FCT membership for original SCP sites appended to the plot name.

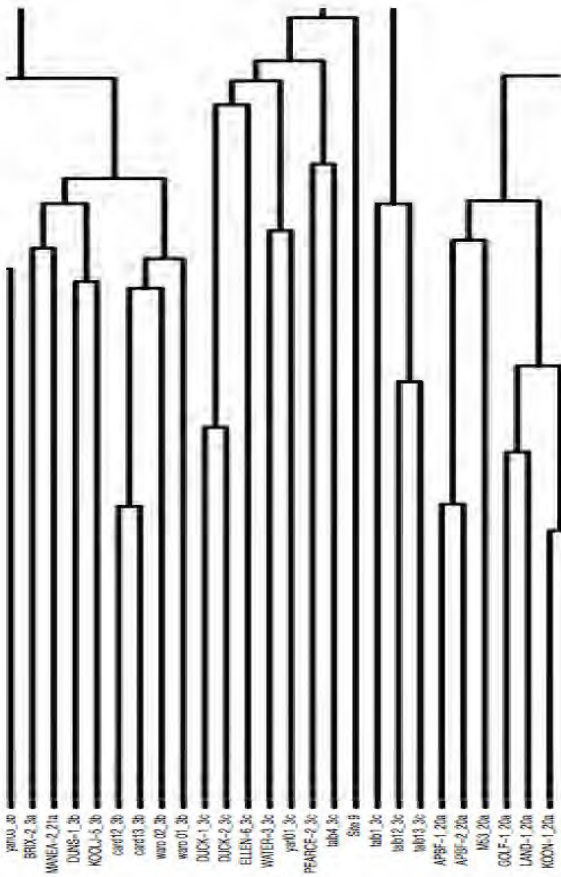


Figure 9: Hierarchical clustering dendrogram showing position of Site 9 (only relevant section shown). FCT membership for original SCP sites appended to the plot name.

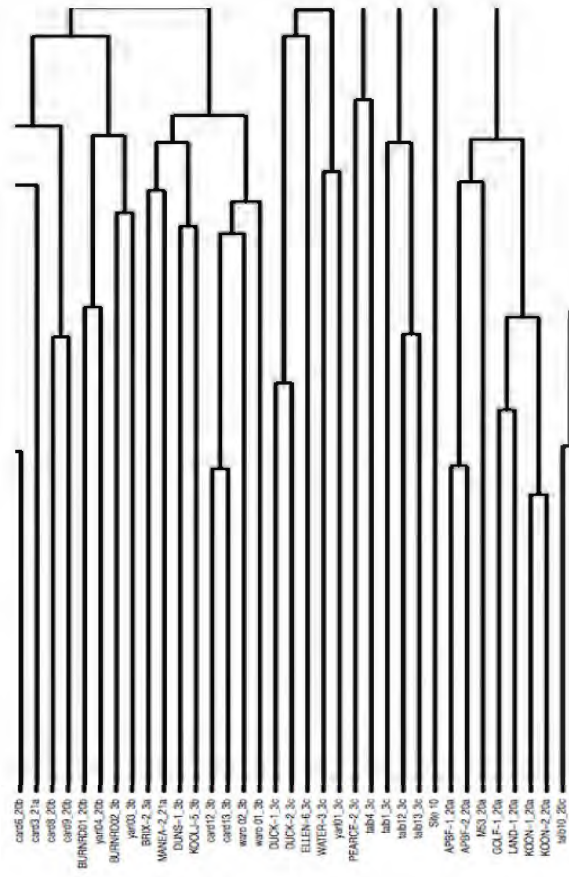


Figure 10: Hierarchical clustering dendrogram showing position of Site 10 (only relevant section shown). FCT membership for original SCP sites appended to the plot name.

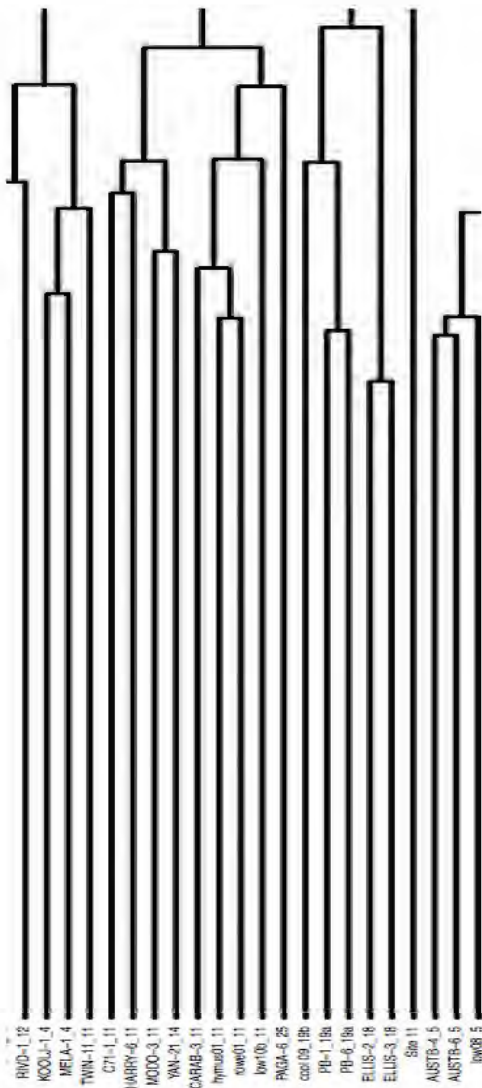


Figure 11: Hierarchical clustering dendrogram showing position of Site 11 (only relevant section shown). FCT membership for original SCP sites appended to the plot name.

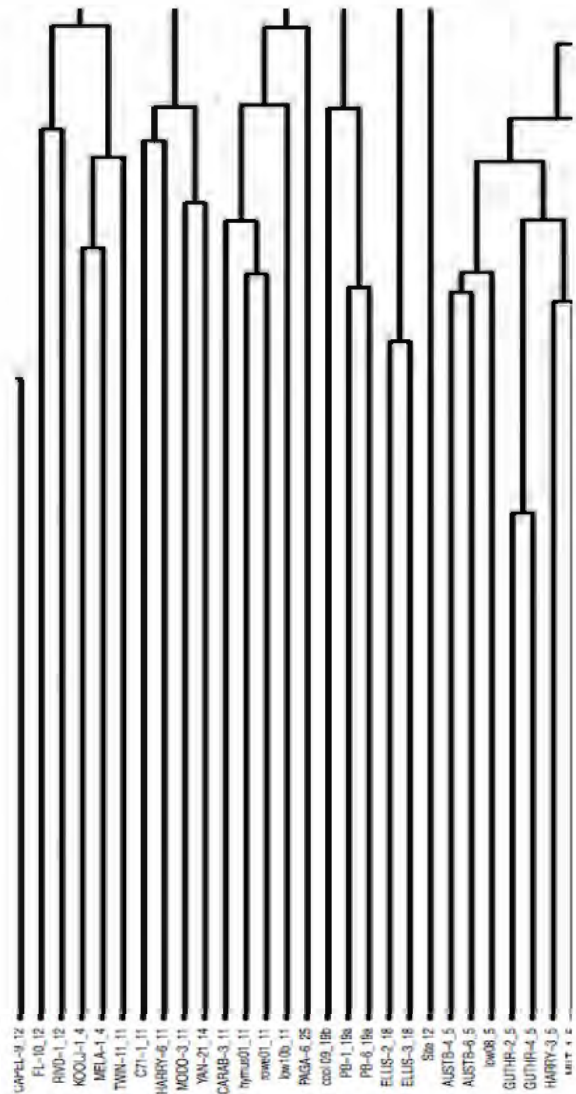


Figure 12: Hierarchical clustering dendrogram showing position of Site 12 (only relevant section shown). FCT membership for original SCP sites appended to the plot name.

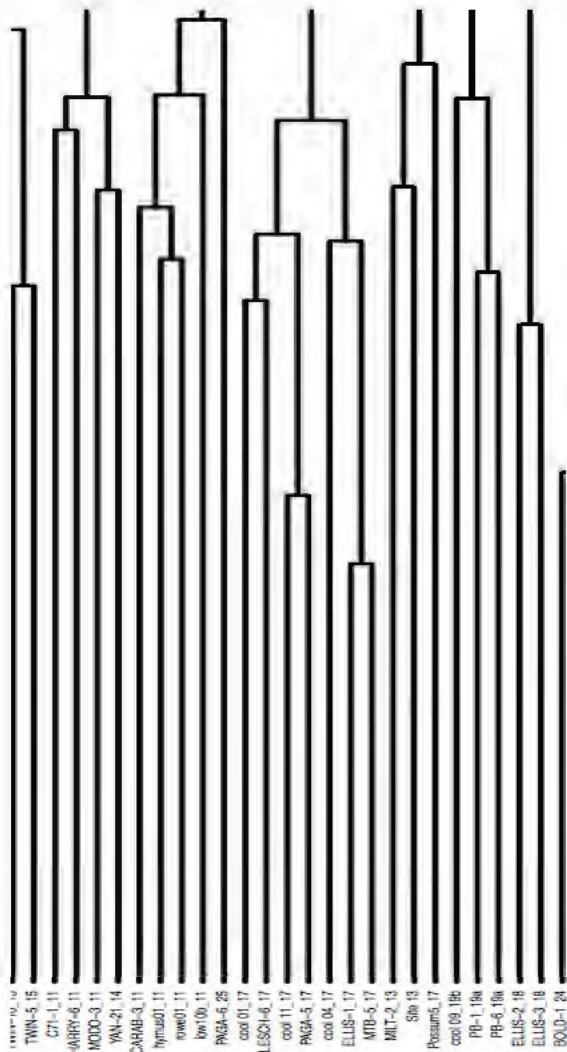


Figure 13: Hierarchical clustering dendrogram showing position of Site 13 (only relevant section shown). FCT membership for original SCP sites appended to the plot name.

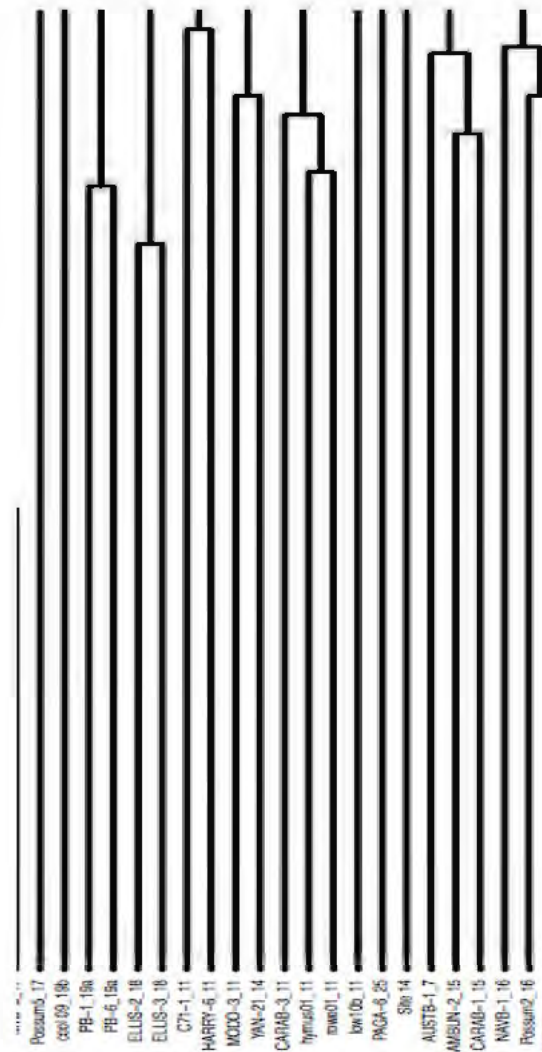


Figure 14: Hierarchical clustering dendrogram showing position of Site 14 (only relevant section shown). FCT membership for original SCP sites appended to the plot name.

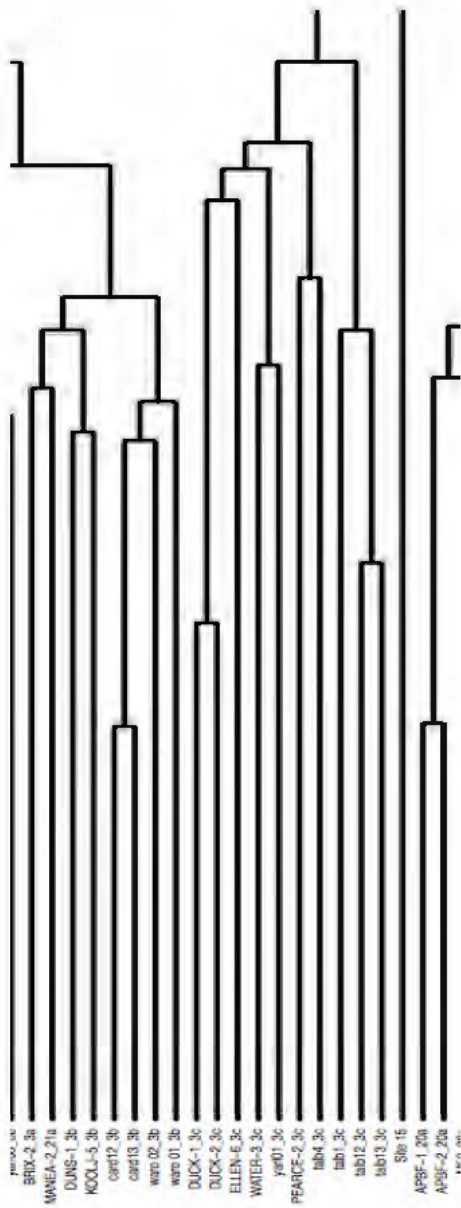


Figure 15: Hierarchical clustering dendrogram showing position of Site 7 (only relevant section shown). FCT membership for original SCP sites appended to the plot name.

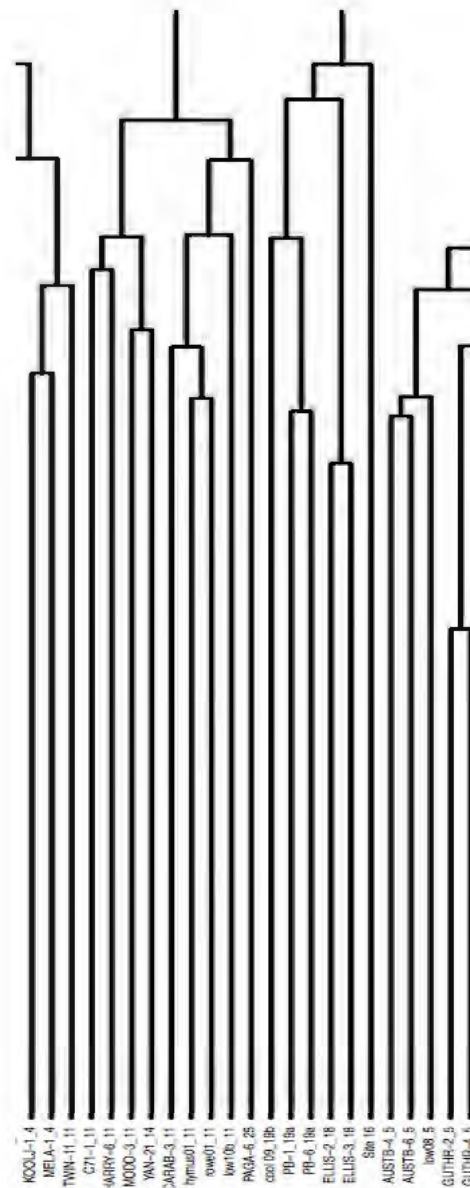


Figure 16: Hierarchical clustering dendrogram showing position of Site 16 (only relevant section shown). FCT membership for original SCP sites appended to the plot name.

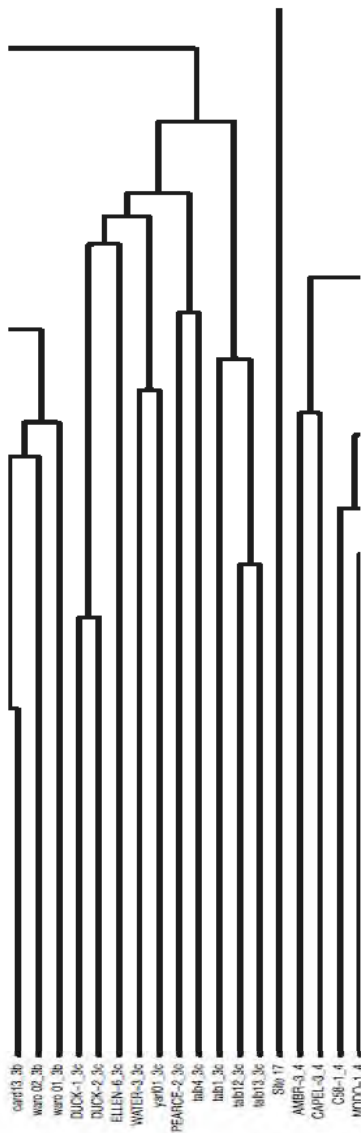


Figure 17: Hierarchical clustering dendrogram showing position of Site 17 (only relevant section shown). FCT membership for original SCP sites appended to the plot name.



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5 References

De Cáceres, M and Wisser, S.K. (2012) Towards consistency in vegetation classification, *Journal of Vegetation Science*, 23: 387-393

Gibson, N, Keighery, BJ, Keighery, GJ, Burbidge, AH and Lyons, MN (1994), *A floristic survey of the southern Swan Coastal Plain*, Unpublished Report for the Australian Heritage Commission prepared by the Department of Conservation and Land Management and the Conservation Council of Western Australia (Inc), Perth.

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Western Australia.*



Department of Biodiversity,
Conservation and Attractions



Your ref: 833-2-24-66 Pt 1 (RLS/0926)
Our ref: PRS43574
Enquiries: Jacqui Clinton
Phone: 9442 0312
Email: jacqui.clinton@dbca.wa.gov.au

The Secretary
Western Australian Planning Commission
Locked Bag 2506
PERTH WA 6001

Att: Anthony Muscara

Proposed Metropolitan Region Scheme Amendment – 1377/57 – Forrestfield North – Environmental Conservation Areas

I refer to your correspondence of 23 September 2020, requesting comments on the proposed Metropolitan Region Scheme (MRS) amendment to rezone 10.2 hectares of land in North Forrestfield from the Urban and Rural zone to Parks and Recreation reservation. The Parks and Wildlife Service at the Department of Biodiversity, Conservation and Attractions reviewed the referred information and provides the following advice.

DBCA notes that the areas proposed to be rezoned from Urban and Rural to the Parks and Recreation (P & R) reservation appear consistent with the 'Environmental Conservation' (EC) areas shown in the approved Forrestfield North Residential Precinct Local Structure Plan (June 2020) (LSP). During preparation of the LSP, the location of the EC areas and adjacent areas of supporting local open space (LOS) were determined by the City of Kalamunda in consultation with DBCA, the Department of Planning Lands and Heritage and the Department of Water and Environmental Regulation. The resulting strategic 'ecological corridor' was designed to retain and protect the highest conservation value bushland remnants in a consolidated conservation area.

The proposed amendment is also consistent with the management approach outlined within Table ES1 (page iv) of the Forrestfield North Strategic Conservation Management Plan (July, 2020) (SCMP). The SCMP provides guidance and outlines the protection mechanisms to be implemented to manage the future development of the North Forrestfield area, while protecting and managing the areas of highest environmental value.

Following the reservation of areas of P & R and allocation of LOS, detailed environmental management plans should be prepared and implemented to ensure the management and enhancement of the biodiversity values within regional and local open space. In addition, tenure protection of these areas should be achieved through Crown reservation, vested with the City of Kalamunda, for the primary purpose of conservation.

Thank you for the opportunity to comment on this proposed MRS amendment. Please contact Jacqui Clinton at Parks and Wildlife's Swan Region office on 9442 0312 or by email at jacqui.clinton@dbca.wa.gov.au if you have any queries regarding this advice.

Yours faithfully,

A handwritten signature in grey ink, appearing to read 'Benson Todd', is positioned above the typed name.

Benson Todd
REGIONAL MANAGER

10 December 2020