Administrative Agreement
between the
Department of Mines and Petroleum
and
Department of Water

For mineral exploration and mining operations
in water resource areas of Western Australia

JANUARY 2016
Administrative agreement between the Department of Mines and Petroleum and Department of Water in relation to;

Mineral exploration and mining operations in water resource areas of Western Australia

This document establishes an Administrative Agreement between the Department of Mines and Petroleum (DMP) and the Department of Water (DoW) to streamline interaction between the two departments in regard to the respective responsibilities for mineral exploration, mining operations and the management of water resources, within areas of water conservation, protection and management significance in Western Australia.

This Administrative Agreement provides DMP and DoW with a framework of administrative arrangements, protocols, and standard endorsements and conditions for dealing with the assessment and regulation of mining activities under the Mining Act 1978, to ensure that mining is carried out in a responsible manner to protect the state's valuable water resources.

The signatories below endorse this Administrative Agreement.

Richard Sellers
Director General
Department of Mines and Petroleum

Mike Rowe
A/ Director General
Department of Water

Dated this............ day of ............................................. 2016
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1. Introduction

This administrative agreement (the Agreement) sets out how the Department of Water (DoW) and Department of Mines and Petroleum (DMP) will interact with each other where mining tenements and associated Programmes of Work (PoW), Mining Proposals (MP) and Mine Closure Plans (MCP) affect water resources in Western Australia.

This Agreement is a revision and replacement of the previous administrative agreement (endorsed March 2012). The criteria for referral between the two agencies has been refined in this 2016 agreement, helping to align with the State Government’s focus on reducing regulatory burden by improving assessment and approvals processes. The Agreement will deliver improved management, timeliness and consistency in dealing with exploration and mining activities in Water Resource Management (WRM) areas.¹

The Agreement recognises that both DoW and DMP have certain legislative and procedural responsibilities in regard to the management of water resources and mining tenements/mining operations respectively. The prime purpose of the Agreement is to ensure that when the two agencies interact with each other, these legislative and procedural responsibilities are carried out in the most efficient, fair, transparent and consistent manner.

2. Scope of this Agreement, and DMP & DoW roles and responsibilities

This Agreement applies to all mining tenements (and associated PoW, MP and MCP) that are subject of the Mining Act 1978, and mining tenements under a State Agreement Act provided the subject mining tenements were granted pursuant to the Mining Act 1978.

This Agreement provides an administrative framework which:

- Defines the roles and responsibilities of DoW and DMP in their interaction with each other
- Recognises that there are both statutory and non-statutory processes requiring interactions between DoW and DMP, and that administrative arrangements are therefore required to ensure effective management of mining related activities over WRM areas
- Recognises the respective responsibilities of management and regulation of water resource and mining activities by each department, through agreed administrative arrangements, protocols, and standard endorsements and conditions.

DoW and DMP are committed to abiding by the arrangements, protocols and standard endorsements/conditions as set out in Table 1 and Section 12, to ensure that exploration activities, mining operations and mine closure are carried out on WRM areas in a responsible manner to protect the State’s valuable water resources.


DoW is responsible for managing the State’s water resources under a range of legislation (see Appendix 2). DoW’s mandate for water resources includes watercourses, reservoirs, floodplains, estuaries and inlets, together with their beds and banks; aquifers and groundwater; and drainage and surface water. These responsibilities concentrate on the assessment, conservation, protection and management of those water resources and their environment, and include allocation of water resources and regulation for the protection and taking of water. DoW also provides advice to other State Government agencies including DMP on water resource management issues.

¹ Water Resource Management (WRM) areas are those areas that are the subject of this Agreement, as listed in Table 1 and defined spatially in Appendix 3.
DMP is responsible for the statewide management and regulation of all mineral titles under the *Mining Act 1978*, including the granting of mining tenements, and the approval of exploration activities (through PoW), mining operations (through MP) and mine closure (through MCP). DMP is committed to working with the DoW to ensure that these activities are carried out in a responsible manner to protect water resources.

_DoW and DMP do not abrogate their legislative responsibilities under this administrative agreement._

### 3. Consultation under reserved land provisions of *Mining Act 1978*

Any mining tenement which encroaches onto water resource management areas reserved under Part 4 of the *Land Administration Act 1997* and vested with DoW, or reserved under water legislation as specified in Part III, Division 2 of the *Mining Act 1978*, will attract the provisions of Part III, Division 2 of the *Mining Act 1978*.

This Division allows for mining tenement applications to be applied for over reserved land, but no mining operations can be carried out on or under such land unless the Minister responsible for the *Mining Act 1978* (Minister for Mines and Petroleum) has given prior consent. Before giving consent the Minister for Mines and Petroleum must consult with the responsible Minister and other persons vested with the control and management of such land (in this case the Minister for Water/Department of Water) and obtain their recommendation.

It is acknowledged that not all mining tenements that encroach on water reserves require referral to the Minister for Water prior to consent for exploration activities or mining operations being provided by the Minister for Mines and Petroleum.

As agreed and approved by the Directors General, consultation for mining referrals including tenement applications applied for over reserved land should occur in accordance with the Agreement. The administrative arrangements and protocols contained in the Agreement ensure that consultation between the two agencies will occur where water resources may be impacted, and at the appropriate time when all relevant information for assessment is available in respect to the exploration or mining activities proposed by the proponent.

It is important to note that although mining consent may be provided no ground disturbance using mechanical equipment is allowed to proceed until a PoW or MP has been approved by DMP.

In accordance with the protocols set out in Table 1 of this Agreement, DoW will have the opportunity to comment on PoW, MP and MCP which:

- relate to those WRM areas specified in Table 1 where DMP “must seek DoW advice”, or
- relate to other WRM areas where DMP consider, based on a risk assessment as specified in section 7, that the water resource is likely to be negatively impacted.

### 4. Procedural arrangements and protocols

This section explains the documentation related to mining activity, and sets out the administrative arrangements and protocols which are to be applied on the grant of a mining tenement, and on the assessment and approval of a PoW, MP or MCP over a WRM area. This section is to be read in association with Table 1, and sections 7 and 12.
Mining related documentation

The stages of mining activity, and the related documentation and processes referred to in this Agreement, are summarised below:

- Where a proponent applies for a prospecting, exploration, retention or miscellaneous licence or a mining or general purpose lease, DMP’s Mineral Titles Division (MTD) will progress the mining tenement (mining tenure) application to grant. DMP MTD will, at or after the time of grant, apply endorsements and impose conditions to draw the tenement holder’s attention to the requirements and obligations of DoW legislation and the *Mining Act 1978*.

- Where a tenement holder seeks an amendment or variation to existing tenement endorsements/conditions, the Minister for Mines and Petroleum has powers under the *Mining Act 1978* to add, vary or delete endorsements/conditions.

- Where a tenement holder/operator wishes to undertake mineral exploration activities using mechanised equipment that involves surface disturbance, they must lodge a PoW and obtain the prior written approval of DMP’s Environment Division (ED).

- Where a tenement holder/operator wishes to undertake mining operations they must lodge a MP and obtain the prior written approval of DMP’s ED.

- Where a tenement holder/operator wishes to modify an approved MP they must lodge an amendment to the MP and obtain the prior written approval of DMP’s ED.

- Where a tenement holder/operator wishes to commence a new mining project, or undertake a significant expansion or alteration of an existing mining project, they must also submit a Mine Closure Plan (MCP) at the same time as they lodge the associated MP, and obtain the prior written approval of DMP’s ED. Regular revisions of the MCP must also be submitted at time periods dictated by tenement conditions (generally every three years). DMP has produced a guideline, in conjunction with the Environmental Protection Authority on MCP requirements entitled ‘Guidelines for Preparing Mine Closure Plans’.

Key protocols of this Agreement

When imposing endorsements/conditions upon tenements, and/or assessing a PoW, MP, amendment to MP, or MCP, the DMP Mineral Titles Division and Environment Division is obligated to take action in accordance with the arrangements and protocols set out in Table 1, explained in detail as follows. DMP will:

a. Impose agreed standard endorsements/conditions upon the grant of tenements over WRM areas as listed in the Schedules in Section 12.

Note: The new standard condition in Schedule 2.3 will establish a conditional consent to mine being granted in respect to:

- a Catchment Area that contains a Reservoir Protection Zone (RPZ), or
- an Underground Water Pollution Control Area or Water Reserve that contains a Wellhead Protection Zone (WPZ), which prevents mining on the RPZ or WPZ, without first obtaining the prior written consent of the Minister for Mines and Petroleum. Such consent will not be given until DMP (as delegate for the Minister) has consulted directly with the DoW/Minister for Water in respect to the tenement holder’s proposed activities on a RPZ or WPZ (see sections 12&13 for further information about this condition).
b. Consult with DoW before any decision is made to vary endorsements on a tenement.

c. Notify DoW (for information only) when:
   - tenements have been granted, and/or
   - PoW applications have been approved (unless DMP has already sought DoW advice regarding the PoW),
within any ‘Other Reserves’ administered by DoW through vesting or management order.

d. For Reserve 31165:
   - Notify DoW and the Chair of the Joint Management Committee (c/o Miriuwung Gajerrong Corporation) (JMC) when
tenements have been granted.
   - Seek advice from DoW and the Chair of the JMC in all cases where a PoW, MP, MCP and/or amendment is
proposed.
   - Notify DoW and the Chair of the JMC when PoW, MP, MCP and/or amendment applications have been approved.

e. Seek advice from DoW:
   i. In all cases where a PoW is proposed within a ‘Primary’ WRM Area (Public Drinking Water Source Area (PDWSA),
      Clearing Control Catchment (CCC), High Value Waterway area or Waterway Management Area).
   ii. Where a PoW is likely to have a negative impact (refer to Section 7 and Appendix 1) on a ‘Secondary’ WRM area,
or ‘Other Reserve’ administered by DoW.
   iii. In all cases where an MP and/or MCP is proposed within a ‘Primary’ WRM area or ‘Other Reserve’ administered
by DoW.
   iv. Where an MP and/or MCP is likely to have a negative impact on a ‘Secondary’ WRM area.
   v. In all cases where an amendment to a MP or a revision of a MCP is proposed within a PDWSA, CCC or ‘Other
Reserve’ administered by DoW.
   vi. Where an amendment to a MP or a revision of a MCP is likely to have a negative impact on a Waterway
Management Area, High Value Waterway area or ‘Secondary’ WRM area.

For ii, iv and vi above, the DMP ED needs to determine whether a proposed activity is likely to have a negative impact on a
WRM area, and thereby make a decision on whether to seek DoW advice. Section 7 provides guidance for DMP ED in these
circumstances. A list of common exploration and mining activities which may have a negative impact is also provided in
Appendix 1. Where the DMP ED is still uncertain whether an activity is likely to have a negative impact on a WRM area, DMP
ED will liaise with DoW.

Where DMP identifies that an application (PoW, MP, MCP) is unacceptable and intends to reject the proposal, requirements
to refer the application to DoW as laid out in this agreement will not apply.
Table 1: Matrix of protocols and schedules of endorsements for mining tenements and activities occurring in Water Resource Management (WRM) areas

<table>
<thead>
<tr>
<th>Department of Mines and Petroleum (DMP) detail of tenement types &amp; activity affected</th>
<th>Department of Water (DoW) – Water Resource Management (WRM) areas</th>
<th>Other Reserves administered by DoW</th>
</tr>
</thead>
</table>
| Public Drinking Water Source Areas (PDWSA):  
– Underground water pollution control areas (MWSSD Act). | Primary WRM areas  
High value waterways Areas: – Within a Wild Rivers Catchment. – In & around Ramsar or DIWA wetlands intersected by waterways.  
Other waterways (excludes “High value waterways and ‘Waterway Management Areas’”)  
Artesian (confined) aquifers & Wells (Rights in Water and Irrigation Act 1914 (RIWI Act) and RIWI Regulations 2000 (RIWI Regs))  
Proclaimed Surface Water Areas, Irrigation Districts & Rivers (RIWI Act & Regs) | Reserves in DoW estate administered by DoW through vesting or management order. (Land Administration Act 1997)  
Reserve 31165 Joint vestees: DoW & Miriuwung Gajerrong Corporation |
| Reservoir protection zones & Wellhead protection zones P1, P2 & P3 PDWSA + Future PDWSA reserves (priority not yet assigned) | Secondary WRM areas | Proclaimed Groundwater Areas (RIWI Act & Regs)  
Reserves in DoW estate administered by DoW through vesting or management order. (Land Administration Act 1997)  
Reserve 31165 Joint vestees: DoW & Miriuwung Gajerrong Corporation |

DMP Mineral Titles Division will apply standard endorsements/conditions to granted tenements in accordance with the schedules listed in Section 12 and the protocols shown below:

| Granting of licences  
– Prospecting licences (P)  
– Exploration licences (E)  
– Retention licences (R)  
– Miscellaneous licences (L) | Granting of leases  
– Mining leases (M)  
– General purpose leases (G) | Approval of Programme of Work (PoW) (a PoW can apply to all tenement types P,E,R,L, M & G)  
Approval of Mining Proposals (MP) and Mine Closure Plans (MCP) (MP and MCP only applies to M, G & L)  
Amendments to MP and MCP revisions |
|---|---|---|
| Schedules 1 & 2.1 & 2.3 | Schedules 1 & 2.2 & 2.3 | ED must seek DoW advice  
Where the activity is likely to have negative impact on WRM area, ED seeks advice from DoW (see Section 7) |
| ED must seek DoW advice | ED must seek DoW advice  
Where the activity is likely to have negative impact on WRM area, ED seeks advice from DoW (see Section 7) | ED must seek advice from DoW & Chair of JMC. After approval of PoW, notify DoW & Chair of JMC. |
| ED must seek DoW advice | ED must seek DoW advice  
Where the activity is likely to have negative impact on WRM area, ED seeks advice from DoW (see Section 7) | ED must seek advice from DoW & Chair of JMC. After approval of MP and MCP, notify DoW & Chair of JMC. |
| ED must seek DoW advice | ED must seek DoW advice  
Where the activity is likely to have negative impact on WRM area, ED seeks advice from DoW (see Section 7) | ED must seek advice from DoW & Chair of JMC. After approval of MP or MCP amendment, notify DoW & Chair of JMC. |
5. Procedural arrangements for existing titles and operations

This Agreement applies to all future grants and approvals of mining tenement applications, PoW, MP and MCP that affect a WRM area as detailed in Table 1. Any decision made prior to the signed date of this Agreement remains in effect unless amended by DMP. DMP will, when reviewing existing titles and operations, seek DoW advice or apply tenement endorsements/conditions as listed in this Agreement, where appropriate.

For example, where a tenement holder requests the amendment or variation to tenement endorsements/conditions (imposed as a result of the grant of the mining tenement, or of an existing PoW, MP and MCP, approved prior to this revised Agreement being implemented), DMP will assess and may approve the amendment or variation (e.g. replace the existing endorsements/conditions with the new standard endorsements/conditions listed in this Agreement). Where the ED undertakes an inspection of an existing mining operation and as a result of that inspection, seeks to modify or add new endorsements/conditions that are relevant to a WRM then it will do so in accordance with this Agreement. The ED may also seek advice from the DoW in that process where appropriate.

In summary, endorsements/conditions imposed on mining titles and operations under previous administrative agreements may be amended by the Minister for Mines and Petroleum under powers contained in sections 46A, 63AA, 70I, 84, 90 and 92 of the Mining Act 1978. However, these will only be amended on a case by case basis (after seeking advice from DoW where appropriate).

6. Interagency consultation processes and timeframes

In accordance with this Agreement, DoW will aim to provide timely advice when consulted by DMP on how the tenement holder/operator can ensure that their proposed activities comply with principles for ensuring conservation and protection of WRM areas.

When DMP ED seeks advice from the relevant DoW regional office on a PoW, MP or MCP in accordance with the protocols set out in Table 1, the ED will indicate which WRM areas have triggered the request for advice, and any particular mining related activities which DMP consider may have a negative impact on the WRM area. The ED must provide sufficient information to enable DoW to assess and respond in the timeframes set out below:

- Where DMP requests advice, DoW will aim to provide its advice to DMP within 20 working days from the date of DMP’s request. The commencement date of the request for advice, and the date of the provision of advice, is the date of the electronic communication.

- If no advice is received within 20 working days, DMP will issue only one reminder giving DoW a further five working days (from the date of DMP’s reminder) to provide its advice.

- If after the expiry of this reminder period no advice from DoW has been received, DMP will use its best judgement to decide whether or not to approve the PoW, MP or MCP. DMP shall then notify DoW of the PoW, MP or MCP approval.

- Where DoW considers that insufficient information is available to assess an application and that additional information is required, DoW will notify DMP within 20 working days. DMP will be responsible for requesting this information from the proponent where they consider this is required to undertake the assessment of the application. The clock will be stopped from the date that DoW requests information from DMP until the date that the information is provided to DoW. DoW will then aim to provide its advice to DMP within 10 working days from the date of receipt of the required information, plus any additional time which remains on the clock (i.e. 10 additional days to the original 20 working day timeframe).

Formal requests for and provision of advice, reminders and notifications listed above will be via electronic communication.

DMP and DoW officers should liaise to clarify and resolve any issues relating to the provision and application of DoW advice, or any other matter related to this Agreement. If issues remain unresolved, managers of the relevant areas of DMP and DoW will discuss the matter. Where necessary, unresolved matters will be referred to relevant directors in each department.
On occasion, DoW will have previously provided advice to the OEPA on a proposal being assessed under Part IV of the Environmental Protection Act 1986. When seeking advice from DoW, DMP will indicate whether the proposal has already been the subject of EPA assessment, and will enquire whether DoW wishes to provide additional or amended advice.

Once DMP have completed their assessments, they will provide feedback to DoW on the final outcomes achieved as a result of the advice received from DoW.

7. Determination of effect on water resources

Some of the protocols listed in Section 4 (and shown on Table 1) give DMP ED discretion to decide whether to seek DoW advice, based upon DMP’s determination of the likely impact of a PoW, MP or MCP on WRM areas, if implemented. In these circumstances, to assist in making decisions about the likely negative impact of a PoW, MP or MCP, and therefore whether to seek DoW advice, DMP will apply a risk-based approach, and consider:

- the capacity of the DMP regulatory process to deliver an agreed outcome where there would be no residual effects that would have negative impacts on WRM areas
- the list of common exploration and mining related activities (provided in Appendix 1) which may have a negative impact on a WRM area. Appendix 1 is to be read in conjunction with the ‘significance test’ of factors listed below.

The following are general factors for determining the potential significance/negative impact on water resources of a proposal;

- character of receiving water resource
- magnitude, extent and duration of anticipated impact
- resilience of the water resource and its ability to cope with change
- confidence of prediction of change
- existence of water resource values, policies, guidelines and standards against which a proposal can be assessed.

Further guidance to determine significant or negative impacts on water resources may be obtained from the Western Australian Water in Mining Guideline (www.water.wa.gov.au/PublicationStore/105195.pdf). This sets out a whole of government approach to manage mining activities that have the potential to impact water resources.

Where the DMP ED is still uncertain whether an activity is likely to have a negative impact on a WRM area, DMP ED will liaise with DoW to determine whether a formal request for advice should be sent. Liaison should ideally be initiated by telephone, and any resulting decision to not send a formal request for advice should be confirmed and recorded in writing. During this liaison process the application itself does not need to be provided however DMP ED will, at a minimum, provide the following information to DoW:

- Company name (tenement holder and operator if relevant)
- Tenement numbers
- A brief description of the proposed activities and relevant site history;
- Extent of proposed clearing/disturbance
- Specific detail regarding aspects of the proposed activities which may have an impact on WRM areas.

DMP may also seek to liaise with DoW in regard to proposals which are not considered likely to have a significant negative impact on water resources, but for which there may be a high level of public interest in water resource issues associated with the proposal.
8. Development of minor administrative procedures

There is latitude under this agreement for minor administrative procedures to be developed and implemented between DoW and DMP that will deliver improvements in the operation of this Agreement. For example, the development of templates for seeking or providing advice.

All such procedures shall be in writing and agreed to by both DoW and DMP at appropriate manager level. The procedures should be made readily available to appropriate DoW and DMP officers with regular monitoring undertaken to ensure that the procedures are being adhered to and continue to be relevant.

Before the introduction of any new procedure or change to an existing procedure, DoW and DMP will consult with each other and reach agreement in writing. If the new/amended procedure is to be introduced, the consultation process should include assessing its benefits and efficiencies, and defining the process details and management requirements.

9. Information exchange

DMP and DoW agree to:

- Exchange up-to-date information, including spatial data, to assist with decision-making matters that relate to this agreement. DoW will provide and update DMP with complete spatial data sets in respect to all managed water resource management (WRM) areas that are to be the subject of this Agreement (see Appendix 3).

- Ensure the exchange of information and documentation occurs in a timely manner as detailed in Section 6. Formal requests from DMP for advice from DoW on a PoW, MP or MCP, and provision of advice from DoW to DMP, must be provided electronically, although prior informal discussion should be undertaken where required. Notifications to DoW to advise of granted tenements or approval of PoW, MP and/or MCP applications within Other Reserves administered by DoW, will be provided electronically.

- Develop templates where appropriate to provide clarity and efficiency when requesting and exchanging information in accordance with arrangements and protocols detailed in this Agreement.

- Ensure consultation and collaboration occurs for new and proposed changes to relevant policies, guidelines and standards that relate to this Agreement.

10. Commitment to inform

Both DoW and DMP will, where considered appropriate, report to the other where any of their respective officers, in the course of their duties, becomes aware of any suspected unauthorised activity (not authorised under relevant legislation listed in Appendix 3), being carried out within mining tenements in WRM areas.

Following such a report, both departments shall liaise with each other to determine if further investigation is required and to keep each other informed where further action is taken. Upon completion of this action each department is to report back to the other in writing on the outcome of the action taken.
11. Review of administrative agreement

The principal points of contact between DMP and DoW relating to this Agreement are:

- Executive Director – Environment (DMP)
- Executive Director – Regional Delivery and Regulation (DoW)

DoW and DMP agree that a review of this Agreement should be undertaken on a regular basis, at least once every five years to ensure the currency and relevance. A review of the Agreement may be undertaken at any time where both departments agree that a review is necessary. Minor textual amendments to the Agreement (not involving changes to the protocols in Table 1) may also be implemented, with the signed approval of both Directors General, without seeking a complete review or revision of the Agreement.

12. Schedules of standard endorsements & conditions

When DMP grant a tenement through a prospecting, exploration, retention or miscellaneous licence or a mining or general purpose lease, DMP will apply the standard endorsements/conditions detailed below, in accordance with the protocols set out in Table 1.

Note:
The condition set out in Schedule 2.3 regarding conditional consent in Reservoir Protection Zones and Wellhead Protection Zones notifies that the tenement holder cannot undertake any mining activity in a protection zone unless the consent of the Minister for Mines and Petroleum is obtained, in accordance with Section 23 (2) of the Mining Act 1978. The remainder of the schedules below are standard endorsements (not conditions) applied by DMP to the tenement, to draw the tenement holder’s attention to the requirements and obligations of DoW legislation.

Schedule 1: General endorsements to be applied on the grant of mining tenements which affect any WRM area referred to in Table 1.

1. Compliance with the:
   - Waterways Conservation Act 1976
   - Rights in Water and Irrigation Act 1914
   - Metropolitan Water Supply, Sewerage and Drainage Act 1909
   - Country Areas Water Supply Act 1947
   - Water Agencies (Powers) Act 1984

2. The rights of ingress to and egress from, and to cross over and through, the mining tenement, being at all reasonable times preserved to officers of Department of Water for inspection and investigation purposes.

3. The storage and disposal of petroleum hydrocarbons, chemicals and potentially hazardous substances being in accordance with the current published version of the Department of Water's relevant Water Quality Protection Notes and Guidelines for mining and mineral processing.

4. Measures such as drainage controls and stormwater retention facilities are to be implemented to minimise erosion and sedimentation of adjacent areas, receiving catchments and waterways.

5. All activities to be undertaken so as to avoid or minimise damage, disturbance or contamination of waterways, including their bed and banks, and riparian and other water dependent vegetation.
Schedule 2: Public Drinking Water Source Areas (PDWSA) endorsements & conditions

2.1 Prospecting, exploration, retention and miscellaneous licences/activities.

1. All activity within proclaimed public drinking water source areas shall comply with the current published version of the DoW’s Water Quality Protection Note 25 Land Use Compatibility in Public Drinking Water Source Areas. Key issues that need to be considered within the Water Quality Protection Note are:

   • All prospecting/exploration/activity in respect to licence purpose involving the storage, transport and use of toxic and hazardous substances (including human wastes) within public drinking water source areas being prohibited unless approved in writing by the DoW.

   • Seek written advice from the DoW if handling, storing and/or using hydrocarbons and potentially hazardous substances.

2.2 Mining lease and general purpose lease/activities.

1. All activity within proclaimed public drinking water source areas shall comply with the current published version of the DoW’s Water Quality Protection Note 25 Land Use Compatibility in Public Drinking Water Source Areas. Key issues that need to be considered within the Water Quality Protection Note are:

   • All mining/activity in respect to mining operations involving the handling, storage, transport and use of toxic and hazardous substances (including human wastes) within public drinking water source areas is prohibited unless approved in writing by the DoW.

   • Seek written advice from the DoW if handling, storing and/or using hydrocarbons and potentially hazardous substances.

2. All mining/activity in respect to mining operations to be conducted in accordance with the current published version of the DoW’s Water Quality Protection Guidelines: Mining and Mineral Processing and relevant Water Quality Protection Notes including Land use compatibility in public drinking water source areas. Key issues derived from the various Water Quality Guidelines and Notes include:

   • All mining/activity in respect to mining operations within three metres of the maximum wet season water table are prohibited in public drinking water source areas unless approved in writing by the DoW.

   • Disposal of domestic and industrial waste (other than approved tailings) is incompatible within public drinking water source areas, except for class 1 landfill (inert) materials which may be disposed of within P3 areas at designated sites if approved in writing by the DoW.

   • Mineral processing, tailings storage, wastewater treatment plants and mechanical plant servicing are incompatible with P1 and P2 areas.

   • Advice shall be sought from the DoW if proposing mineral processing, tailings storage, wastewater treatment plants and mechanical plant servicing within P3 areas.

   • Underground petroleum hydrocarbon and other chemical storage tanks are incompatible within P1 and P2 areas.

   • Underground petroleum hydrocarbon and other chemical storage tanks are prohibited within P3 areas, unless approved in writing by the DoW.
• Above ground petroleum hydrocarbon and other chemical storage tanks are incompatible with P1 areas.
• Advice shall be sought from the DoW if proposing above ground petroleum hydrocarbon and other chemical storage tanks within P2 and P3 areas.
• Advice shall be sought from the DoW if proposing mining or construction camps in public drinking water source areas.

2.3 Condition on prospecting, exploration, retention and miscellaneous licence/activities, mining lease and general purpose lease/activities on:
• Reservoir Protection Zones in Catchment Areas
• Wellhead Protection Zones in Underground Water Pollution Control Areas
• Wellhead protection zones in Water Reserves.

Condition heading:
Consent to mine on [insert details of Catchment Area or Underground Water Pollution Control Area or Water Reserve, whichever is applicable] granted by Minister responsible for Mining Act 1978 on [insert date consent to mine granted] subject to:

Condition:
No mining on any [insert Reservoir Protection Zone ID or Wellhead Protection Zone ID, whichever is applicable] located within the subject mining tenement boundaries without first obtaining the written consent of the Minister responsible for Mining Act 1978.

Schedule 3: Clearing Control Catchments (Country Areas Water Supply Act 1947) endorsements

3.1 Apply to all tenement types

1. Clearing of any area of vegetation is prohibited within [insert name of clearing control catchment] without appropriate licensing from the DoW.

Schedule 4: Waterways Management Areas (Waterways Conservation Act 1976) endorsements

4.1 Prospecting, exploration, retention and miscellaneous licences/activities.

1. Prior to undertaking any prospecting/exploration/activity in respect to licence purpose within a Waterways Management Area the licensee shall seek advice from DoW.
2. Any dredging and/or reclamation within a Waterway Management Area which affects the waterway or adjacent land within the Waterway Management Area is prohibited unless a current licence to dredge and/or reclaim has been issued by DoW.
3. Any discharge or deposit of any matter within a Waterway Management Area which affects the waterway or adjacent land within the Waterway Management Area is prohibited unless a current disposal licence has been issued by DoW.

4.2 Mining lease and general purpose lease/activities.

1. Prior to undertaking any mining/activity in respect to mining operations within a Waterway Management Area the lessee shall seek advice from DoW.
2. Any dredging and/or reclamation within a Waterway Management Area which affects the waterway or adjacent land within the Waterway Management Area is prohibited unless a current licence to dredge and/or reclaim has been issued by DoW.

3. Any discharge or deposit of any matter within a Waterway Management Area which affects the waterway or adjacent land within the Waterway Management Area is prohibited unless a current disposal licence has been issued by DoW.

Schedule 5: Proclaimed surface water areas, irrigation districts, & rivers (RIWI Act) endorsements

5.1 Prospecting, exploration, retention licences; and mining leases/activities.

1. The taking of surface water from a watercourse or wetland is prohibited unless a current licence has been issued by DoW.

2. No prospecting/exploration/mining/activity is to be carried out if:
   - it may obstruct or interfere with the waters, bed or banks of a watercourse or wetland; and
   - it relates to the taking or diversion of water, including diversion of the watercourse or wetland, unless in accordance with a permit issued by the DoW.

3. Advice shall be sought from DoW and the relevant water service provider if proposing prospecting/exploration/mining/activity in an existing or designated future irrigation area, or within 50 metres of a channel, drain or watercourse from which the water is used for irrigation or any other purpose, and the proposed activity may impact water users.

5.2 Miscellaneous licence/activities.

1. The taking of surface water from a watercourse or wetland is prohibited unless a current licence has been issued by DoW.

2. Advice shall be sought from DoW to determine if a permit is required prior to undertaking any activity in respect to the licence purpose which may obstruct or interfere with the waters, bed or banks of a watercourse, wetland or other surface water body under section 17 of the Rights in Water and Irrigation Act 1914.

3. Advice shall be sought from DoW and the relevant water service provider if proposing activity in respect to the licence purpose in an existing or designated future irrigation area, or within 50 metres of a channel, drain or watercourse from which the water is used for irrigation or any other purpose, and the proposed activity may impact water users.

5.3 General purpose lease/activities.

1. The taking of surface water from a watercourse or wetland is prohibited unless a current licence has been issued by DoW.

2. No activity in respect to lease purpose is to be carried out that may obstruct or interfere with the waters, bed or banks of a watercourse, wetland or other surface water body under section 17 of the Rights in Water and Irrigation Act 1914, unless in accordance with a permit issued by DoW.

3. Advice shall be sought from DoW and the relevant water service provider if proposing activity in respect to the lease purpose in an existing or designated future irrigation area, or within 50 metres of a channel, drain or watercourse from which the water is used for irrigation or any other purpose, and the proposed activity may impact water users.
Schedule 6: Proclaimed groundwater areas (RIWI Act) endorsements

6.1 Apply to all tenement types.

1. The taking of groundwater and the construction or altering of any well is prohibited without current licences for these activities issued by DoW, unless an exemption otherwise applies.

Schedule 7: Artesian (confined) aquifers and wells (apply state-wide) endorsements

7.1 Apply to all tenement types.

1. The taking of groundwater from an artesian well and the construction, enlargement, deepening or altering of any artesian well is prohibited unless current licences for these activities have been issued by DoW.

Schedule 8: Reserve 31165 endorsements

8.1 Apply to all tenement types.

1. Aboriginal heritage protection measures to be considered prior to undertaking any ground disturbing activity on Reserve 31165 (joint vestees Department of Water and the Miriuwung Gajerrong Corporation) to avoid any breach of the provisions of the Aboriginal Heritage Act 1972 and Regulations there under.

13. Supplementary information on restricting mining on reservoir and wellhead protection zones


Reservoir Protection Zones (RPZ) fall within Catchment Areas, and are defined to protect water sources from contamination in the immediate vicinity of reservoirs. Wellhead Protection Zones (WPZ) fall within Underground Water Pollution Control Areas or Water Reserves, and are defined to protect drinking water sources from contamination in the immediate vicinity of production wells.

Catchment Areas, Underground Water Pollution Control Areas and Water Reserves are reserved land and attract the reserved land provisions of the Mining Act 1978. Pursuant to section 23 of the reserved land provisions, no mining can be carried out in respect of such reserved land without first obtaining the consent of the Minister responsible for the Mining Act 1978. Mining consent may be provided, but no ground disturbance using mechanised equipment is allowed to proceed until a PoW, MP and MCP is approved by DMP.

Prior to this 2016 Agreement, when DMP granted consent to mine in a PDWSA area that contained a RPZ or WPZ, endorsements were applied to the grant, to inform the tenement holder that mineral exploration and operations within any RPZ or WPZ required approval by DoW, and that the following activities were prohibited within wellhead protection zones and reservoir protection zones:

- Mineral processing, tailings storage, wastewater treatment plants and mechanical plant servicing
- Underground petroleum hydrocarbon and other chemical storage tanks
- Above ground petroleum hydrocarbon and other chemical storage tanks.
To better ensure protection of wellheads and reservoirs within PDWSA, from the outset of a tenement, this 2016 Agreement includes a new standard condition which will be imposed on the tenement to prevent any mining activities taking place on RPZ or WPZ, irrespective of the holder using mechanised equipment or not. Any consent to mine that is granted in respect of Catchment Areas, Underground Water Pollution Control Areas or Water Reserves that contain a protection zone will therefore be conditional, in that no mining is allowed within the RPZ or WPZ.

The new standard condition regarding conditional consent in RPZ and WPZ notifies that the tenement holder cannot undertake any mining activity in a protection zone unless the consent of the Minister for Mines and Petroleum is obtained, in accordance with Section 23 (2) of the Mining Act 1978.

However, should the tenement holder subsequently wish to carry out mining on a RPZ or WPZ then he would need to get (subject to the new condition) a new consent from the Minister for Mines and Petroleum in respect to mining in a protection zone, but such consent would not be given until the Minister for Mines and Petroleum (or DMP as the Minister’s delegate) has consulted directly with the Minister for Water (or DoW as the Minister’s agent) in respect to the tenement holder’s proposed activities.

The new standard condition (shown in Section 12, Schedule 2.3) will be imposed on new tenement applications, replacing the use of the endorsements listed in previous administrative agreements. The new condition heading and condition will read as follows:

**Condition heading:**
Consent to mine on [insert details of Catchment Area or Underground Water Pollution Control Area or Water Reserve, whichever is applicable] granted by Minister responsible for Mining Act 1978 on [insert date consent to mine granted] subject to:

**Condition:**
No mining on any [insert Reservoir Protection Zone ID or Wellhead Protection Zone ID, whichever is applicable] located within the subject mining tenement boundaries without first obtaining the written consent of the Minister responsible for Mining Act 1978.

Existing tenements will still have the old endorsements (which were applied prior to the implementation of this 2016 Agreement), and will not have the new condition applied, unless determined by DMP in accordance with the arrangements set out in section 5 of this Agreement (“Procedural arrangements for existing titles and operations”).
Appendix 1: List of common exploration and mining related activities which may have a negative impact on a WRM area

DMP ED is to consider this list and Section 7 when the ED is required, in accordance with Table 1, to make a determination on whether or not to seek DoW advice. This list is therefore applicable to those POW, MP, MCP or Amendment applications where the protocols set out in Table 1 state “Where the activity is likely to have negative impact on WRM area, ED seeks advice from DoW”.

This list is provided as guidance only and does not constitute a complete list of mining or exploration activities which may have a negative impact on WRM areas.

Referral of PoWs, MPs and MCPs to DoW should be considered for mining, prospecting and exploration activities which:

- Involve drilling within known artesian (confined) aquifers (these may be identified by the proponent in a PoW or through submission of a hydrogeological report).
- Result in the blocking, impeding or diversion (temporary or permanent) of waterways (i.e. watercourse and adjacent floodplain). For example:
  - Diversions of waterways around mine pits and other infrastructure
  - Causeways, land bridges, tracks or roads which block or divert waterways
  - Culverts raised above the natural bed of the watercourse.
- Occur within a watercourse, or within a wetland contiguous with a waterway. For example mining in a channel bed, costeans, pipework, or other activities that may degrade the watercourse.
- Result in the production of waste materials with hostile properties including but not limited to potentially acid forming (PAF) waste, and waste which may result in metalliferous drainage if poorly managed.
- Involve dewatering (or other groundwater abstraction which is likely to result in aquifer drawdown) and/or reinjection which may impact upon Groundwater Dependant Ecosystems (GDEs).
- Result in changes to the hydrological regime and/or water quality of a waterway which may impact upon its dependent ecosystems or other water users.
- Include the development of Tailings Storage Facilities (TSF), evaporation ponds, heap or vat leaches or a significant change to the use of these facilities (e.g. TSF expansions).
- Are likely to result in the formation of a temporary or permanent pit lake upon closure (including MCP’s which include pit lakes in the proposed closure strategies).

For further guidance to determine significant or negative impacts of mining activities on water resources refer to DoW’s ‘Western Australian water in mining guideline’ at: www.water.wa.gov.au/PublicationStore/105195.pdf
Appendix 2: Legislation relevant to this Agreement

**Mining Act 1978**
All mining titles in the State are administered by the Department of Mines and Petroleum under the *Mining Act 1978*. The Act includes provisions relating to environmental matters such as environmental management of mining operations and post-mining rehabilitation.

**Rights in Water and Irrigation Act 1914**
The *Rights in Water and Irrigation Act 1914* (RIWI Act) provides for the regulation, management, use and protection of water resources. This Act provides for a licensing system for taking water; and a permitting system for activities that may damage, obstruct or interfere with water flow or the beds and banks of watercourses and wetlands in proclaimed rivers, surface water management areas and irrigation districts. The objects in Section 4 of the RIWI Act include providing for the sustainable use and development of water resources, protection of their ecosystems and the environment in which water resources are situated, and assisting the integration of water resources management with other natural resources management.

**Metropolitan Water Supply, Sewerage and Drainage Act 1909 and Country Areas Water Supply Act 1947**
The quality of public drinking water resources is protected by proclamation of Underground Water Pollution Control Areas, Catchment Areas and Water Reserves under the *Metropolitan Water Supply, Sewerage and Drainage Act 1909* and Catchment Areas and Water Reserves under the *Country Areas Water Supply Act 1947* (CAWS Act). These Acts have by-laws, which are administered by DoW, or the Water Corporation under delegation, to control potentially water polluting activities, prevent or clean up contamination, and to manage catchment land use activities.

**Country Areas Water Supply (Clearing Licence) Regulations 1981**
The clearing of vegetation is controlled under the CAWS Act and Country Areas Water Supply (Clearing Licence) Regulations 1981 (CAWS Regs), to manage and prevent salinisation of water resources in the clearing control catchments. These are the Mundaring Weir, Wellington Dam, Harris River Dam and Denmark River catchment areas and the Warren River and Kent River water reserves. For further information, refer to the Native vegetation fact sheet 8: Clearing in specific existing or potential water supply catchments (Department of Environment and Conservation 2010).

**Waterways Conservation Act 1976 and Regulations 1981**
Under the *Waterways Conservation Act 1976*, any waterway in need of coordinated management can be declared a Management Area, with defined boundaries. DoW administers this Act and has approval powers for certain works affecting the bed, banks or foreshore of managed waterway areas. In addition, the department can request details of other developments affecting, or likely to affect, the health and amenity value of these waterways. There are presently five proclaimed waterways management areas – the Avon River, Peel Inlet, Leschenault Inlet, Albany Waterways and the Wilson Inlet.

**Water Agencies (Powers) Act 1984**
The *Water Agencies (Powers) Act 1984* provides many of the works powers and other powers of DoW and the Minister for Water. Section 9 of the Act outlines the general functions of the Minister for Water as:

- conserving, protecting and managing water resources
- assessing water resources
- planning for the use of water resources
- promoting the efficient use of water resources
- promoting the efficient provision of water services
- developing plans for and providing advice on flood management.
### Appendix 3: DoW and DMP spatial layer references for WRM areas

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Appendix 4: Glossary

Definitions used here are intended for informing DoW and DMP staff about the technical terms used by each agency. They are generally based upon legislation and technical documents.

Department of Mines and Petroleum definitions

Activity in respect to mining operations: Section 86 of the Mining Act 1978 refers, a general purpose lease maybe granted for use by the holder in connection with a mining operations. The use includes:

- for erecting, placing and operating machinery thereon
- depositing or treating thereon minerals or tailings
- using the land for any specified purpose.

Activity in respect to licence purpose: Regulation 42B of the Mining Regulations 1981 prescribe the purposes that a miscellaneous licence may be granted and may include for one or more purposes for example a road, a pipeline etc.

Endorsements: Imposed at the time of grant (or after grant) to draw the tenement holder’s attention to requirements and obligations of the Mining Act 1978, or other legislation relevant to activities that may be carried out.

Exploration: To explore for minerals as authorised pursuant to section 66 of the Mining Act 1978.

Exploration Licence: Is a tenement used to secure ground for exploring. Term of five years renewable.

General Purpose Lease: Is a tenement used to secure ground for operating machinery, treating ore or storing tailings / mine water. It is held for 21 years renewable.


Lease: Refers to a mining lease or general purpose lease but can include both of these.

Licence: Refers to a prospecting licence, exploration licence, retention licence or miscellaneous licence but can also include all or any combination of these.

Mine Closure Plan: Pursuant to section 70O of the Mining Act 1978, means a document that;

- is in the form required by the guidelines
- contains information of the kind required by the guidelines about the decommissioning of each proposed mine, and the rehabilitation of the land, in respect of which a mining lease is sought or granted, as the case requires.

Minerals: Includes all naturally occurring substances that are not a soil or a hydrocarbon. Does not include basic raw materials (eg. clay, sand, limestone, gravel, and rock) where they occur on private land. Such basic raw materials are administered under the Local Government Act 1995. Note that pre-federation land statutes gave mineral rights to the owner that do not come under the Mining Act 1978.

Mining: Includes fossicking, prospecting and exploring for minerals and mining operations.

Mining Lease: Is a tenement used for mining and removal of minerals in, on or under the land surface. It is held for 21 years renewable.
Mining Operation: This term is defined in section 8 of the Mining Act 1978 and includes any mode or method of working whereby any earth, rock, fluid or mineral bearing substance may be disturbed, removed, washed, sifted, crushed, leached, distilled, evaporated, smelted or refined or dealt with for the purpose of obtaining any mineral. Term covers over burden removal, storage and treatment and the harvesting of salt or other evaporates.

Mining Proposal: Pursuant to section 700 of the Mining Act 1978, means a document that;

- is in the form required by the guidelines (approved by the Director General of Mines)
- contains information of the kind required by the guidelines about proposed mining operations in, on or under the land in respect of which a mining lease is sought or granted.

Mining Tenement: General term for a licence or lease (mining tenure) issued under the Mining Act 1978.

Miscellaneous Licence: Is a tenement used to secure ground for purposes such as roads, pipelines or bore-fields. It is held for 21 years renewable.

Negative Effect: Refer to Section 7.

Programme of Works: Is the document that is required before ground disturbance (exploration) using mechanical equipment is allowed to proceed. It describes the activity, environment, and methods for minimising disturbance and rehabilitation initiatives for the proposal. Assessed by the Environment Division of DMP.

Prospecting: To prospect for minerals as authorised pursuant to section 48 of the Mining Act 1978.

Prospecting Licence: Is a tenement (maximum of 200 ha in area) used to secure ground for prospecting / exploring. Term of 4 years and is renewable for one period of 4 years.

Retention Licence: Is a licence used by a primary tenement holder to retain the land where there is an identified mineral resource but which is uneconomic or is being used to sustain future mining operations, it is a retaining title where the expenditure obligations are relaxed and rent is cheaper.

State Agreement Act: Major resource projects are administered by Department of State Development under acts ratified by State Parliament. Note some mining tenements granted under the Mining Act 1978 will also be subject to State Agreements (where the Act provisions differ then the State Agreement provisions prevail).

Department of Water definitions

Artesian aquifer: A confined aquifer in which the hydraulic pressure is sufficient to cause water to rise above the land surface in a well/bore or spring. If the pressure is insufficient to cause the well to flow at the surface, it is called a sub-artesian aquifer.

Artesian Well: Refers to a well, including all associated works from which water flows, or has flowed, naturally to the surface.

Bank: is the part of the waterway that confines the water in the bed and may also include as much of the land adjoining the watercourse to contribute to the function of containing the water, and may include an artificially improved or created bank.

Bed: with reference to a waterway, means the land over which water normally flows or which is normally covered by water, whether permanently or intermittently; but does not include land from time to time temporarily covered by flood waters abutting on or adjacent to the bed.

Catchment: The area of land which intercepts rainfall and contributes the collected water to surface water (streams, rivers, wetlands) or groundwater.
**Catchment Area:** An area proclaimed under the *Metropolitan Water Supply Sewerage and Drainage Act 1909* or *Country Areas Water Supply Act 1947* to allow the protection and use of surface water for public drinking water supplies.

**Clearing Control Catchments:** Catchments proclaimed under the *Country Areas Water Supply Act 1947* in which the clearing of native vegetation requires a licence from the Department of Water, as specified in the Country Areas Water Supply (Clearing Licence) Regulations 1981.

**Dam:** A structure constructed across a drainage system which may create a reservoir to store surface water flow for water supply use or release in a controlled manner for downstream use. A dam can be constructed across a river valley or at the side of a valley to store water pumped into it from “run of river” flow. Dams and associated storage reservoirs also store water for farm use.

**Floodplain:** An area of land adjacent to a river, stream, lake or watercourse, or a coastal flat that is subject to inundation from time to time. Management of these areas is important to maintain the ecological health of a riverine system.

**Floodway:** The river channel and a portion of the floodplain, which forms the main flow path for floodwaters once the main channel has overflowed.

**Groundwater:** Water that occupies the pores and crevices of rock or soil.

**Groundwater Area:** An area proclaimed under the *Rights in Water and Irrigation Act 1914* in which a licence to construct/alter a well and a licence to take groundwater is required.

**Groundwater Dependent Ecosystems (GDE):** Ecosystems that require access to groundwater to meet all or some of their water requirements so as to maintain the communities of plants and animals, ecological processes they support, and ecosystem services they provide. In-stream areas of rivers, riparian vegetation, springs, wetlands, subterranean aquatic karst, rock aquifer ecosystems and phreatophytic vegetation may be GDEs.

**High value waterways:** Those areas for which DoW has some management responsibility, and which are a subset of the high conservation significance areas defined in the EPA Guidance statement No. 33 Section B5.2.2.

The term high value waterways has been created only for the purpose of this Administrative Agreement. There is currently no single spatial dataset which comprehensively describes these areas. Given these limitations, high value waterways are currently to be defined as:

- Within Wild River catchments
- Areas in and around significant wetlands, which are connected to (intersected by) waterways.

Where:

- Wild river catchments are as shown in DoW's Wild Rivers dataset.
- The area “in and around” a significant wetland is spatially defined as:
  - the area inside the marked boundary of the wetland; and
  - the area around the wetland which is within 200m of the outermost marked boundary of the wetland.
- Significant wetlands are Wetlands of international importance (Ramsar), and Wetlands of national importance (Directory of Important Wetlands in Australia), as defined by the Australian Government Department of Environment.
- Waterways are as shown on the Hydrographic part of Geodata topo 250K series 3, known within DoW as “Hydrography linear medium scale 250K”.  

DoW may, at a future date, request that DMP consider additional or alternative spatial datasets to identify high value waterways, if/when relevant datasets become available.

**Intermittent waterway:** a waterway that flows at irregular intervals and that may be dry for extended periods.

**Other waterways:** all waterways in WA, except waterways defined as “High value waterways”, and waterways within “Waterways Management Areas” declared under the *Waterways Conservation Act 1976.*

**Perennial Waterway:** A waterway that has a continual flow of water.

**Public Drinking Water Source Areas:** Public drinking water source area (PDWSA) is the collective name given to any area proclaimed under legislation for the management and protection of a water source used for public drinking water supplies. They may be Catchment Areas, Water Reserves or Underground Water Pollution Control Areas.

In a PDWSA, the State Government has defined three types of protection area to manage land use as follows:

**P1:** P1 source protection areas are defined to ensure that there is no degradation of the water source. P1 areas are declared over land where the provision of the highest quality public drinking water is the prime beneficial land use. P1 areas are managed in accordance with the principle of **risk avoidance.**

**P2:** P2 source protection areas are defined to ensure that there is no increased risk of pollution to the water source. P2 areas are declared over land where the provision of public water supply is a high priority. P2 areas are managed in accordance with the principle of **risk minimisation.**

**P3:** P3 source protection areas are defined to minimise the risk of pollution to the water source. P3 areas are declared over land where water supply needs coexist with other land uses such as residential, commercial and light industrial developments. Protection of P3 areas is achieved through management guidelines rather than restriction on land use.

**Proclaimed Surface Water Areas and Irrigation Districts:** Areas of land proclaimed under the *Rights in Water and Irrigation Act 1914.* Within these areas the right to the use and flow and the control of water within all surface water features including wetlands and waterways is managed by the Department of Water.

**Receiving water:** Waters into which treated or untreated wastewater, process water or de-water are discharged, or where the water resource, including water quality, may be adversely impacted by land uses in the catchment.

**Reservoir Protection Zones:** Defined to protect water sources from contamination in the immediate vicinity of reservoirs. Reservoir protection zones consist of a zone with up to a two kilometre buffer area around the top water level of a reservoir and includes the reservoir itself.

**Riparian vegetation:** the vegetation associated with waterways, that adjoins or is influenced by waterways. This vegetation generally has distinctly different structure and/or floristics than adjacent terrestrial areas. This vegetation plays important roles in waterway function by stabilising the waterway channel and banks, by influencing movement of sediments and nutrients and in ecological processes. When riparian vegetation is removed, the ability of riparian land to act as a buffer is diminished and the rate of transfer of sediments from land to water may increase, leading to eutrophication and sedimentation of waterways or wetlands.

**Seasonal Waterway:** A waterway that will only have a seasonal flow of water.

**Stormwater:** Water flowing over ground surfaces and in natural streams and drains, as a direct result of rainfall over a catchment. Stormwater consists of rainfall runoff and any material (soluble or insoluble) mobilised in its path of flow.

**Surface Water:** Water flowing or held in watercourses, wetlands or other surface water bodies in the landscape.
Taking: in relation to water, means to remove water from, or reduce the flow of water in, a watercourse, wetland or underground water source, including by:

- pumping or siphoning water; or
- stopping, impeding or diverting the flow of water; or
- releasing water from a wetland; or
- permitting water to flow under natural pressure from a well; or
- permitting stock to drink from a watercourse or wetland,

and includes storing water during, or ancillary to, any of those processes or activities.

Underground Water Pollution Control Areas: Areas in which restrictions are put on activities that may pollute the groundwater. These areas are proclaimed under the Metropolitan Water Supply Sewerage and Drainage Act 1909. They are referred to as “pollution areas”, and depicted in the schedule of, the Metropolitan Water Supply, Sewerage and Drainage Bylaws.

Watercourse: Any river, creek, stream or brook, including its bed and banks, and estuary. This includes systems that flow permanently, for part of the year or occasionally, and including parts of the watercourse that have been artificially modified, altered or diverted from the natural course.

Water dependent ecosystems: Water dependent ecosystems are parts of the environment in which the composition of species and natural ecological processes are determined by the permanent or temporary presence of flowing or standing surface water or groundwater. The in-stream areas of rivers, riparian vegetation, springs, wetlands, floodplains, estuaries, karst systems and groundwater-dependent terrestrial vegetation are all water dependent ecosystems.

Water Quality: Physical, chemical and biological measures of water attributes.

Water Reserve: An area proclaimed under the Metropolitan Water Supply Sewerage and Drainage Act 1909 or Country Areas Water Supply Act 1947 to allow the protection and use of groundwater and future surface water sources for public drinking water supplies.

Water Resource Management (WRM) Areas: Areas subject of this agreement as listed in Table 1 and spatially defined in Appendix 3.

Water Table: Surface of the unconfined groundwater in a given vicinity.

Waterway: The watercourse plus the floodplain.

Waterways Management Areas: an area declared by the Governor under the Waterways Conservation Act 1976 of which DoW is the custodian and has the duty of conserving the rivers, inlets and estuaries in accordance with the powers under the Act. Under the Waterways Conservation Act 1976, five waterways management areas have been established for the conservation of waterways and associated land. The management areas apply to:

- Wilson Inlet and associated rivers
- Albany Harbour and associated rivers
- Avon River
- Peel-Harvey estuaries
- Leschenault inlet, estuary and associated rivers.
Well: A hole dug or drilled into the ground to monitor or withdraw groundwater. The term includes drilled bores as a specific type of well. Household wells are commonly called bores.

Wellhead Protection Zones: Defined to protect drinking water sources from contamination in the immediate vicinity of production wells. They are usually circular, with a radius of 500 metres in P1 areas and 300 metres in P2 and P3 areas. Different dimensions may apply to wells sited in fractured rock aquifers.

Wetland: as defined in the Rights in Water and Irrigation Act 1914, means a natural collection of water, whether permanent or temporary, on the surface of any land and includes —

(a) any lake, lagoon, swamp or marsh; and

(b) a natural collection of water that has been artificially altered,

but does not include a watercourse.

Wild Rivers: Wild rivers are nationally significant, unique and rare examples of waterways where biological and hydrological processes continue without significant disturbance. These waterways and catchments generally remain undisturbed due to their isolation, topography or land tenure. The important values of wild rivers include rarity, habitat, water quality and scientific value. For more information refer to Water note 37: Wild Rivers in Western Australia <www.water.wa.gov.au/PublicationStore/first/83725.pdf>.
Appendix 5: DoW Regional Boundaries and Contact Details

Both departments will provide detailed contact information as required to enable liaison on specific issues or processes, and to supplement the key contacts listed on agency websites. Current contact details for DoW regional offices are shown below.

Legend
- Regional Office
- DoW Regional Boundaries
- Local Government Authorities

Relevant Region Office for Local Government Referrals
- Albany
- Bunbury
- Carnarvon and Geraldton
- Ellenbrook
- Karratha
- Kununurra
- Mandurah

DEPARTMENT OF WATER
Local Government Referral Boundaries

If the weather relates to more than one region or to State-wide, it should be forwarded to Water and LandUse Coordination Section PO Box 8822, Perth, WA 6842.
### South West Region

**Bunbury Regional Office**  
PO Box 261 Bunbury WA 6231  
Ph: 08 9726 4111  
Fax: 08 9726 4100  
bunbury.admin@water.wa.gov.au

Augusta-Margaret River, Shire of  
Boyun Brook, Shire of  
Bridgetown-Greenbushes, Shire of  
Bunbury, City of  
Busselton, Shire of  
Capel, Shire of  
Collie, Shire of  
Dardanup, Shire of  
Donnybrook-Balingup, Shire of  
Dumbleyung, Shire of  
Harvey, Shire of  
Katanning, Shire of  
Kojonup, Shire of  
Manjimup*, Shire of  
Nannup, Shire of  
Narrogin, Shire of  
Narrogin, Town of  
Wagin, Shire of  
West Arthur, Shire of  
Woodanilling, Shire of

### Mid-West Gascoyne Region

**Geraldton Regional Office**  
94 Sanford Street Geraldton 6530  
Ph: 08 9965 7400  
Fax: 08 9964 5983  
midwest@water.wa.gov.au

Carnamah, Shire of  
Chapman Valley, Shire of  
Coorow, Shire of  
Cue, Shire of  
Dalwallinu, Shire of  
Dandaragan, Shire of  
Greater Geraldton, City of  
Irwin, Shire of  
Meekatharra, Shire of  
Mingenew, Shire of  
Moora, Shire of  
Morawa, Shire of  
Mount Magnet, Shire of  
Murchison, Shire of  
Northampton, Shire of  
Perenjori, Shire of  
Three Springs, Shire of  
Yalgoo, Shire of

### Kimberley

**Kununurra District Office**  
PO Box 625 Kununurra WA 6743  
Ph: 08 9166 4100  
Fax: 08 9168 3174  
kunadmin@water.wa.gov.au

Broome, Shire of  
Derby-West Kimberley, Shire of  
Halls Creek, Shire of  
Wyndham-East Kimberley, Shire of

### Pilbara

**Karratha District Office**  
PO Box 836 Karratha WA 6714  
Ph: 08 9144 0200  
Fax: 08 9144 2610  
pilbara.landuse@water.wa.gov.au

Ashburton, Shire of  
East Pilbara, Shire of  
Karratha, City of  
Town of Port Hedland

### North West Region

**Kwinana Peel Region**

**Mandurah Regional Office**  
PO Box 332  
Mandurah 6210  
Ph: 08 9550 4222  
Fax: 08 9581 4269  
kwinanapeel.landuse@water.wa.gov.au

Boddington, Shire of  
Cockburn, City of  
Cuballing, Shire of  
Kwinana, City of  
Mandurah, City of  
Murray, Shire of  
Rockingham, City of  
Serpentine-Jarrahdale, Shire of  
Wandering, Shire of  
Waroona, Shire of  
Williams, Shire of

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* Local Government Area jointly managed - refer to map for relevant DoW regional office.
Swan Avon Region

Ellam Street & Kalgoorlie
Regional Office
7 Ellam Street
Victoria Park 6110
Ph: 08 6250 8000
Fax: 08 6250 8050
swanavon.landuse@water.wa.gov.au

Contacts for Reserve 31165

The contact addresses for:
• notification of granted tenements,
• seeking advice on PoW, MP, MCP and amendments, and
• notification of approved PoW, MP, MCP and amendments,

in relation to Reserve 31165, are as follows:

Chair of the Joint Management Committee
c/o Miriuwung Gajerrong Corporation
PO Box 2110
Kununurra WA 6743

and

Department of Water
Regional Office
PO Box 625
Kununurra WA 6743

Ngaanyatjarraku, Shire of
Northam, Shire of
Nungarin, Shire of
Peppermint Grove, Shire of
Perth, City of
Pingelly, Shire of
Quairading, Shire of
Sandstone, Shire of
South Perth, City of
Stirling, City of
Subiaco, City of
Swan, Shire of
Tammin, Shire of
Toodyay, Shire of
Trayning, Shire of
Victoria Park, Town of
Victoria Plains, Shire of
Vincent, Town of
Wanneroo, City of
Westonia, Shire of
Wickepin, Shire of
Wiluna, Shire of
Wongan-Ballidu, Shire of
Wyalkatchem, Shire of
Yilgarn, Shire of
York, Shire of