Conservation of Roadside Vegetation

Advice of the Environmental Protection Authority to the Minister for the Environment under Section 16(e) of the *Environmental Protection Act 1986*

Environmental Protection Authority
Perth, Western Australia
Bulletin 1290
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Strategic Advice Timelines

Date	Progress stages
25 January 2006	**Request for advice from Minister for the Environment**
23 June 2008	**EPA section 16(e) advice released**

Report Released: 23 June 2008
There is no appeal period on s16(e) advice.

Summary and Recommendations

The EPA has reviewed regional road upgrade processes and associated policy settings and their potential impacts on the conservation of roadside vegetation in Western Australia (WA), and now provides its advice and recommendations to the Minister for the Environment.

The EPA's advice is based on a literature review, consultation with relevant stakeholders and is set within the legislative context for native vegetation clearing and strategic planning for road networks, including those for heavy haulage. The Department of Environment and Conservation (DEC) is responsible for the administration of the State's clearing legislation which took effect on 8 July 2004, and this encompasses vegetation in road reservations. Main Roads WA is responsible for 12% of WA's road networks (including the National highway network) as well as route determination for heavy haulage trucks; the remaining 88% of the road network falls under the jurisdiction of the 141 Local Governments.

The EPA is cognisant of the need to upgrade road networks to meet the increasing demands of road freight transport, and recognises the importance of planning for road safety. Nevertheless, roadside vegetation has high biodiversity and ecological linkage values and every possible measure should be employed for its retention and management.

Subsequent to the Minister for the Environment's request for advice, the Auditor-General assessed the administration of the clearing regulations and found that the *Environmental Protection Act 1986* provisions and principles are clear, the process has adequate accountability and transparency, and that the applications to clear land are generally appropriately assessed. The EPA notes that the Auditor General's concerns with respect to compliance have been acknowledged by the DEC, and ameliorative measures have been, or are being, taken. The EPA supports the DEC's efforts, within its budgetary constraints, to ensure that processes are consistent, timely and transparent.

MRWA also has in place sufficient legislation, regulation (including the conditions of Purpose Permit CPS818/4) and guidelines to ensure that roadside vegetation is considered as part of regional road upgrades. However, in the past, compliance with regulations, guidelines and procedures has on occasion been problematic. MRWA has acknowledged that the delivery of appropriate environmental outcomes has not always been achieved, nor issues well-handled from a community perspective. As a result, MRWA has recently lifted its stakeholder and community engagement profile, and the EPA strongly supports MRWA's ongoing initiatives to implement effective community engagement. The EPA believes that regulatory compliance would be strengthened by more thorough consideration of environmental factors during the early strategic planning stages, as well as education and training, and the rigorous enforcement of the legislative requirements, including monitoring the condition of roadside vegetation. Where projects are potentially significant and require referral to the EPA, the protocols in the *Memorandum of Understanding* between MRWA and the (then) Department of Environment have been applied, but now require updating to ensure the consistent delivery of good environmental outcomes.

In contrast to MRWA, Local Government typically deals with a large volume of small budget projects, over a far greater area, and under a more diverse range of conditions, but often with a much lower capacity and capability to meet environmental objectives than MRWA. Consequently, Local Government faces a number of issues and challenges in complying with the clearing legislation. The Western Australian Local Government Association has advised that, in liaison with the Roadside Conservation Committee and other stakeholders, a pilot project is underway to identify environmental issues and potential solutions. It is hoped that the outcomes from this trial will have wider regional application.

The EPA understands that the Minister for the Environment has recently approved Terms of Reference to examine native vegetation issues pertaining to Local Government, in order to determine whether or not amendments to legislation, regulations or administrative processes would improve efficiency, while maintaining appropriate protection of native vegetation.

The EPA believes it would be environmentally beneficial, and assist stakeholders (including MRWA, Local Governments, DPI and industry), if the need for regional road upgrades, and their potential cumulative impacts on the environment, were considered in an holistic manner, through strategic land use planning.

Opportunities now exist to consider incorporation of the conservation of roadside vegetation in the national *Caring for our Country* program, and the State's Natural Resource Management plan and strategies, so that future decision-making is integrated, and funding is appropriately targeted.

Also, where the environmental impacts of strategic proposals are likely to be significant, there is the opportunity to refer them to the EPA for Strategic Environmental Assessment under s.38 of the *Environmental Protection Act 1986.*

Finally, the EPA has been encouraged by the advances that have been made to ensure improved delivery of good environmental outcomes and believes continuation of such initiatives is necessary. At the same time, meeting statutory clearing obligations requires further refinements and improvements to the 'system'. Opportunities and challenges for all agencies and bodies lie in the areas of strategic land use and transport planning, particularly any expansions of the heavy haulage network. Effective environmental strategic land use planning requires adequate resourcing and targeting of compliance and enforcement activities, as well as improved integration of regional natural resource management with local road construction and maintenance delivery activities.

The EPA recommends that:

1. The Minister:

- **note the EPA's Report and Recommendations; and**
- **provide copies of the EPA's findings to relevant Ministers and all agencies affected by the issues identified and summarised in the Report, encouraging them to further consider the implications of the issues raised, and where appropriate implement effective measures to address those issues.**

2. **The DEC update the existing Memorandum of Understanding (between Main Roads WA and the former Department of Environment), which outlines the referral process to the EPA, in order to:**
   - **acknowledge the formation of the Department of Environment and Conservation; and**
   - **clarify which proposals are now subject to Part V of the *Environmental Protection Act 1986* and which proposals should be referred to the EPA under Part IV of the EP Act.**

3. **As part of its natural resource management leadership role, the Council of Natural Resource Agency Chief Executives give this matter attention through:**
   - **strategic land use planning which integrates transport requirements with resource requirements; and**
   - **cooperation between government agencies, groups and individuals so that conservation of roadside vegetation is incorporated in the forth-coming regional Natural Resource Management strategies, thus enabling strategic funding bids.**

Contents

1. Minister's request for advice

This report provides the Minister for the Environment, David Templeman MLA, with the Environmental Protection Authority's (EPA's) advice and recommendations, under section 16(e) of the *Environmental Protection Act 1986* (EP Act), on its review of conservation of roadside vegetation in Western Australia. The advice was requested on 25 January 2006 by the then Minister for the Environment, Dr Judy Edwards (see Appendix 2).

The issue, raised by the Minister's Roadside Conservation Committee (RCC)[1], pertains to the extent of loss of roadside vegetation in Western Australia, either through assessed projects, exempt works, or illegal clearing resulting from poor knowledge of legislative requirements. The general question is, "Are the existing regulations and mechanisms adequate to protect and conserve that vegetation?".

The Minister specifically requested the EPA to provide advice in relation to:

1. ***"the issue of the impact of regional-scale road upgrade works on the conservation of roadside vegetation, and in particular the role that strategic planning and environmental assessment at the strategic planning stage is having on meeting appropriate environmental objectives with such regional projects"; and***

2. ***"the appropriateness of the current referral strategy employed by Main Roads and recommendations on how this strategy could be improved to achieve good environmental outcomes, if any such improvement is warranted".***

The EPA has inferred that the first part of the request relates to the outcomes of regional-scale upgrade works undertaken by both Main Roads Western Australia (MRWA) and Local Government. The second part relates specifically to the process where, under section 38 of the EP Act, proposals which are likely to have a significant impact on the environment are referred by MRWA to the EPA for environmental assessment[2].

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[1] The RCC was created in 1971 as a Ministerially appointed advisory committee to *coordinate and promote the conservation and effective management of native vegetation on rail and roadside vegetation for the benefit of the environment and the people of Western Australia.* The committee has 12 members representing state and local government agencies, conservation interests and utilities, and is chaired and supported by the Department of Environment and Conservation (DEC, previously the Department of Conservation and Land Management). The RCC meets quarterly.

The committee has published a number of documents for use by local and state governments to assess the value of roadsides for conservation value (RSS, 2002), provide environmental guidance for road construction and maintenance, and guidelines for managing special areas in transport corridors.

[2] Although the Minister's letter referred to specific projects (such as the requirements for major east-west transport corridors to transport agricultural lime; truck transport of blue gum harvests from south-west plantations; closure of Cooperative Bulk Handling (CBH) wheat bins requiring farmers to drive greater distances to central depots) the request was for a general overview of the environmental outcomes of regional upgrade planning in WA, rather than a detailed evaluation of those specific examples.

2. Introduction

2.1 Background

Roadside vegetation is often the only intact local native vegetation in the region. It is important in the overall conservation of the landscape and environment, and has biological, cultural, aesthetic and landcare values (p.2, RCC, 2002). The clearing of roadside vegetation also has economic implications, because it may have detrimental impacts on the wildflower tourism industry. In addition, roadside vegetation links remnant stands of vegetation, provides vital habitat for a range of native fauna, including threatened species such as Carnaby's Cockatoo, acts as windbreaks and provides a source of seed for revegetation projects.

The RCC correspondence (January 2006), which triggered the Minister's request for advice, noted that the Purpose Permit granted to MRWA (CPS818/4) would provide for annual clearing limits of up to 1,225ha of roadside vegetation. This includes 175ha (approximately a further 600 kilometres) in the wheatbelt, which is already substantially cleared. The RCC's concern is that the continuing loss of vegetation will have permanent adverse environmental impacts.

The EPA's objectives, its methodology, definitions, and the legislative context for the review are outlined in this section.

2.2 Key Environmental Factors and EPA's Objectives

The key environmental factors potentially impacted by the clearing of remnant roadside vegetation are native vegetation and flora, and native fauna.

- Native Vegetation and Flora
  The EPA's environmental objective for this factor is to maintain the abundance, diversity, geographic distribution and productivity of flora at species and ecosystem levels through the avoidance or management of adverse impacts and improvement in knowledge (EPA, 2004a).

- Native Fauna
  The EPA's environmental objective for native fauna is to maintain the abundance, diversity, geographic distribution and productivity of fauna at species and ecosystem levels through the avoidance or management of adverse impacts and improvement in knowledge (EPA, 2004b).

2.3 Methodology

In summary, the EPA's views have been formed through:

- a comprehensive review of literature, including public reports, guidelines for external and internal processes, and fact sheets;
- consultation with stakeholders, including the Department of Environment and Conservation (DEC), MRWA, RCC, the Department for Planning and Infrastructure (DPI) and Western Australian Local Government Association (WALGA); and
- consideration of audit findings (Auditor General for Western Australia and accredited external auditors).

2.4 Definitions

The terms 'clearing', and 'native vegetation' are defined in the E*nvironmental Protection Act 1986* (EP Act) (sections 3(1) and 51A) and explained in the *Guide to Clearing Permits under the Environmental Protection Act 1986* (DoE 2005b).

'Clearing' includes the killing or removal of native vegetation, the severing or ringbarking of trunks or stems, the draining or flooding of land, the burning of vegetation, the grazing of stock and any other activity that kills or causes substantial damage to native vegetation. For the purposes of this s.16(e) advice, the most likely removal of native vegetation is by the first method. However, it is noted that inappropriate drainage practices along roads could lead to erosion, which may also result in the destruction of vegetation.

'Native vegetation' includes all types of native vegetation and includes vegetation that has been planted as a requirement of a written law. Roadsides which have been rehabilitated as offsets for proposals therefore fall into this category.

2.5 Legislative context

2.5.1 Clearing legislation

The clearing changes to the EP Act took effect on 8 July 2004, following the gazettal of the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004* (the Regulations) on 30 June 2004. Under the clearing provisions, clearing of native vegetation is an offence unless a permit has been granted by the Chief Executive Officer (CEO) of the DEC or his delegate or the clearing is for an exempt purpose. The provisions apply to both private and public lands, and are binding on the Crown. (The offence of unauthorised clearing attracts fines of up to $250,000 for an individual, and $500,000 for a body corporate.)

Exemptions

Two types of exemption apply:

1. those under other written laws, for example, proposals assessed by the EPA where these are implemented in accordance with an implementation agreement or decision, or clearing required under the *Bush Fires Act 1954* (Schedule 6 of the EP Act) (DoE 2005b); and
2. where the clearing is prescribed under s.51C of the EP Act (and outlined in Regulation 5 of the Regulations (also see DoE 2005c). These are low impact activities, such as maintenance of existing fences, or limited clearing to construct a lawful building. The exemptions in these Regulations do not apply in areas declared as environmentally sensitive areas by the Minister for the Environment under section 51B of the EP Act.

Item 22 and Schedule 2 of the Regulations provide for clearing for maintenance in existing transport corridors. Schedule 2 defines the purpose for which clearing may be allowed, the extent of clearing that is permissible and how the clearing is to be carried out.

Permits

There are two types of clearing permit:

1. 'area' permits for clearing of a particular area; they have a default period of two years; and
2. 'purpose' permits which apply for clearing of different areas from time to time for a specified purpose for a default period of five years. Purpose permits also apply where the applicant is not the owner but has the authority to undertake the intended activity on the land. They are most likely to be used by Local Governments, and State Government agencies.

The DEC is required to advertise the clearing applications and seek public comments. The DEC must also write to any person or public authority which has a direct interest in the permit application.

It is a statutory requirement that all applications for permits are assessed in accordance with the ten clearing principles specified in Schedule 5 of the EP Act (also see, for example, *Guide to Assessment, Clearing of Native Vegetation* (DoE, 2005a) and *Environmental Guideline: Native Vegetation Clearing Regulations and Permits* (MRWA, 2007e)).

The EP Act states that native vegetation should not be cleared if -

a) it comprises a high level of biological diversity;
b) it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia[3];
c) it includes, or is necessary for the continued existence of, rare flora;
d) it comprises the whole or part of, or is necessary for the maintenance of a threatened ecological community;

[3] Habitat maintenance incorporates assessment of faunal requirements such as food, roosting and nesting. Requirements are outlined in various sources, including websites for threatened species, namely flora, ecological communities and fauna (see http://www.naturebase.net/content/view/840/1288/). This is supplemented by advice from relevant experts, together with local advice from the regional offices.

e) it is significant as a remnant of native vegetation in an area that has been extensively cleared[4];
f) it is growing in, or in association with, an environment associated with a watercourse or wetland;
g) the clearing of the vegetation is likely to cause appreciable land degradation;
h) the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area;
i) the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water;
j) the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.

Ecological linkages are addressed as corridors, stepping stones and connectivity of habitat within principles b) and h) above, relating to fauna habitat and impacts on a nearby conservation area.

Prior to making any permit decision, the CEO of the DEC is required to "have regard to any planning instrument or other relevant matter" in addition to consideration of the above clearing principles (section 51O(4) of the EP Act).

The decision to grant or refuse a clearing permit must be advertised, and is subject to an appeal period, including by third parties. Appeals are to the Minister for the Environment and are managed by the Appeals Convenors Office.

2.5.2 Strategic Environmental Assessment

The 2003 amendments to the EP Act also introduced Strategic Environmental Assessment (SEA), enabling the EPA to assess proposals at a strategic level. A strategic proposal may be a project, plan, program, policy operation, undertaking or development or change in land use, but is generally expected to be relatively conceptual, or to encompass a range of significant proposals to be progressed over time.

To date the SEA process has been applied in limited contexts. Referral to the EPA can only be done by the proponent and the assessment is undertaken on a voluntary basis. Therefore, although the SEA provides a means of considering potential clearing of remnant vegetation at a strategic level, it has not yet been used as it relies on the proponent to request this type of assessment. Also it is not useful where there are multiple proponents, as would be the case with WA's 141 Local Governments.

[4] Determination of significance as a remnant of native vegetation is outlined on p.8 of the *Guide to Assessment, Clearing of Native Vegetation under the Environmental Protection Act 1986* (DOE 2005a), and based on the Commonwealth of Australia's retention target of 30% or more (previously *National Objectives and Targets for Biodiversity Conservation 2001*-2005, but now *National Biodiversity and climate change action plan 2004-2007*), except in constrained areas (such as Swan Coastal Plain and Greater Bunbury Region Scheme) where the criteria may be varied to "at least 10%".

2.5.3 Road Legislation

The following summary of the road legislative context provides an understanding of the operating domain for the clearing legislation.

Planning and management of the WA road network is legislated through a number of Acts and State and Local Government policies including: *Main Roads Act WA 1930; Land Administration Act 1997; Local Government Act 1995; AusLink (National Land Transport) Act 2005; Planning and Development Act 2005;* and the Western Australian Planning Commission's (WAPC) policy and development control documents. Engineering practices of the network managers are led by a number of guidelines including Australian Standards, Austroads Guidelines and Main Roads publications.

Consequently, State and Local Government strategic road planning occurs on a number of levels, with national definitions that outline the functional hierarchy of the road network. Road reserves, which were gazetted for the purpose of roads, now face a number of competing uses and requirements, including:

- transport functions, including the freight transport task;
- infrastructure service corridors for other agencies;
- the need to conform with safety standards, and consider public liability issues;
- conservation of native vegetation; and
- public expectations, which range from pro-environment to pro-development.

3. The Environmental Protection Authority's Findings

The EPA's review encompassed both the MRWA's and Local Governments' planning and referral processes for regional-scale road upgrades, as well as heavy vehicle road use and route determination. It is available at Appendix 3 for information and transparency purposes, as an educational resource, and as background to inform the proposed legislative review.

The Minister's January 2006 request to the EPA followed the transition from the *Soil and Land Conservation Act* requirements to the requirements of the EP Act (as amended). The EPA has found that there are:

- some areas where positive initiatives have been undertaken subsequent to the Minister's request; the EPA believes the continuation of such initiatives is important;
- other areas where fine tunings and improvements to the system are recommended; and finally,
- issues which require further consideration by other bodies and agencies.

3.1 Positive Initiatives and Outcomes

Numerous initiatives which had commenced around the time of the Minister's request, or have been undertaken since, are summarised below.

1. The Auditor-General for Western Australia assessed the administration and regulation of native vegetation clearing in WA (Auditor General's Report No 8 *Management of Native Vegetation Clearing* (September 2007). The key findings were that the legislation enshrines clear principles for assessing applications, there is adequate accountability in the process, and that applications to clear land are generally appropriately assessed.

2. The Auditor-General also found that there is adequate transparency in the process to regulate the clearing of native vegetation[5]. However, the Auditor-General found that there had been no meaningful testing to see if application decisions are being complied with. Nor had there been proper investigations of potential illegal clearing. Other findings related to a backlog of clearing applications, and technical matters.

3. Since then, the DEC has cleared the backlog of clearing applications, and is generally achieving the 90 day target for assessment of applications. The Auditor-General commented on errors with respect to the database recording; the system is currently being upgraded and all processing times, conditions and appeals, which are recorded on file, will be accurately entered into the system.

4. The DEC acknowledged the findings of the Auditor General in respect to compliance. It has developed and is progressively implementing an inspection program for testing compliance with decisions on clearing applications. In addition, the DEC has purchased and now uses satellite imagery to identify vegetation change, and (based on the analysis of this imagery, and inspection of the land) to determine whether unlawful clearing is likely to have occurred. The vegetation change may have been caused by fire, seasonal variations in wetland vegetation or include clearing that has been granted an exemption. Since July 2007, vegetation changes indicated by imagery have been ground-truthed in the Bunbury to Denmark area, and the regions of Ravensthorpe, Jerramungup, Hill River, Southern Cross and Esperance, as well as parts of the Swan Coastal Plain.

   Clearing incidents identified as a result of either the monitoring program or third-party complaints are investigated and progressed according to the DEC's Enforcement and Prosecution Policy. Clearing incidents have been prioritised for investigation. High priority investigations are at an advanced stage. Two successful prosecutions were undertaken in 2006, one in 2007 and two in 2008. A further two prosecutions have been announced. There is no statute of limitations on illegal clearing and prosecutions can be mounted any time after the offence.

[5] New applications for clearing permits as well as the determinations are publicly available on DEC's website and advertised in the *West Australian* (Monday edition). Members of the public are able to obtain other background material through the FOI process.

Consequently, as analysis of satellite imagery proceeds, it is likely that there will be additional prosecutions[6].

5. The DEC has prepared and published the following Guidelines to explain how the new exemption and permitting laws interact with road maintenance and construction processes. (These are in addition to existing guides released in 2005, and all are on the website.):
    a. *Getting to know your purpose permit*;
    b. *A Guide to the exemption for clearing Native Vegetation for maintenance in existing transport corridors*; and
    c. *Guide to developing a clearing permit offset proposal*.

6. The DEC has prepared and published fourteen (14) Native Vegetation Conservation Fact Sheets, all of which are available on the website. Local Government has found that advice from the DEC has also improved in consistency and availability, and, as a consequence, understanding in the industry and public has improved. In parallel with changing social attitudes, the legislation and related guidelines and fact sheets have successfully raised the profile and legitimacy of the conservation of native vegetation.

7. The amalgamation of the (then) Department of Environment and (then) Department of Conservation and Land Management has consolidated assessment and decision-making, provided a more holistic framework for decisions and reduced red tape. Communication, mutual recognition of issues, and co-operation between involved agencies have also improved.

8. In July 2005, MRWA's Environmental Management System (for planning, delivery, maintenance, network operations and supporting services) was accredited under ISO 14001:2004. MRWA continues to maintain this accreditation for its Environmental Management System.

9. A Purpose Permit for planned project works was granted to MRWA (CPS818/4) for a period of five years, expiring in December 2010. It contains binding conditions (see Appendix 4).

10. MRWA published the following guideline to facilitate compliance with the Regulations and to assist during the training of MRWA contractors:
    Environmental Guideline: Native Vegetation Clearing Regulations and Permits, Document 6707/034, 18 December 2007, Perth, WA.

11. MRWA is endeavouring to identify potential significant environmental impacts at the strategic level of road program review. The purpose is to achieve better environmental outcomes in terms of reducing the need for clearing of native vegetation, and to accommodate any associated costs in the subsequent project budgets.

[6] In addition to mounting prosecutions, since late 2007 a total of eleven vegetation conservation notices have been given, requiring the person bound by the notice to ensure that no unlawful clearing or further unlawful clearing takes place on the land. DEC has also given four vegetation conservation notices to mitigate the environmental harm caused by unlawful clearing. The person to whom the notice is given is required to undertake certain specified measures to repair the damage and re-establish native vegetation.

12. Many Local Governments have been granted Purpose Permits for their road upgrade programs. These contain binding conditions to assist with conservation of roadside vegetation, and are specific to the issues raised by each application during the DEC's assessment.

13. The transitional exemption for road maintenance has been refined and made permanent following the review and recommendations of a working group including the DEC, MRWA, WALGA and conservation organisations.

14. The EPA itself has prepared and released a number of documents which are relevant to the conservation of remnant native vegetation[7], including:
    - *Position Statement No 9 – Environmental Offsets*;
    - Draft *Guidance Statement No 19 – Environmental Offsets*;
    - *Guidance Statement No 6 – Rehabilitation of Terrestrial Ecosystems*; and
    - *State of the Environment: Western Australia 2007*.

3.2 Process Improvement

With regard to the MRWA road upgrades referral process to the EPA, the EPA is confident that the MoU has established processes for dialogue between the two parties early in the planning process, and that there are a number of mechanisms whereby the EPA can assess the proposals. The EPA considers that there is adequate consultation by MRWA with relevant agencies. The spirit and intent of the MoU still operate, although it precedes the:

- formation of the DEC;
- 2004 amendments to the EP Act, including introduction of the Part V requirement for a clearing permit, and the Regulations for the Clearing of Native Vegetation; and
- EPA's current review of its Environmental Impact Assessment policies and processes.

As a consequence, the EPA recommends that the MoU be updated.

As the Minister is aware, the general topic of MoUs is being examined during the EPA's current review of environmental impact assessment, so there is opportunity to consider whether a second MoU, between the EPA itself and MRWA, to incorporate the risk-based approaches and outcomes focus being introduced by the EPA.

3.3 Issues for Consideration by Others

Roadside vegetation is likely to be subject to increasing pressures and threats from road upgrades related to ongoing economic activities and resource development projects. In addition to the transport generated by the activities identified by the RCC

[7] The new documents support the EPA's earlier *Position Statement No 2 – Environmental Protection of Native Vegetation in Western Australia* (December 2000).

(agricultural lime, blue gum and grain – see Appendix 3, sections 4 and 5), there is potential for increased demand for road transport from:

- the development of other basic raw materials;
- increasing plantation and farm forestry activity, under WA's 2008-2012 strategy, in the State's medium to lower rainfall areas (Government of WA 2008b);
- the development of timber plantations for carbon sequestration to underpin future carbon trading mechanisms; and
- changes within the grain industry, leading to the closure of some railway lines and therefore greater use of the road network for grain transport.

While the EPA recognises that road safety is paramount, the EPA's position is that roadside vegetation should be retained for its intrinsic biodiversity values, especially its significance as habitat for threatened flora and fauna species and its importance as ecological linkages; its loss should, where at all possible, be avoided during road upgrade projects. The EPA believes that there are opportunities to achieve this outcome through further improvement and refinement of the existing systems. Opportunities and challenges include creative planning solutions at the strategic level, adequate resourcing for compliance, and last, but by no means the least, integration with Natural Resource Management priorities and strategies[8].

It is acknowledged that there are inherent difficulties in balancing often competing and conflicting needs, but this is the traditional role of strategic land use planning, as the WAPC recognises in its *State Planning Policy No. 2: Environment and Natural Resources Policy* (SPP2). One of SPP2's objectives is "to integrate environment and natural resource management with broader land use planning and decision-making", and one of the general measures proposed to avoid environmental harm and improve environmental outcomes is implementation through the preparation of strategic plans, inclusion in town planning schemes, and assessment of developments.

The EPA is of the opinion that it would be beneficial if the need for regional road upgrades, and their potential cumulative impacts on the environment, were considered in an holistic manner, through strategic land use planning[9]. As a general rule, there is currently no linking of the strategic land use planning for a resource industry itself with its associated transport requirements. The absence of a clear planning framework is highlighted in the Forest Products Commission's Strategy, which proposes the development of a planning process for plantations (Action 8 – wording in footnote[10]). The consequence of not considering long-term transport requirements at an early stage is that flexibility to modify plans is reduced if potential environmental impacts on roadside vegetation are only identified at a later stage.

[8] The EPA is hopeful that these strategic measures will also be supported by more practical measures, such as the continued introduction of innovative road-design alternatives.

[9] The former Department of Transport endeavoured to do this through a series of Regional Transport Strategies to be developed during the 1990s, but this work has not been continued in any systematic manner.

[10] Action 8: The Forest Products Commission will work with the Western Australian Planning Commission and industry stakeholders to develop a planning process for plantations and farm forestry that is consistent, equitable and efficient for the industry and local communities." (p.17, Government of WA, 2008b).

In instances where the environmental impacts of such integrated strategic proposals are likely to be significant, there is the opportunity to refer the proposals to the EPA for Strategic Environmental Assessment, under s.38 of the EP Act. In the longer term, there is also the option to increase certainty of land uses by converting the strategic planning outcomes to statutory requirements, in local planning schemes and/or regional schemes.

Also at the strategic level, but from a transport planning perspective, one environmentally responsible modification of MRWA's process would be the automatic consideration of roadside vegetation during the strategic assessment and identification phase of the suitability of roads for freight routes, that is, for use by Restricted Access Vehicles. This approach to transport planning would provide the opportunity to avoid detrimental impacts on remnant roadside vegetation. It is understood that moves towards such a modification could be considered during MRWA's annual update of its *Guidelines for Assessing the Suitability of Routes for Restricted Access Vehicles* (Main Roads WA (2007)).

Prior to the development stage, land use planning legislation may provide other statutory mechanisms to complement the clearing legislation, and assist with achieving sound environmental outcomes. For example, it may be possible to insert a new clause in the Model Scheme Text (Part 8 – Development of Land) to the effect that removal of vegetation within any road reservation requires Development Approval, with decision-making based on clearing regulation principles (separately specified). If this approach is not appropriate, it is likely that there are a number of alternative planning tools which could be proposed, and the EPA encourages the WAPC and the DPI (with their stakeholders) to explore all of these options.

The EPA has found that inadequate resourcing, including the ability of all affected agencies (DEC, MRWA and Local Governments) to attract and retain suitably qualified staff, has led to shortcomings in both statutory compliance (monitoring and enforcement aspects) and education and training.

The EPA understands that the DEC's administration of the compliance requirements of the clearing provisions has been adversely affected both by high staff turnover and budgetary pressures. This is likely to reduce the agency's capacity to audit compliance with the conditions imposed on clearing permits, and follow-up on potential illegal clearing identified either by satellite imagery or by third party complaints. The EPA believes that adequate resourcing is a significant element in achieving across-the-board improvements in environmental outcomes.

With respect to MRWA's monitoring and decision-making processes, refinements could include:

- complementing the existing broad-scale photographic monitoring of the condition of roadside vegetation with a more detailed and more publicly available assessment of vegetation condition, including areas which have been revegetated;
- development of a long-term on-ground method to monitor roadside vegetation, in continued liaison with stakeholders, including the RCC and the Conservation Council; and
- consultation and liaison with the DEC, the RCC and any other relevant agencies to verify that the environmental issues component of their multi-criteria assessment

is up-to-date, and that the issues have been allocated appropriate weightings. MRWA uses the multi-criteria assessment, for example, prior to the investment decision phase of road planning for the *Roads 2025* recommendations, and strategic consideration of roadside vegetation could make it to easier to comply with the clearing regulations at the later stages of the road-building process.

Turning to Local Government resourcing, the current *State Road Funds to Local Government Agreement 2005/2006 to 2009/2010* does not take into consideration the roadside vegetation and its conservation needs. The anticipated negotiation of the next agreement (post-2009/10) could provide the opportunity to consider roadside vegetation requirements within a new agreement, and potentially a new funding category or categories for environmental issues and/or offsets, so that Local Government is adequately funded to meet the costs of compliance with its statutory obligations under the clearing legislation.

The EPA understands that, subject to adequate resourcing, WALGA, DEC, the RCC and the Department of Agriculture and Food intend to undertake a joint road-show to educate and train Local Government officers. Furthermore, it is intended that the information will be presented in a targeted manner, depending on the audience (whether environmentalists, engineers, or contract workers). The EPA supports this action, and, if it proceeds, suggests that consideration be given to inviting other affected stakeholders, such as MRWA and DPI to participate in the presentations, as well as other agency personnel to attend the educational sessions.

The national *Caring for our Country* program brings together the former *Natural Heritage Trust*, *National Action Plan for Salinity and Water Quality*, environmental stewardship and Working on Country programs. Biodiversity has been identified as one of the national priorities for investment under *Caring for our Country*, which has been funded as an ongoing program with a total of $2.246 billion allocated for the first 5 years; base-funding will be provided to regions and the remainder of the funds will be available through competitive bidding. Recently (June 2008), the WA Council of Natural Resource Agency Chief Executives (CONRACE) released a consultation draft of *A Natural Resource Management Plan for Western Australia* for public comment. The expectation is that the State Natural Resource Management (NRM) Plan will minimise fragmented decision-making, set a Statewide framework, and guide government, group and individual effort and investment (including that from *Caring for our Country*) into the six priority areas, one of which is recovery and conservation of WA's biodiversity (Outcome 1) and another the need for comprehensive land use planning (Outcome 5). The published timeframe for the first round of competitive funding indicates that proposals are to be lodged by January 2009; and payments will commence July 2009. The EPA believes this is an ideal opportunity for CONRACE to facilitate the integration of the conservation of roadside vegetation with the other NRM programs, and to encourage agencies and others to bid for funding.

4. Conclusion and Recommendations

The EPA has reviewed the practices and processes relating to regional road upgrades and their potential impacts on the conservation of roadside vegetation.

Roadside vegetation is likely to be subject to increasing pressures and threats from road upgrades related to a combination of economic activity and road safety. Notwithstanding the primacy of road safety, the EPA's position is that roadside vegetation has high biodiversity and ecological linkage values and its retention is critical, and should be considered in any road upgrade.

The EPA's review findings are that: a number of positive outcomes have been achieved since the Minister's request and these positive initiatives should continue; process refinements can be made by the EPA and DEC; and there are opportunities for other agencies and bodies to further improve and refine their processes. The latter opportunities lie in the areas of strategic land use planning, increased resourcing for compliance and educational activities, and incorporating the roadside vegetation issue within the broader integrated framework of natural resource management.

Strategic land use planning which holistically addresses the economic activity together with its related transport requirements would enable consideration of the potential environmental cumulative impacts. It would also provide greater certainty of land use (both for the activity and the associated regional road upgrades) as well as more beneficial outcomes for the environment.

Improvements in environmental outcomes rely in large part on adequate resourcing. Therefore, the EPA is strongly supportive of an adequately-resourced, compliance and enforcement regime for the clearing provisions of the EP Act. Aspects to be considered include the DEC's administration of the clearing provisions (particularly the compliance requirements); refinements to MRWA's monitoring and decision-making processes; Local Government's abilities to implement statutory obligations, including offsets should they be necessary; and education and training of staff and contractors.

The EPA believes the State Natural Resource Management (NRM) Plan and the forthcoming regional NRM strategies present the opportunity to minimise existing fragmented decision-making and investment (including national) through integrating the required planning and funding issues with the NRM programs, and for government agencies to work together with groups and individuals to identify priorities and bid for funding.

Every possible measure should be employed to retain and manage roadside vegetation and, in summary, the EPA's findings include:

- consideration of cumulative environmental impacts would be facilitated if resource industry requirements were linked with associated transport requirements during strategic land use planning;
- if an integrated strategic proposal is likely to have significant environmental impacts, there is the opportunity to refer it to the EPA for Strategic Environmental Assessment;
- consideration of environmental factors during assessment of heavy haulage routes and strategic road-planning will provide the opportunity to avoid clearing and therefore strengthen regulatory compliance;
- land use planning legislation and processes may contain statutory or other mechanisms to complement the clearing legislation;

- adequate, targeted resourcing is required for DEC, MRWA and Local Government for their compliance obligations (effective monitoring and rigorous enforcement) and education and training activities;
- continued improvement of stakeholder and community engagement is encouraged; and
- WA's Natural Resource Management plan and the forthcoming regional strategies provide opportunities to integrate planning and decision-making as well as coordinate bids for the available funding.

The EPA recommends that:

1. The Minister:
- **note the EPA's Report and Recommendations; and**
- **provide copies of the EPA's findings to relevant Ministers and all agencies affected by the issues identified and summarised in the Report, encouraging them to further consider the implications of the issues raised, and where appropriate implement effective measures to address those issues.**

2. The DEC update the existing Memorandum of Understanding (between Main Roads WA and the former Department of Environment), which outlines the referral process to the EPA, in order to:
- **acknowledge the formation of the Department of Environment and Conservation; and**
- **clarify which proposals are now subject to Part V of the *Environmental Protection Act 1986* and which proposals should be referred to the EPA under Part IV of the EP Act.**

3. As part of its natural resource management leadership role, the Council of Natural Resource Agency Chief Executives give this matter attention through:
- **strategic land use planning which integrates transport requirements with resource requirements; and**
- **cooperation between government agencies, groups and individuals so that conservation of roadside vegetation is incorporated in the forth-coming regional Natural Resource Management strategies, thus enabling strategic funding bids.**

Appendix 1

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Appendix 2

Minister’s Request for Section 16(e) Advice

GOVERNMENT OF WESTERN AUSTRALIA

MINISTER FOR THE ENVIRONMENT; SCIENCE

Ref: 5746

Dr Walter Cox
Chairman
Environmental Protection Authority
PO Box K822
PERTH WA 6842

R. Sippe / K. Taylor
For inclusion in work program.
wlc
2/2/06

Dear Wally

REQUEST FOR SECTION 16(e) ADVICE

Please find attached a letter from, Dr Ken Atkins, the Chairman of the Roadside Conservation Committee (RCC).

The RCC is appointed by myself, and includes representation from Government agencies and instrumentalities, local government and community organisations, with a management role or interest in the conservation of roadside vegetation.

I understand that in November 2005, you met with Dr Atkins and Mr Keiran McNamara, the Executive Director of the Department of Conservation and Land Management, to discuss roadside conservation issues. I also understand that through direct representation to you from the Wildflower Society of Western Australia, and in meetings of the RCC, that the issue of regional road upgrades, and the impact that these may be having on the conservation of roadside vegetation has been raised.

This Government is concerned about roadside conservation, and included specific reference to roadside conservation issues in the pre-election policy commitments prior to originally being elected to office. I have also ensured that roadside issues were included in the amendments to the *Environmental Protection Act 1986* with regard to the clearing permit process. Consequently, I am concerned if there is a continued potential for the loss of roadside vegetation as a consequence of a failure in strategic planning and assessment processes.

As suggested by the RCC, I request that the Environmental Protection Authority (EPA) provide my office with advice under Section 16(e) of the *Environmental Protection Act 1986* in relation to the issue of the impact of regional-scale road upgrade works on the conservation of roadside vegetation, and in particular the role that strategic planning and environmental assessment at the

29th FLOOR, ALLENDALE SQUARE, 77 ST. GEORGE'S TERRACE, PERTH 6000
TELEPHONE: (08) 9220 5050 FACSIMILE: (08) 9221 4665

strategic planning stage is having on meeting appropriate environmental objectives with such regional projects.

The letter from the RCC lists a number of regional road upgrade projects. I do not intend that the EPA undertake a detailed evaluation of each of these projects, but rather use them as examples to inform a more general over view of regional road upgrade planning in this State, and how this process is affecting good environmental outcomes.

One area that I believe does require more detailed evaluation, is the operation of Main Roads WA in planning and providing for environmental assessment, their major road upgrade projects. I would specifically appreciate your advice on the appropriateness of the current referral strategy employed by Main Roads, and recommendations on how this strategy could be improved to achieve good environmental outcomes, if any such improvement is warranted.

Thank you for your consideration of this important issue.

Yours sincerely

Judy Edwards

Dr Judy Edwards MLA
MINISTER FOR THE ENVIRONMENT; SCIENCE

25 JAN 2006

Dr K Atkins
9334 0425
9334 0278
kena@calm.wa.gov.au

The Hon Dr JM Edwards MLA
Minister for the Environment
29th Floor, Allendale Square
77 St Georges Terrace
PERTH WA 6000

Dear Minister

PROTECTION OF ROADSIDE VEGETATION

As you are aware the Roadside Conservation Committee (RCC) is concerned with the protection and conservation of roadside vegetation in this State. I am also aware that you are similarly interested in roadside conservation, and were instrumental in achieving specific provisions for roadside vegetation protection under the amendments to the *Environmental Protection Act 1986*. The Committee was appreciative of your efforts in this regard.

In addressing its role, the Committee acknowledges that roadsides are primarily for the purpose of safe vehicular transportation, but especially in areas of intensive development where any remnant vegetation is of high value, the Committee seeks an approach to road management that also conserves this vegetation asset that is valuable from a biodiversity, cultural and economic perspective.

Despite the work undertaken by the RCC and the initiatives of your Government, the Committee remains concerned at the continuing loss of roadside vegetation, either through assessed projects, exempt works, or illegal clearing through poor knowledge of legislative requirements. The Committee notes the annual clearing limits provided to Main Roads in their recently granted clearing purpose permit, which provides for up to 1225 ha of roadside vegetation to be cleared annually, including 175 ha in the Wheatbelt. This equates to approximately 4,000 km of 3m wide roadside vegetation Statewide and nearly 600km of roadside vegetation in the Wheatbelt, potentially able to be cleared annually. This level of continued vegetation clearing would change the nature of the Wheatbelt for ever if not adequately assessed for its potential environmental impact.

In recent years the Committee has become increasingly concerned over a number of major road upgrade programs in the southwest, that have the potential to cause significant loss of roadside vegetation in areas where this vegetation has particular value. These areas of concern are:

- The proposed development of 'lime routes' that were to create major east-west transport corridors for the road transportation of agricultural lime. A number of these corridors were to result in the upgrade of roads with significant and high quality vegetation.

- The requirement for truck transport of blue gum harvesting from south west plantations. These plantations have been established with minimal regional planning context, and very little consideration of the future harvesting requirements. As harvesting is now coming on stream, small rural roads need to be upgraded for short term harvest transport requirements, with consequential impacts on the roadside vegetation in areas such as Mt Barker, Albany and Plantagenet.

- The recent announcement by Cooperative Bulk Handling (CBH) to close a number of satellite wheat bins, thereby requiring farmers to drive greater distances to centralised receival depots. Apart from the social and economic impacts on the farming community, this decision will change the transport patterns in rural areas, necessitating the upgrade of roads, and the loss of roadside vegetation (as well as additional clearing to expand the residual wheat bins).

- The major road upgrade program of Main Roads WA. While Main Roads has many projects referred to the EPA for assessment, they will rarely refer a whole road upgrade project due to its size and complexity. Rather, they will break the project up into smaller components for separate assessment, with each part being, by definition, of less overall environmental significance, and therefore more likely to be approved.

On 25 November 2005, Dr Wally Cox met with Mr Keiran McNamara and myself to discuss the issue of roadside clearing. This meeting was in response to a meeting that Dr Cox had held with the Wildflower Society of WA where the issue of the Main Roads road upgrade program was raised.

The specific issue raised by the Wildlfower Society was in relation to the upgrade of the Brookton Highway. In this situation, upgrade works had been done previously in sections, and Main Roads now are seeking to realign the highway through an important area of remnant vegetation, including a nature reserve at Gorge Rock. The location of this realignment is preempted by the previous works, and provides the most cost-effective option, but at greater environmental cost.

The concern with this project assessment is that I understand the entire road upgrade program was originally referred to the EPA, but subsequently withdrawn due to its complexity, and presumed overall significant impact. The EPA is now dealing with a smaller (but still significant) issue, but one that is constrained by previous works.

At the meeting with Dr Cox, I expressed my concern at the lack of planning in this range of major road upgrade projects, and sought a means whereby a strategic environmental review of road developments, such as those listed above, could be undertaken. Dr Cox suggested that the only practical means of undertaking such an assessment was through yourself requesting advice on this issue from the EPA under Section 16(e) of the Environmental Protection Act.

Consequently, I am writing to you to ask if you would request such advice from the EPA. While there are a number of strategic road upgrade issues, I suggest that that the most appropriate issue to seek advice on would be the strategic planning and referral approach for major road upgrades by Main Roads, as this would also inform the process for other strategic road upgrade projects. However, it would also be beneficial to roadside conservation if other regional road issues, such as those listed above, could also be included in this advice.

I appreciate your support for roadside conservation, and look forward to the outcome of this request.

On a personal note, I am saddened to hear of your decision to resign your portfolio as Minister for the Environment; Science. On behalf of the RCC, I would like to wish you well in your future pursuits, and re-iterate the Committee's appreciation of the positive work that you have done for the environment of Western Australia, and in particular for the conservation of roadside vegetation.

Yours sincerely,

Dr KJ Atkins
Chairman

January 2006

Appendix 3

Regional-Scale Road Upgrades – The Environmental Protection Authority's Review

1. Background and Responsible Agencies

The Government agency responsible for strategic transport planning in WA is the DPI. However, DPI focuses on new infrastructure proposals, which are subject to statutory environmental impact assessment referral requirements under the EP Act. The SEA form of assessment could be used for strategic proposals, given that there would be a single proponent, but often formal assessment is not necessary because the DEC and other stakeholders (such as Department of Water) are involved during the route identification process, and environmental issues are resolved prior to the design phase.

The Minister's request relates to upgrade works on existing roads rather than new road works. Planning and management of the WA road network and its upgrade works is shared by MRWA and Local Government. For example, MRWA and Local Government recently produced *Roads* 2025, a plan for the rural regions of Western Australia[11]. *Roads 2025* considers the road network in two parts: State Roads and Local Government Roads. Road development strategies for the State Roads are based upon the strategies defined in Main Roads' Road Asset Planning Investment Database. Local Governments reviewed and updated the road development strategies for the Local Government Roads. The road strategies are based primarily on the established and predicted road transport need and established transport network, and are in turn driven by the provision of safe roads to support economic development and population growth. Environmental issues are integrated into higher level road planning through a multi-criteria assessment of the environmental issues pertinent to proposed projects as input to investment decision making. However, the extent to which roadside vegetation is considered is unclear.

The MRWA's and Local Governments' planning and referral processes are outlined below. Both MRWA and Local Government undertake another road planning activity, namely, the determination of routes for heavy haulage vehicles. It has the capacity to impact on the conservation of roadside vegetation, and is also discussed below.

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[11] The preceding *Roads 2020* regional plans – for the Pilbara, Kimberley, Great Southern, Goldfields-Esperance, South West and Peel, Midwest, Wheatbelt North and Wheatbelt South – were prepared by a number of Working Groups with representation from Main Roads, Local Government, Department of Transport, Aboriginal and Torres Strait Islander Commission, Ministry for Planning, Westrail and various Development Commissions. The process also involved input from steering and advisory groups and the community. The then Departments of Environmental Protection and Conservation and Land Management were represented on Steering Groups and Advisory Groups. *Roads 2025* is the first review of *Roads 2020.*

Submissions were received from other interested parties such as mining companies and tour operators. The strategies took into consideration predicted and potential growth in population as well as resource development and tourism. Road proposals were developed in the context of the broader transportation needs and development of each region.

Roads were prioritised against criteria including land use planning, population growth, industrial development, freight transport, recreation and tourism (Main Roads WA website). Many proposals are staged to allow for progressive upgrading to meet changing road usage needs.

2. Main Roads Western Australia Process

MRWA is responsible for 12% of WA's roads (including the National highway network). These are the major roads defined as highways or main roads in accordance with the provisions of the *Main Roads Act 1930.* The *Main Roads Act 1930* charges MRWA with providing *safe and efficient road access that will enhance community lifestyles and ensure economic prosperity* (MRWA website). Furthermore, MRWA has a statutory obligation, under Section 38 of the EP Act, to refer to the EPA any road upgrade which may have a significant impact on the environment[12].

MRWA employs a number of regional environmental officers in addition to a significant Perth-based planning and environmental staff. They are involved primarily in the planning and development stages of the road management process.

MRWA operates with a three tier 'planning' or project hierarchy. "Road Planning" is the strategic or regional tier of planning and comprises both alignment selection and alignment definition. The more detailed planning phase is known as "Project Planning", and this is followed by "Project Implementation". MRWA's project planning processes are supported by a number of environmental measures, guidelines and actions designed to assist with the retention or rehabilitation of roadside vegetation. A flowchart (Figure 1) illustrates the decision-making process and the following table (Table 1) outlines the referral timing and outcomes.

Table 1: MRWA planning, timing of referral to EPA, and outcomes

Main Roads Project Development		**Referral Process**	**Outcomes**
Road Planning	Alignment Selection	Section 16 --------- Section 16 & Section 48(A) or Section 38	Advice on environmental factors, their management, and selection of alignment options --------- Advice on environmental factors, their management, and selection of alignment options Environmental assessment, approval and setting of environmental conditions under Planning Scheme Environmental assessment, approval and setting of Ministerial conditions
	Alignment Definition & Reservation		
Project Planning		Section 38	Environmental assessment, approval and assigning of Ministerial conditions, development of Environmental Management Plan
Project Implementation			Implementation of environmental management requirements

Source: DoE & MRWA Memorandum of Understanding, 2003 - Schedule 1, p.2

[12] Where reservation of the land is required for **new** roads, there is also a statutory requirement under s.81 of the *Planning and Development Act 2005* that amendments to regional and/or local planning schemes be referred to the EPA.

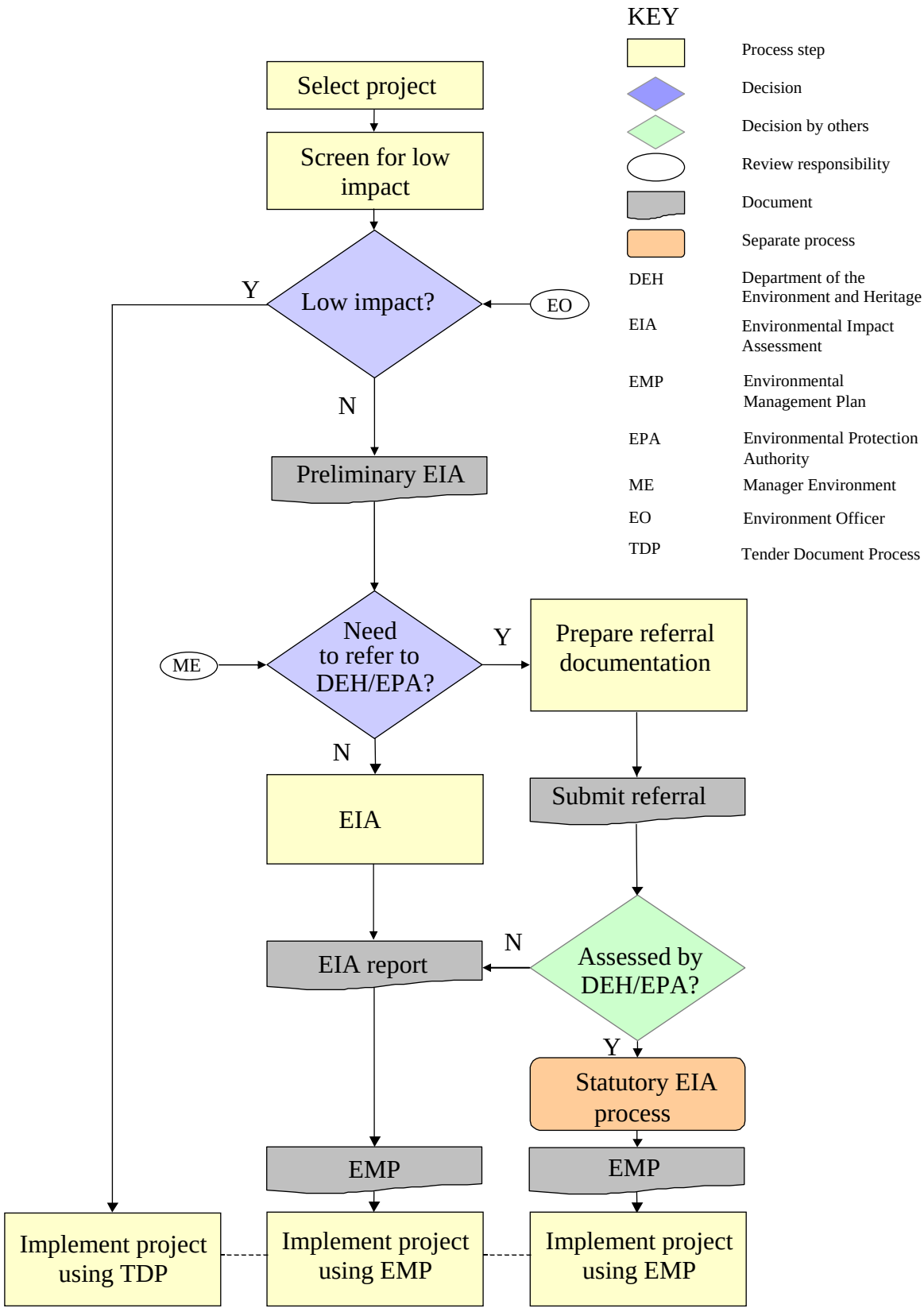

Figure 1 Flowchart of Environmental Management for Road Projects

Source: Page 9 of Main Roads Western Australia, 2004. *Environmental Guideline: Environmental Assessment and Approval*, 1 November 2004, Perth

2.1 MRWA's Road Planning Process (Strategic)

Given the statutory environmental obligations under the EP Act, MRWA generally seeks early input to the "Road Planning" process and advice from environmental agencies, including the respective regional offices. Discussions cover the major environmental issues, including biodiversity, identification of any required surveys or work, and whether the proposal should be referred to the EPA. As illustrated in Table 1, either s.48A and/or s.38 referral of proposals may occur at this stage of planning, or the following stage.

MRWA's position accords with the EPA's position (see Figure 2), that is, avoidance of significant environmental impacts is a priority, even if it involves road re-alignments or other design amendments. For example, one objective of MRWA's *Environmental Policy Statement* (June 2004) is to "Apply an approach of 'avoid, minimise and mitigate', in order of preference, to the management of environmental impacts associated with road construction projects" and in addition the same principles are incorporated in Condition 6 of the Purpose Permit granted to MRWA. Therefore, impacts on vegetation, which often require re-vegetation or offsets, are considered to be measures of last resort, when no other options exist (also see p.11, MRWA, 2007c). A current example is provided by the proposed upgrade of Great Northern Highway between Muchea and Wubin, where MRWA is endeavouring to redesign alignments in order to avoid areas of high environmental significance.

The position (and the subsequent Purpose Permit's requirement) is implemented through various actions, some of which are incorporated in MRWA's Annual Business Plans, which aim to identify strategic actions and considerations prior to the planning phase for road upgrades. For example, the 2006 Business Plan (MRWA, 2006b) includes an action, "E1 – Improve early identification of environmental constraints in rural road corridors where extensive upgrades are likely within the next 10-15 years". The project involves desktop assessment to ascertain whether projects are likely to have significant impacts on roadside vegetation. The assessment includes consideration of vegetation condition, and whether Threatened Ecological Communities or Declared Rare Flora are present.

If, at this early strategic stage of planning, the preliminary assessment shows potential significant impacts, then there is better opportunity to consider options and their cost implications prior to establishing final budgets. Options include widening of the road reservation, realignment outside the existing reserve, bypasses and alignment modifications[13]. Outcomes of proposed actions are available for public scrutiny (see, for example, MRWA's annual *Public Environment Reports*) and are also subject to both internal and external auditing.

[13] It is interesting to note that design innovations frequently occur through large initiatives (generally new roads), and are then available for later use in other smaller and/or upgrade projects. One example is the introduction of flexible wire rope safety barriers during the construction of the new Perth-Bunbury road. The wire rope barriers reduce the amount of clearing needed for safety reasons, so one benefit arising from their use is retention of native vegetation.

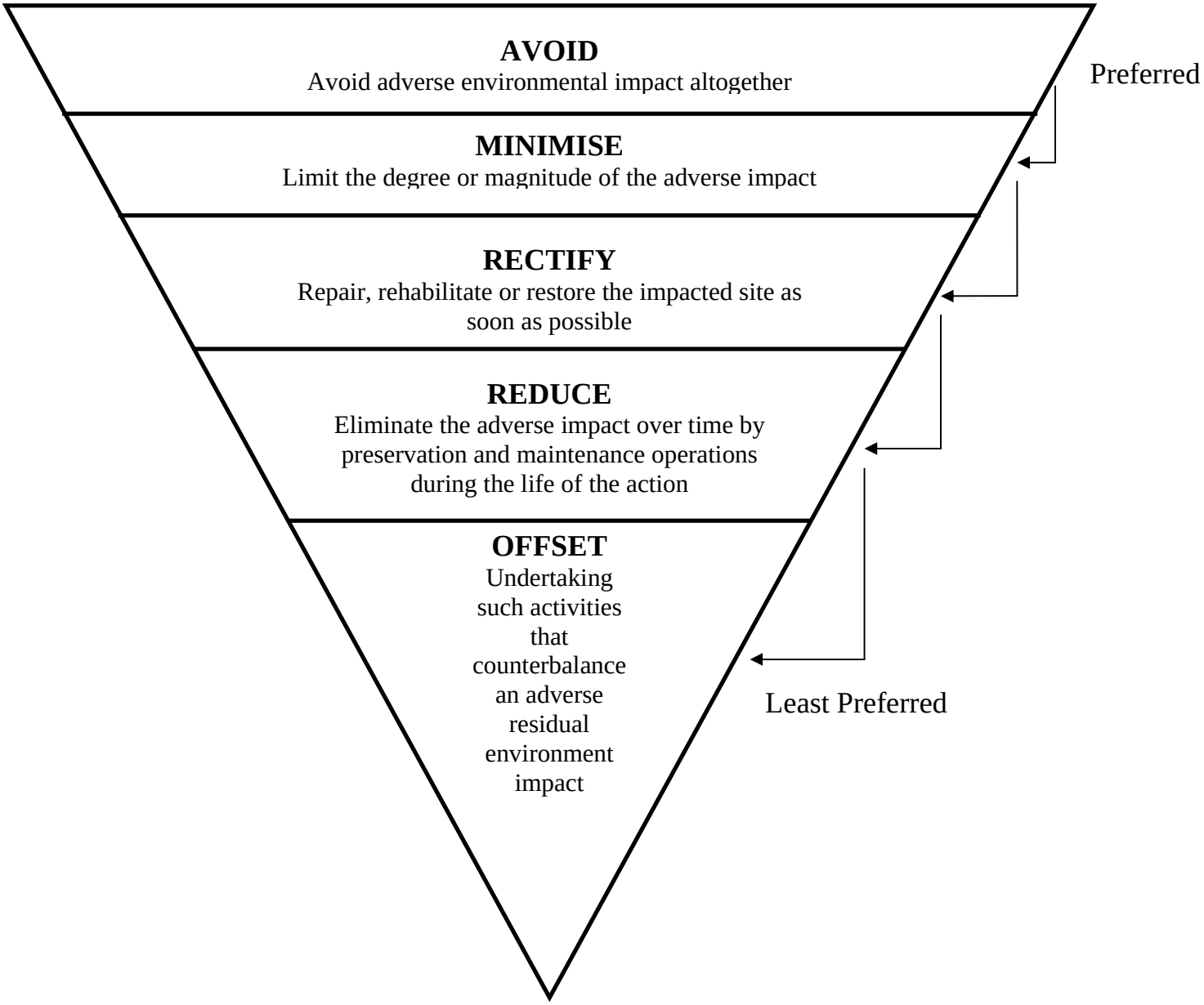

Figure 2 Environmental Decision Making

Source: Extrapolated from Figure 2, p.20 EPA's *Position Statement No. 9 – Environmental Offsets*, January 2006

More recently, the 2007 Business Plan (MRWA, 2007e) listed six environmental management initiatives, including "E1 – Engage key stakeholders on improving corporate environmental performance" and "E4 – Maintain the condition and extent of native vegetation within road reserves." One of the targets for the latter is to develop a long-term monitoring approach for roadside vegetation, by June 2008.

2.2 MRWA's Project Planning Process

As previously mentioned, MRWA uses internal processes to consider all road proposals in terms of their environmental impacts (Figure 1), together with the *Memorandum of Understanding* (MoU) between the Department of Environment (now DEC) and MRWA (1983; updated September 2003). The MoU's purpose is to ensure that:

- only those projects requiring a decision as to whether assessment is required by the EPA are referred to the EPA under Part IV of the EP Act 1986; and
- those projects with minimal impact are not referred.

The spirit and intent of the MoU still operate, although it precedes the:

- formation of the DEC;
- 2004 amendments to the EP Act, including introduction of the Part V requirement for a clearing permit, the Regulations for the Clearing of Native Vegetation; and
- EPA's current review of its Environmental Impact Assessment policies and processes.

In essence, if a project potentially has an environmental impact, MRWA undertakes a preliminary environmental impact assessment (PEIA) to determine whether it requires referral to the EPA for assessment under Section 38 of the EP Act. If it does not require referral to the EPA, then a full internal MRWA environmental impact assessment (EIA) is undertaken and an Environmental Management Plan prepared for implementation. On the other hand, if the proposal has no environmental impact it proceeds to tender, incorporating standard environmental management specifications.

There are road proposals which do not require referral to the EPA under the MoU agreement, but whose impacts may be at variance with the ten clearing principles. In such cases, Condition 8 of the MRWA Purpose Permit requires that submissions be invited from designated parties, including the Conservation Council of WA and any other interested environmental or community groups (see Appendix 4).

For safety reasons, MRWA has developed a *Guideline for Assessing Vegetation within Recovery Zones on Established Roads* (MRWA 2006c). It involves the assessment of trees considered to be a hazard to road users within the Recovery Zone on rural or open roads within MRWA control. The Recovery Zone is located within the Clear Zone and is to be free of solid objects. The guideline therefore applies to trees and 'continuous tree groups' only and does not advocate the removal of undergrowth or shrubs. The Clear Zone is defined as "the horizontal width of space available for the safe use of an errant vehicle within the verge area and is measured from the nearside edge of the traffic lane"

(MRWA 2006c). Current MRWA general practice is to defer the provision of recovery zones until an upgrade is required, at which time all impacts, including environmental, are assessed and referred to the EPA if they may be significant (Limb, *pers.com.*).

In order to provide an overview and focus for activities such as revegetation of historical disturbance and improvement of degraded road reserves, MRWA is developing Regional Revegetation Plans for various regions (MRWA 2006e). Plans for the Wheatbelt South, Wheatbelt North, Great Southern, and the South West regions have already been developed.

At a strategic (network) level, MRWA identifies areas with special features along roads such as Declared Rare Flora or Threatened Ecological Communities with markers which alert contractors to their presence. Currently there are approximately 400 such locations across its network (MRWA 2006g).

Monitoring is one of the requirements of the State-wide clearing permit. In order to rate vegetation condition, MRWA videotapes all roadsides within the State network on an annual basis (MRWA 2005). The practical application of this method of rating vegetation condition is for PEIA assessment, but the current reporting process doesn't allow a fine level of strategic reporting. MRWA has advised its intention to improve the reporting of vegetation condition, and also its consultation with stakeholders to develop an approach to long-term on-ground monitoring of roadside vegetation.

MRWA acknowledges that despite all the requirements, processes and guidelines, there are occasions when issues have not been well-handled, and the delivery of environmental outcomes has not been viewed by all parts of the community as satisfactory or even acceptable. One example where public consultation and other technical matters were poorly handled is the Gorge Rock Nature Reserve section of the major up-grade of Brookton Highway between Corrigin and Hyden, in MRWA's Wheatbelt South region. This was one of the issues raised in the RCC correspondence forwarded with the Minister's request. The upgrade was referred to the EPA in 2003 with a level of assessment at *Not Assessed – Public Advice Given*. MRWA's actions caused considerable community anger and disappointment over the impacts on the Nature Reserve as well as Salmon Gums to the east of Gorge Rock, and have been a catalyst for community action. To prevent any similar occurrence, MRWA has subsequently taken remedial action, including staffing changes and the appointment of an environmental officer. In addition, based on principles enunciated in its *Community Engagement Policy* (2006), MRWA is endeavouring to take a strategic approach with stakeholder engagement, and the merit of their revised consultation policy has recently been recognised by the Civic and Citizens Branch of the Department of Premier and Cabinet. MRWA also held a Right Roads stakeholder workshop to help progress the detailed actions for their new Strategic Plan.

2.3 MRWA Permits and Exemptions

MRWA was granted a Purpose Permit for clearing for planned project works in December 2005. The permit was amended on appeal and some data subsequently updated (CPS818/4, Government of WA 2006 – see Appendix 4). The permit provides greater clarity for vegetation clearing and greater assurance that MRWA follows environmentally acceptable processes. The primary requirements of the Purpose Permit are to:

(a) "avoid the clearing of native vegetation;
(b) minimise the amount of native vegetation to be cleared; and
(c) reduce the impact of clearing on any environmental value." (as illustrated in Figure 2).

A view has been expressed that, consistent with the notion of continuous environmental improvement and adaptive environmental management, periodic evaluation of the adequacy of these measures be undertaken. The statutory requirement is that the permit be reviewed when it expires (that is, after five years). More importantly, a condition of the existing MRWA permit is that every two years they undertake an annual internal audit, complemented by an external audit by an accredited lead auditor. As a consequence, issues have been identified, and continuous improvement amendments have already occurred during the term of the permit, which is currently in its fourth version.

The permit has been tailored to accord with the process used by the Native Vegetation Conservation Branch of the DEC, so all clearing proposals are assessed against the ten clearing principles. If a proposal may be at variance with one or more of the clearing principles, MRWA must undertake environmental impact assessment and seek submissions from a specified number of state government agencies, local government and environmental groups. Offsets also apply for any clearing that may be at variance with the 10 principles, and MRWA must submit an offset package for the approval of the CEO prior to undertaking the clearing.

The permit outlines the processes to be adopted for offsets, if they are applicable. Offset principles are clearly articulated and the offset proposal has to be provided to, and approved by, the CEO of the DEC, prior to undertaking any clearing related to that offset. Since the introduction of the new clearing legislation, six proposals have required offsets, and five have been approved by the CEO.

There are measures in place for both monitoring and auditing. The permit holder must provide to the CEO of the DEC, on or before 30 June each year, a written report of the activities undertaken under the permit. Although the reports are not public, they can be accessed through the *Freedom of Information Act 1982*. Both internal and external audits are required, to the satisfaction of the DEC. MRWA reports publicly in its annual *Public Environmental Report*, and the reporting process incorporates data verification by external consultants.

In addition to the MRWA Purpose Permit, Schedule 2 of the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004* provides both the MRWA and local governments with an exemption for clearing in existing transport corridors for maintenance purposes only, to the extent lawfully cleared in the previous ten years. A guide to assist local governments and other road managers to understand their legal obligations has been prepared with input from a working group including representatives from the RCC, Conservation Council of WA, MRWA, WALGA and the Office of Road Safety. This guide *A Guide to the exemption for clearing native vegetation for maintenance in existing transport corridors* is available on the DEC's website at www.dec.wa.gov.au/nvc under Guidelines.

MRWA has also been granted a Purpose Permit for works required as the result of an emergency (CPS817/1).

3. Local Government Process

Roads which fall under the jurisdiction of Local Governments in WA constitute 88% of the road network and comprise approximately 125,500 km. These roads, generally referred to as local roads, range from major distributor roads to unsealed roads servicing farms, and the extent, quality and importance of the native vegetation in their reserves varies considerably[14]. Local roads are managed and funded by WA's 141 Local Governments, with assistance from the State and Commonwealth governments in recognition that revenue generated from the transport function (for example, fuel taxes, license fees, tariffs on produce, and goods and services tax) are collected at a State and Federal level, but rely on provision of services at a local level.

A particular difference between MRWA and Local Government planning processes is that whereas MRWA deals with a small number of high profile, well funded projects on an annual basis, Local Government typically deals with a large volume of small budget projects over a far greater area and under a more diverse range of conditions. The ability of Local Government to plan is therefore far more complicated, and the capacity of Local Government to do so is often lower.

3.1 Strategic Regional Funding and Planning for the Local Road Network

The majority of regional and higher level road improvement in rural areas is funded jointly by State and Local Government. These types of projects generally have the largest

[14] Although this report focuses on the higher order distributor road network, the comments are equally applicable to lower order roads.

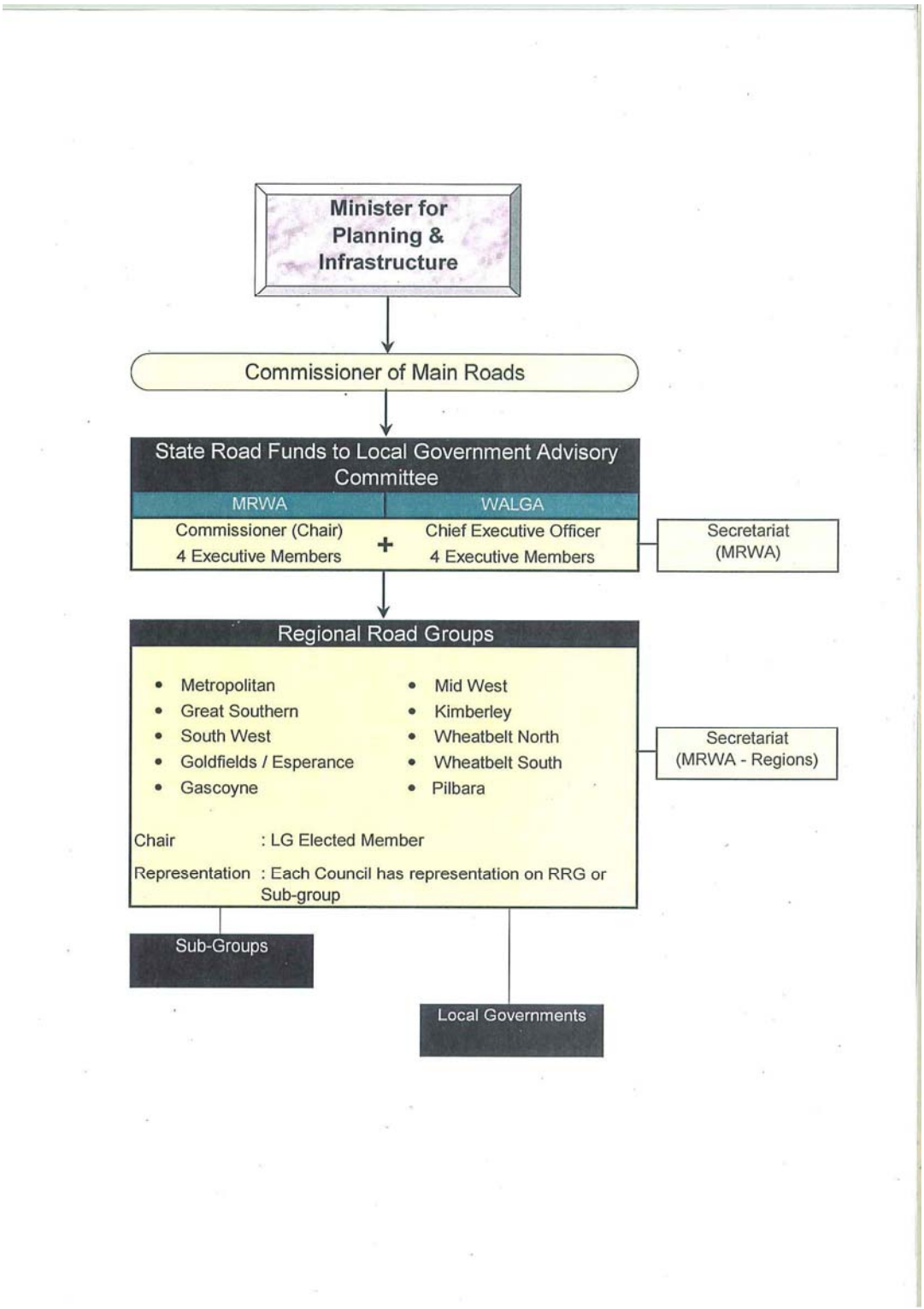

Figure 3: Management Structure to distribute State Road Funds to Local Government

Source: Page 6, Main Roads WA, 2006 *State Road Funds to Local Government Procedures*

impact on native vegetation. The *State Road Funds to Local Government Agreement 2005/2006 to 2009/2010* (Agreement) establishes a funding mechanism and processes to distribute funds to the regional road network. Under the Agreement funding is allocated within three categories, each of which has a specific purpose and methodology to allocate funds.

Under this Agreement ten Regional Road Groups (RRGs) [15] are established to provide Local Governments with the opportunity to participate in strategic road planning at the regional scale, and, through delegation under the Commissioner of Main Roads' statutory powers, a voice in how monies are spent for regional road projects. RRGs are responsible for assessing road funding needs, annual distribution of State funds[16] and monitoring and reporting (Government of WA, 2005). RRGs can further delegate certain functions to Regional Sub Groups. MRWA has administrative responsibility for the Road Groups and for the provision of technical advice on a regional level. It must be noted that Local Government is required to match funds for Road Project Grants from their own source revenue - $1 of local funding for every $2 of State funds.

The RRGs are charged with:

- establishing a five year plan for distribution of State road funds in the region;
- developing methods for annual distribution of road funds to Local Government road;
- applying criteria developed for *Roads 2025*, or the functional road hierarchy (MRWA, WALGA, 2005), to determine a network of roads that are eligible for road project grants;
- allocating funds to Blackspot Projects, a specific program aimed at improving road safety[17].

The quantum of State Government funding available to RRGs is based on a percentage (27%) of vehicle licensing fees collected by the State. The level of funding was established by the Minister for Planning and Infrastructure following discussion between

[15]

Region	**Number of LGAs**
Kimberley	4
Pilbara	4
Gascoyne	4
Goldfields/Esperance	9
Midwest	18
Wheatbelt North	25
Wheatbelt South	19
Great Southern	13
South West	16
Metropolitan	30

[16] Through the provision of Road Project Grants, RRGs distribute funds within their region to projects on a priority basis. As a rule of thumb the funds are applied to:

- Maximise benefits to the community;
- Preserve, improve and extend the road system; and
- Comply with the obligations of the Commissioner of Main Roads under legislation.

[17] WALGA has advised that the when the current permit system under the Clearing Regulations was introduced, there were significant delays in the undertaking of Blackspot Projects on local roads. DEC procedures are being modified to prioritise applications where safety is an issue.

the State and Local Government and does not reflect the costs of compliance with the clearing provisions of the EP Act (estimated to vary between 7 and 25% of normal road costs). Compliance costs are currently being met from the grants program and local government funding, with a consequent reduction in the delivery of road projects. There is currently no provision to fund environmental assessment and responses on other road projects, except from municipal rates. It is anticipated that a new agreement will be negotiated for the post 2009/2010 period.

Strategic local road planning is critical to avoid detrimental environmental impact of regional-scale road upgrade works on roadside vegetation. Although the current clearing process has raised, and continues to raise, the profile and importance of the environment in the industry, from a Local Government perspective the system does not:

- lead to strategic natural resource management planning, linking native vegetation requirements to environmentally sustainable outcomes;
- holistically balance environmental impacts with economic need, road safety and functional requirements;
- provide realistic skill-based and resource capacities within Local Government to undertake this environmental assessment work; for example, the Local Governments in the best position to identify and preserve native vegetation (small rural Shires) are the least capable in terms of expertise and resources to implement that protection, but the Local Governments with the best capacity have the least opportunity;
- allow for flexible and timely responses and targeting of resources to high value, strategic matters; and
- allow for cost-efficient and timely delivery of road projects.

The EPA has been advised that other related issues faced by Local Governments include lack of environmental data, lack of information on gazetted and ungazetted roads, process duplication and little coordination, lack of a strategic approach for offsets, lack of access to skilled staff and financial support, and little or no training and education for Local Government and the public.

The challenges currently faced by Local Governments include how to:

- access current mapping/survey information and environmental data to inform strategic decision making;
- encourage balanced holistic decision making;
- tap into expertise of various agencies, such as the DEC, MRWA; and
- source adequate resources, including funding, suitably qualified people and appropriate tools, in order to comply with the legislation.

The WALGA has advised the EPA that it is endeavouring to develop balanced decision-making through strategically linked consideration of regional biodiversity assets and road reserve capital works programs, including the associated engineering standards. To this end, a pilot project is underway, examining one project in the Shire of York to illustrate problems and identify potential solutions to meet environmental and road policy objectives (noting that, in the interim, some issues may have been resolved). It is hoped that in the future the outcomes can be built-upon with a regional pilot project. Such a

study could include an audit to identify existing gaps in environmental tools accessible by Local Government, including mapping; and address those gaps as well as development of templates to ensure consistency across the sector and reduce duplication of effort; incorporation of roadside conservation assets into the Local Government road asset software management systems, and education and training. However, the transfer and implementation of information gained from this pilot project to the many Local Governments in WA would also need to be resolved.

3.2 Local Government Permits and Exemptions

A number of Local Governments have been granted permits for clearing. Of 185 applications considered by 20 May 2008, 141 (76%) have been granted permits, 27 have been withdrawn, 8 (4%) are currently being assessed and some other action has been taken on 9.

Purpose permits vary according to the local circumstances and the particular areas required to be cleared. The permit holder is required to comply with the Assessment Sequence and the Management Procedures set out in the permit. It covers issues such as the avoidance, minimisation and reduction of clearing where possible (see Figure 2), dieback and weed control and revegetation requirements. Record keeping and reporting procedures are similar to, but not as detailed as the MRWA permit.

4. Heavy Vehicle Road Use and Route Determination

An important use of the road network is heavy vehicle transportation of produce from rural enterprises (such as plantation timbers or agricultural lime) or from agricultural pursuits (for example, horticulture, livestock, grains) or industry (extractive industries, industrial products, building materials) to markets or distribution points.

Trucks up to semi-trailer size are considered to have an existing right to use the road network, but in the pursuit of economic efficiency, the transport industry is using larger and heavier vehicles to transport goods. Larger vehicles require greater road space and pavement strength.

Permits are required for trucks of a larger size, that is, for all operators of Class 2 and 3 Restricted Access Vehicles (RAVs) to use the road network (MRWA 2007a). This covers vehicles such as a B-double, road train, truck and trailer, livestock vehicle or car carrier (MRWA 2006a). The Class 2/3 Notice was developed in close consultation with Local Government (Walker 2006). Each heavy vehicle route is classified by MRWA and approved for use by specific types/classes of heavy vehicles. Maps of the various route classifications are available on the MRWA website and on CD-ROM. In general, the larger the vehicle, the smaller the available network.

Any determination to expand or reduce the heavy haulage network “will be done with a view to developing the needs of industry, Local Government, Government and the

expectations of the broader community" (MRWA 2006a). That is, expansion of the heavy vehicle network is being driven by the need for industry to remain financially competitive, which is often an economic imperative in remote rural communities. Community considerations such as noise, vibration, smell and dust are included in the *Guidelines for Assessing the Suitability of Routes for Restricted Access Vehicles*, and therefore taken into account during the assessment of the suitability of roads for heavy vehicle routes, but other environmental factors, including vegetation, are not considered (MRWA 2007d).

A large percentage of the existing road network was designed at an engineering standard lower than required to service modern heavy haulage, and adding roads to the heavy haulage network must be considered in terms of the ongoing maintenance costs and upgrading (Heavy Vehicle Operations Newsletter MRWA 2006e). If upgrading includes widening, there may be consequential detrimental impacts on the conservation of roadside vegetation, but under the MRWA Purpose Permit conditions, and as outlined in Figure 1, an internal MRWA environmental impact assessment would be undertaken, with referral to the EPA under Part IV of the EP Act if the impact may be significant.

In 2006/07, $2 million from the Rural Road Project Grant (Category 1) allocation was set aside to fund roads servicing the timber industry (TIRES), Aglime routes and for Grain Logistics (p.6 Govt of WA Agreement, 2005/2006). The Agreement states that the funding allocation will be reviewed as part of the overall review of the distribution methodology for allocating Road Project Grant funding to Rural Regional Road Groups.

5. Specific freight uses and safety issues

5.1 Lime routes

Six routes were identified for potential routes to transport agricultural lime from the coast to the wheatbelt region. The routes were:

Route 1: Lancelin to Northam Heavy Haulage Route
Route 2: Lancelin to Goomalling
Route 3: Cervantes to Burakin Heavy Haulage Route
Route 4: Jurien to Dalwallinu Heavy Haulage Route
Route 5: Greenhead to Latham via Coorow
Route 6 Coolimba to Peronjori

The limited available funding has forced prioritisation and staging. In 2002 a Community Consensus Forum was held to assess whether Route 1 or Route 2 was the better. Route 2 was selected for funding but the work has not yet been completed. There has been no work to date on the other routes.

Any road works requiring clearing of native vegetation would be assessed by the MRWA or Local Government using the process in the Purpose Clearing Permit outlined above.

5.2 Timber industry transportation

The timber industry can be divided into three main categories – native timber harvesting, hard wood plantations (generally Tasmanian blue gum) and soft wood (generally pine). Native timber harvesting is largely limited to the operations of the Forest Products Commission who operate under a separate set of environmental controls mainly using Forestry Roads under the care and control of the DEC.

The Tasmanian blue gum plantation industry is a rapidly growing industry in the great southern and south west region of Western Australia. The plantations have been established primarily to produce woodchips for export in the manufacture of paper pulp, and the plantation boom is, in part, consequent to restrictions on the harvest of Native Timbers and ban on old growth logging.

Consequent to the transition from Native Forest harvest to blue gum plantation harvest there has been a shift in road transport from established forestry tracks and haulage routes to private properties accessed by the public road network. This has resulted in a demand to upgrade existing minor and major roads to provide heavy haulage access.

A report on the infrastructure requirements of the industry (TIRES, 2000), assumed the logs will be transported from plantations to chip mills at Manjimup, Donnybrook and the industrial site of Mirambeena near Albany. After processing, the logs will be transported to the ports of Bunbury and Albany by rail. Subsequently the rail link from Manjimup and Donnybrook to Bunbury has been closed and the industry is now reliant on road transport.

In terms of road infrastructure, the report found that the local road network had 416 local roads of which 2,517 kilometres were of inadequate standard for the transport of the blue gums. The State road network upgrading and renewal had been slower than demand and needed to be accelerated as well as new transport links provided for the industry transport needs (TIRES 2000).

Funding to upgrade the roads to the required standard has not been available resulting in Local Governments taking a fairly reactive and limited response (essential works only) to the timber industry needs. Consequently opportunities and resources to plan works and take proactive roadside vegetation management steps have not been available.

Problematically many of the affected roads are located near, or within, native forest areas, often with high quality roadside vegetation which is acting as a buffer to State Forest or National Park.

5.3 Grain routes

The grain industry is currently in the process of deregulation and reform which is calling into question previous assumptions about the transport function. Economic efficiency of the transport function is a major consideration.

The Grain Freight Network Review is currently reviewing the grain network. This review is conducted by the Grain Infrastructure Group chaired by the Department for Planning and Infrastructure. The review is examining the economic rationale of shifting grain transport from the rail to the road network in some locations. Recommendations have been made to the Minister for Planning and Infrastructure regarding the transport of grain on the rail network, however, a decision has not yet been made by the Minister. Depending on that decision, a number of other issues will need to be addressed including community and social impacts and whether roads needs to be rationalised and upgrades or closures put into effect. MRWA is representing road transport issues and there is no representation of local communities.

One issue which has to be considered in the grain network is the rationalisation of wheat bins by Cooperative Bulk Handling (CBH). Many of their smaller bins are being closed or not replaced and others are currently being enlarged. The DEC has received a number of applications for clearing of vegetation for enlargements. There are transport implications associated with these larger wheat bins and closures, as larger trucks will travel on local roads which will require widening. In responding to requests for such widening, local governments must apply for their Purpose Clearing Permits.

5.4 Black Spot Program

The Black Spot Program is a federal and state initiative targeting road safety on both highways and local roads. The program is based on documented accident statistics and scientific evaluation of roadside hazards and the development of targeting responses to prevent accidents and reduce severity of accidents. The program emphasises low cost, quick solutions to road safety hazards, and often involves the clearing of native vegetation either as a requirement to implement other works, or because the roadside vegetation is identified as a road safety hazard.

There is an element of urgency and lack of ability to proactively plan black spot works inherent in the program, which is deliberately intended to be quickly responsive to road safety issues. There is also a level of political and social sensitivity and risk, in that any process or decision delaying or limiting the delivery of safety improvements could potentially come under coronial scrutiny. The black spot program also most directly encapsulates the conflicting requirements of road safety and preservation of the roadside environment.

The MRWA, Local Government and the DEC have all worked proactively towards streamlining and prioritising the vegetation clearing permit system for black spot projects.

Appendix 4

Government of WA (2006). ***Clearing Permit CPS 818/4, Commissioner of Main Roads – Clearing for project activities***

GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose permit number:	CPS 818/4
Permit holder:	Commissioner of Main Roads
Purpose of clearing:	Clearing for *project activities*
Duration of permit:	12 December 2005 – 12 December 2010

TABLE OF CONTENTS

Permit number:	CPS 818/4
Permit holder:	Commissioner of Main Roads
Purpose of clearing:	Clearing for *project activities*
Duration of permit:	12 December 2005 – 12 December 2010

The permit holder is authorised to clear native vegetation for the above stated purpose, subject to the conditions of this Permit, including as amended or renewed.

PART I - TYPE OF CLEARING AUTHORISED

1. Type of clearing authorised

(a) In accordance with this Permit, the permit holder may clear *native vegetation* for *project activities*, which means any one or more of the following:

(i) new *roads*;
(ii) road infrastructure, including all buildings, fences, gates, posts, boards, erections and structures placed upon any *road* that are associated with the use of the *road*;
(iii) new road signs, as defined in regulation 3 of the *Road Traffic Code 2000*;
(iv) new traffic-control signals, as defined in regulation 3 of the *Road Traffic Code 2000*;
(v) new *sightline areas*;
(vi) new *lateral clearance areas*;
(vii) new *temporary works*;
(viii) new *rest areas*;
(ix) new *camps*;
(x) new *firebreaks*;
(xi) searching for and extracting *road building materials*;
(xii) *road realignment*;
(xiii) *road widening*;
(xiv) *project surveys*;
(xv) expansion of existing *lateral clearance areas*; and
(xvi) *pre-construction activities*.

(b) This Permit authorises the permit holder to clear *native vegetation* for *project activities* to the extent that the permit holder has the power to clear *native vegetation* for those *project activities* under the *Main Roads Act 1930* or any other *written law*.

2. Clearing not authorised

(a) This Permit does not authorise the permit holder to clear *native vegetation* for *project activities* where:

(i) it does not have the power to clear *native vegetation* for those *project activities* under the *Main Roads Act 1930* or any other *written law*;
(ii) the *clearing* may be seriously at variance with the *clearing principles*; or
(iii) those *project activities* are incorporated in any *proposal* that is *referred* to and assessed under Part IV of the *EP Act* by the *EPA*.

(b) If a *proposal* incorporating a *project activity* has been *referred* to the *EPA*, this Permit does not authorise any *clearing* for that *project activity* until:
   (i) the *EPA* has given notice under section 39A(3) of the *EP Act* that it has decided not to assess the *proposal*; and
   (ii) either:
      (A) the period within which an appeal against the *EPA's* decision may be lodged has expired without an appeal being lodged; or
      (B) an appeal has been lodged against the *EPA's* decision not to assess the *proposal* and the appeal was dismissed.

(c) If the permit holder intends to clear *native vegetation* under this Permit for a *project activity* that is incorporated in a *proposal* referred to in condition 2(b), then the permit holder must have regard to any advice or recommendations made by the *EPA* under section 39A(7) of the *EP Act*.

3. Application

This Permit allows the permit holder to authorise persons, including employees, contractors and agents of the permit holder, to clear *native vegetation* for the purposes of this Permit subject to compliance with the conditions of this Permit.

4. Limits on authorised clearing

The total amount of *native vegetation* cleared pursuant to this Permit and CPS 817/1 together, per *region*, must not exceed the *regional clearing limits*.

5. Requirements prior to undertaking clearing

(a) Prior to *clearing* any *native vegetation* under this Permit, the permit holder must:
   (i) comply with the *Assessment Procedure* and the *Assessment Principles* set out in this Permit;
   (ii) if an *offset* is required to be implemented pursuant to condition 9(c), provide the *CEO* with an *offset proposal* for the *CEO*'s approval;
   (iii) if a *management strategy* is required to be implemented pursuant to condition 9(d), provide the *CEO* with a *management strategy* for the *CEO*'s approval; and
   (iv) if *revegetation* and *rehabilitation* is required to be done pursuant to condition 13, provide the *CEO* with a *Revegetation Plan*.

(b) The permit holder need not comply with condition 5(a)(iv) if the area to be *revegetated* and *rehabilitated* is:
   (i) less than 0.5 hectares;
   (ii) not located in an *ESA*; and
   (iii) an area where the proposed clearing that triggers the obligation to *revegetate* and *rehabilitate* is not at variance with one or more of the *clearing principles*.

PART II - ASSESSMENT PROCEDURE

6. Avoid, minimise etc clearing

The permit holder must have regard to the following principles, set out in order of preference:
(a) avoid the *clearing* of *native vegetation*;
(b) minimise the amount of *native vegetation* to be cleared; and

(c) reduce the impact of *clearing* on any *environmental value*.

7. Assessment of Clearing Impacts

(a) Once the permit holder has complied with condition 6 of this Permit, if any *native vegetation* is to be cleared the permit holder must conduct a *desktop study* assessing the *clearing* to be undertaken against each of the *clearing principles* in accordance with the *Assessment Principles* set out in Part III of this Permit.

(b) The *desktop study* must be conducted having regard to the permit holder's *Standard Brief for Preliminary Environmental Impact Assessment* and, subject to condition 7(l), must include production of a *PEIA Report*.

(c) The *PEIA Report* must set out:

(i) the manner in which the permit holder has had regard to the principles set out in condition 6;

(ii) the manner in which the permit holder has had regard to the permit holder's *Standard Brief for Preliminary Environmental Impact Assessment* in conducting a *desktop study*;

(iii) the amount (in hectares) and boundaries of *clearing* required for the *project activity*;

(iv) how each of the *clearing principles* has been addressed through the *desktop study*;

(v) whether there are likely to be any *impacts* that may be at variance or seriously at variance with the *clearing principles*; and

(vi) whether, in accordance with the *Assessment Principles*:

(A) *rehabilitation* and *revegetation*, or a *management strategy*, is likely to be required under Part IV of this Permit; and

(B) an *offset* is likely to be required under Part V of this Permit.

(d) Where the outcome of the *desktop study* indicates that the *clearing* may be at variance or seriously at variance with one or more of the *clearing principles*, the permit holder must undertake *EIA* in accordance with this condition, and seek submissions in accordance with condition 8 of this Permit.

(e) Without limiting condition 7(d), where the information available is insufficient to allow the permit holder to assess the proposed *clearing* against one or more of the *clearing principles* as part of the *desktop study*, the permit holder must undertake *EIA* in accordance with this condition.

(f) Where required pursuant to condition 7(d), the permit holder must conduct an *EIA* addressing those *environmental values* identified in the *desktop study* as likely to be affected by the *clearing* to an extent that may be at variance or seriously at variance with the *clearing principles*.

(g) Where required pursuant to condition 7(e), the permit holder must conduct an *EIA* assessing each of those *clearing principles* for which there was insufficient information available to undertake a *desktop study*.

(h) *EIA* must be conducted having regard to the permit holder's *Standard Brief for Environmental Impact Assessment and Environmental Management Plan (Internal)* and, subject to condition 7(l), must include production of an *EIA Report*.

(i) *EIA* must include a *biological survey*, and:
   (i) where the area to be cleared may be affected by *dieback*, a *dieback survey*;
   (ii) where the *clearing* may have a detrimental impact on the *environmental values* of a *wetland*, a *wetland field assessment*; and
   (iii) any additional surveys and field assessments that are required to determine the *impacts* of the *clearing* on any *environmental value* protected by the *clearing principles*,

   and every such survey or field assessment must be conducted by an *environmental specialist*.

(j) Any *biological survey* carried out pursuant to condition 7(i) that relates to flora must be conducted having regard to *EPA Guidance Statement No.51*.

(k) The *EIA Report* must set out:
   (i) copies of any submissions received pursuant to condition 8, and a statement addressing each of those submissions;
   (ii) the manner in which the permit holder has had regard to the permit holder's *Standard Brief for Environmental Impact Assessment and Environmental Management Plan (Internal)* in conducting an *EIA*;
   (iii) the results of any surveys and field assessments carried out pursuant to conditions 7(h) and 7(i);
   (iv) any *impacts* likely to occur as a result of the *clearing*, including a description of those *impacts* that may be at variance or seriously at variance with the *clearing principles*;
   (v) any *rehabilitation, revegetation, management strategy* or other means of rectification that the permit holder will adopt to address the *impacts*; and
   (vi) any *offsets* developed in accordance with Part V of this Permit that the permit holder will implement to address the *impacts*.

(l) Where the permit holder conducts a *PEIA* and an *EIA* simultaneously:
   (i) the permit holder may produce one report, to be known as an *Assessment Report*, which contains all of the information required to be provided by this condition in a *PEIA Report* and an *EIA Report*; and
   (ii) if the permit holder produces an *Assessment Report*, there is no need to produce a *PEIA Report* or an *EIA Report* for the proposed *clearing*.

(m) Subject to condition 7(n), after undertaking the *EIA* the permit holder must prepare, implement and adhere to an *EMP* to address the *impacts*, in accordance with condition 11 of this Permit.

(n) Where the results of the *EIA* indicate that *clearing* for the *project activity* may be seriously at variance with the *clearing principles*, the permit holder must apply to the *CEO* for a *clearing permit* in respect of that *clearing*.

8. Submissions

(a) The permit holder must invite submissions from the following parties about those *impacts* of the proposed *clearing* that may be at variance or seriously at variance with the *clearing principles*:
   (i) the *Department*'s Native Vegetation Conservation Branch;

(ii) the Office of the Commissioner of Soil and Land Conservation in the Department of Agriculture and Food;
(iii) the Department of Water;
(iv) the Conservation Council of Western Australia Inc.;
(v) the local government responsible for the area that is to be cleared;
(vi) the owner (as defined in section 51A of the *EP Act*), or occupier (as defined in section 3 of the *EP Act*), of any land on which the *clearing* is proposed to be done;
(vii) any other environment or community groups that the permit holder reasonably considers may have an interest in the *clearing* that is proposed to be done; and
(viii) any other party that the permit holder reasonably considers may have an interest in the *clearing* that is proposed to be done.

(b) The permit holder must provide the following information to the parties from whom it invites submissions under condition 8(a):
(i) a description of the land on which the *clearing* is to be done;
(ii) a description of the *project activities* for which the *clearing* is to be done;
(iii) the size of the area to be cleared (in hectares);
(iv) in what manner the permit holder considers that the *clearing* may be at variance or seriously at variance with the *clearing principles*;
(v) an outline of any *rehabilitation*, *revegetation*, *management strategy* or *offset* proposed to be implemented in relation to the *clearing*;
(vi) the contact details of the person to whom submissions must be sent; and
(vii) the date by which submissions must be made.

(c) The permit holder must allow a period of at least 21 days for submissions to be made.

(d) Any submissions received by the permit holder under this condition 8 must be addressed in the *EIA Report* in accordance with condition 7(k) of this Permit.

PART III - ASSESSMENT PRINCIPLES

9. Assessment against the Clearing Principles

(a) In complying with condition 7 of this Permit, the permit holder must have regard to the *Department*'s *Guidelines for Assessment: Clearing of Native Vegetation under the Environmental Protection Act 1986*, contained in Annexure 7 to this Permit, when conducting an assessment of the proposed *clearing* against the *clearing principles*.

(b) If part or all of the *clearing* to be done may be seriously at variance with one or more of the *clearing principles* then condition 7(n) applies.

(c) If part or all of the *clearing* to be done is or is likely to be at variance with one or more of the *clearing principles*, then the permit holder must implement an *offset* in accordance with Part V of this Permit with respect to that *native vegetation*.

(d) If part or all of the clearing to be done is or is likely to be at variance with *clearing principle (g)*, *clearing principle (i)* or *clearing principle (j)*, the permit holder must implement a *management strategy*, approved by the *CEO* in accordance with conditions 5(iii) and 12 of this Permit, with respect to that *clearing*.

(e) In making a determination under condition 9(b) as to whether part or all of the *clearing* to be done may be seriously at variance, or under conditions 9(c) and 9(d) as to whether part or all of the *clearing* to be done is or is likely to be at variance, with one or more of the *clearing principles*, the permit holder must obtain and have regard to the advice of an *environmental specialist*.

10. Other

In assessing the clearing for the *project activity* against the *clearing principles*, the permit holder must have regard to any approved policy (as defined in section 3 of the *EP Act*) and any planning instrument (as defined in section 51O of the *EP Act*), that applies to the area of *native vegetation* to be cleared.

PART IV – MANAGEMENT

11. Environmental management plan

(a) The permit holder must prepare, implement and adhere to an *EMP* if required by condition 7(l) of this Permit.

(b) The *EMP* must have regard to the permit holder's *Standard Brief for Environmental Impact Assessment and Environmental Management Plan (Internal)* and include:
- (i) a plan for managing the *impacts*;
- (ii) a table setting out the permit holder's commitments to the *EMP*'s requirements;
- (iii) a program for monitoring compliance with the permit holder's commitments;
- (iv) a copy of the *Revegetation Plan*, where required under condition 13 of this Permit.

12. Management strategy

(a) Where the permit holder is required under this Permit to comply with this condition 12, the permit holder must prepare, implement and adhere to a strategy designed by an *environmental specialist*, in consultation with the Commissioner of Soil and Land Conservation, to avoid, mitigate or manage the *land degradation*, *water quality deterioration*, or flooding that triggered the permit holder's obligation to comply with this condition.

(b) Once the permit holder has developed a *management strategy*, the permit holder must provide that *management strategy* to the *CEO* prior to undertaking any *clearing* of an area to which the *management strategy* is related, and prior to implementing the *management strategy*.

13. Revegetation and Rehabilitation

(a) The permit holder must *revegetate* and *rehabilitate* the following areas once those areas are no longer required for the following purpose for which they were cleared under this Permit:
- (i) *temporary works*;
- (ii) *extraction sites*;
- (iii) *camps*;
- (iv) *project surveys*; or
- (v) *pre-construction activities*.

(b) The permit holder need not *revegetate* and *rehabilitate* an area specified in condition 13(a) if the permit holder intends to use that cleared area for another *project activity* within 12 months of that area no longer being required for the purpose for which it was originally cleared under this Permit.

(c) The *revegetation* and *rehabilitation* of an area pursuant to this condition 13:
   (i) must be carried out as soon as possible once the permit holder no longer requires that area for a *project activity*, in accordance with conditions 13(a) and 13(b); and
   (ii) must be undertaken according to a *Revegetation Plan* that the permit holder must provide to the *CEO* prior to *clearing native vegetation* from the area that is to be *revegetated* and *rehabilitated*.

(d) The permit holder need not comply with condition 13(c)(ii) if the area to be *revegetated* and *rehabilitated* is:
   (i) less than 0.5 hectares;
   (ii) not located in an *ESA*; and
   (iii) an area where the proposed *clearing* that triggers the obligation to *revegetate* and *rehabilitate* is not at variance with one or more of the *clearing principles*.

(e) A *Revegetation Plan* must be developed having regard to the *Environmental Guideline: Revegetation Planning and Techniques* and must involve the following steps:
   (i) *site preparation*;
   (ii) *weed* control;
   (iii) *regeneration, direct seeding* or *planting*, at an *optimal time*;
   (iv) a *vegetation establishment period*; and
   (v) ongoing maintenance and monitoring.

(f) Any area of *native vegetation* that does not form part of the area to be cleared for the *project activity* and that has been damaged as a result of the *clearing* by the permit holder must be *revegetated* and *rehabilitated* in accordance with conditions 13(c) and 13(d).

14. Dieback, other pathogen and weed control

(a) When undertaking any *clearing*, *revegetation* and *rehabilitation*, or other activity pursuant to this Permit in any part of a *region* that has an average annual rainfall of greater than 400 millimetres and is south of the 26th parallel of latitude, the permit holder must take the following steps to minimise the risk of introduction and spread of *dieback*:
   (i) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
   (ii) avoid the movement of soil in wet conditions;
   (iii) if movement of soil in wet conditions is necessary, the permit holder must prepare, implement and adhere to a *dieback* management plan developed in consultation with the *Department* for minimising the spread of *dieback*;
   (iv) ensure that no *dieback*-affected *road building materials*, *mulches* or *fill* are brought into an area that is not affected by *dieback*; and
   (v) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

(b) Where the permit holder considers, having regard to the advice of an *environmental specialist*, that the area to be cleared may be susceptible to a pathogen other than *dieback*,

the permit holder must take appropriate steps to minimise the risk of the introduction and spread of that pathogen.

(c) When undertaking any *clearing*, *revegetation* and *rehabilitation*, or other activity pursuant to this Permit the permit holder must take the following steps to minimise the risk of the introduction and spread of *weeds*:
  (i) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
  (ii) ensure that no *weed*-affected *road building materials*, *mulch*, *fill* or other material is brought into the area to be cleared; and
  (iii) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

(d) At least once in each 12 month period for the *term* of this Permit, the permit holder must remove or kill any *weeds* growing within areas *cleared*, *revegetated* and *rehabilitated*, or the subject of an *offset* implemented by the permit holder under this Permit where those *weeds* are likely, having regard to the advice of an *environmental specialist*, to spread to and result in *environmental harm* to adjacent areas of *native vegetation* that are in *good or better condition*.

PART V – OFFSETS

15. Determination of offsets

(a) In determining the *offset* to be implemented with respect to a particular area of *native vegetation* proposed to be cleared under this Permit, the permit holder must have regard to the offset principles contained in condition 16 of this Permit.

(b) Once the permit holder has developed an *offset proposal*, the permit holder must provide that *offset proposal* to the *CEO* for the *CEO*'s approval in accordance with condition 5(a)(ii), prior to undertaking any *clearing* to which the *offset* related, and prior to implementing the *offset*.

16. Offset principles

For the purpose of this Part, the offset principles are as follows:

(a) *direct offsets* should directly counterbalance the loss of the *native vegetation*;
(b) *contributing offsets* should complement and enhance the *direct offset*;
(c) *offsets* are implemented only once all avenues to avoid, minimise, rectify or reduce environmental impacts have been exhausted;
(d) the *environmental values*, habitat, species, ecological community, physical area, ecosystem, landscape, and hydrology of the *offset* should be the same as, or better than, that of the area of *native vegetation* being *offset*;
(e) a ratio greater than 1:1 should be applied to the size of the area of *native vegetation* that is offset to compensate for the risk that the *offset* may fail;
(f) *offsets* must entail a robust and consistent assessment process;
(g) in determining an appropriate *offset*, consideration should be given to ecosystem function, rarity and type of *ecological community*, vegetation *condition*, habitat quality and area of *native vegetation* cleared;
(h) the *offset* should either result in no net loss of *native vegetation*, or lead to a net gain in *native vegetation* and improve the condition of the natural environment;

(i) *offsets* must satisfy all statutory requirements;
(j) *offsets* must be clearly defined, documented and audited;
(k) *offsets* must ensure a long-term (10-30 year) benefit; and
(l) an *environmental specialist* must be involved in the design, assessment and monitoring of *offsets*.

17. Duration of offsets

(a) The permit holder must ensure that an *offset* implemented under this Permit continues to be implemented for the *term* of this Permit.

(b) If for any reason an *offset* is not continually implemented for the *term* of this Permit, the permit holder must:
(i) implement the *offset* again within 12 months of becoming aware that the *offset* is not being maintained; and
(ii) if necessary, modify the *offset* in a manner that increases the likelihood that the *offset* will be implemented for the *term* of this Permit.

PART VI – MONITORING, REPORTING & AUDITING

18. Monitoring

(a) The permit holder must monitor:
(i) areas *revegetated* and *rehabilitated* under this Permit to determine compliance with the relevant *Revegetation Plan* and the conditions of this Permit; and
(ii) areas the subject of an *offset* implemented under this Permit to determine compliance with the relevant *offset proposal* and the conditions of this Permit.

(b) Monitoring pursuant to this condition 18 must be done having regard to section C.9 of the *Environmental Guideline: Revegetation Planning and Techniques*.

19. Records of assessment and clearing

The permit holder must maintain the following records for activities done pursuant to this Permit, as relevant:

(a) in relation to the *clearing* of *native vegetation*:
(i) a copy of any *PEIA Report*, *EIA Report* and *Assessment Report* produced in accordance with condition 7;
(ii) a copy of the *EMP* produced in accordance with conditions 7 and 11;
(iii) for a cleared area greater than 0.5 hectares, a map showing the location where the *clearing* occurred, recorded in an *ESRI Shapefile*;
(iv) for a cleared area of 0.5 hectares or less, a co-ordinate of the location where the *clearing* occurred;
(v) the size of the area cleared (in hectares); and
(vi) the dates on which the *clearing* was done;

(b) in relation to the *revegetation* and *rehabilitation* of areas:
(i) a copy of each *Revegetation Plan* provided to the *CEO* in accordance with condition 13(c);
(ii) a map showing the location of any area *revegetated* and *rehabilitated* in accordance with condition 13, recorded in an *ESRI Shapefile*;

(iii) a description of the *revegetation* and *rehabilitation* activities undertaken pursuant to condition 13; and
(iv) the size of the area *revegetated* and *rehabilitated* (in hectares);

(c) in relation to each *offset* implemented:
(i) a copy of each *offset proposal* approved by the *CEO* in accordance with condition 15(b);
(ii) a map showing the location of any *offset* implemented pursuant to condition 15, recorded in an *ESRI Shapefile*;
(iii) a description of the *offset* implemented pursuant to condition 15; and
(iv) the size of the area of the *offset* (in hectares);

(d) in relation to each *management strategy* implemented:
(i) a map showing the location of any area to which a *management strategy* has been applied in accordance with condition 12, recorded in an *ESRI Shapefile*;
(ii) a description of the *management strategy* implemented under condition 12; and
(iii) the size of the area to which the *management strategy* was applied (in hectares);

(e) in relation to the control of *weeds*, *dieback* and other pathogens:
(i) a copy of any management plan prepared in accordance with condition 14(a)(iii); and
(ii) for any pathogen other than *dieback*, the appropriate steps taken in accordance with condition 14(b).

20. Reporting

(a) The permit holder must provide to the *CEO*, on or before 30 June of each year, a written report of activities done by the permit holder under this Permit between 1 January and 31 December of the preceding year.

(b) The report must set out the records required to be maintained pursuant to condition 19 of this Permit, except for those records relating to cleared areas of less than 0.5 hectares that:
(i) are not located in an *ESA;*
(ii) do not require an *offset* to be implemented; and
(iii) are not at variance with one or more of the *clearing principles*.

21. Internal auditing

(a) The permit holder must conduct *internal environmental audits* for areas specified in condition 21(c) to determine the permit holder's compliance with the conditions of this Permit, with particular emphasis on:
(i) the location and extent of *native vegetation* cleared;
(ii) the implementation status of any *offsets* imposed;
(iii) the effectiveness of any *management strategies* implemented; and
(iv) the implementation status of any *revegetation* or *rehabilitation* undertaken.

(b) The permit holder must conduct its first *internal environmental audit* within 6 months of the date of this Permit. Subsequent *internal environmental audits* must be conducted annually.

(c) The areas to be audited under condition 21(a) must be selected by the auditor using a structured and documented risk-based selection framework, and must include at least one cleared area in each *region* in which *clearing* has been done under this Permit within the previous 12 months.

(d) The permit holder must provide written reports of the *internal environmental audits* conducted pursuant to this condition 21 to the *CEO* on or before 30 December of each year for the *term* of this Permit, which reports must include details of steps taken by the permit holder to address any non-compliance with conditions of this Permit.

22. External auditing

(a) The permit holder must engage an external accredited *lead environmental auditor* to undertake environmental audits of the permit holder's compliance with the conditions of this Permit for each of the *regions* in which *clearing* is done under this Permit.

(b) The *external environmental audits* must be done on or before 30 November 2007 and 30 November 2009 and/or as otherwise required by the *CEO*.

(c) The permit holder must provide the *lead environmental auditor's* written reports of the *external environmental audits* to the *CEO* on or before 30 December in each year that an *external environmental audit* is conducted and/or as otherwise required by the *CEO*.

PART VII – INTERPRETATION & DEFINITIONS

23. Interpretation

The following rules of interpretation apply to this Permit:

(a) a reference to any *written law* includes a reference to that *written law* as amended, repealed or replaced from time to time;

(b) if a word or phrase is defined, other parts of speech and grammatical forms of that word or phrase have corresponding meanings.

24. Severance

It is the intent of these conditions that they shall operate so that, if a condition or part of a condition is beyond the *CEO*'s power to impose, or is otherwise ultra vires or invalid, that condition or part of a condition shall be severed and the remainder of these conditions shall nevertheless be valid to the extent that they are within the *CEO*'s power to impose and are not otherwise ultra vires or invalid.

25. Inconsistency

(a) The *EP Act* prevails to the extent of any inconsistency between its provisions and the conditions of this Permit.

(b) Subject to condition 25(a), this Permit prevails to the extent of any inconsistency between its conditions (including its Schedules), and the provisions of any other document referred to in this Permit.

26. Definitions

The following meanings are given to terms used in this Permit and the attached Advice:

Assessment Principles	means the assessment principles set out in Part III of this Permit;
Assessment Procedure	means the assessment procedure set out in Part II of this Permit;
Assessment Report	has the meaning given to that term in condition 7(l) of this Permit;
authorised survey	has the meaning given to it in section 3 of the *Licensed Surveyors Act 1909*;
biological survey	means a site visit undertaken by an *environmental specialist* to: (a) verify *desktop study* information; (b) delineate key flora, fauna, soil, and groundwater and surface water values and potential sensitivity to impact; (c) undertake *vegetation condition mapping*; and (d) undertake vegetation mapping by delineating on a map the *ecological communities* formed within a given area, and the nature and extent of each combination, within the area to be cleared at the scale of the best available mapping information;
bioregion	has the meaning given to it in regulation 3 of the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004*;
Bush Forever site	means a 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 clause 4(3) of the *Environmental Protection (Environmentally Sensitive Areas) Notice 2005*;
camp	means any facilities required to be established by the permit holder at the site of a project activity such as offices, storerooms, workshops, toilets, washing facilities, accommodation, change rooms, shelter sheds, drying conveniences, mess rooms;
CEO	means the Chief Executive Officer of the *Department*;
clearing	has the meaning given to it in section 51A of the *Environmental Protection Act 1986*;
clearing permit	has the meaning given to it in section 3 of the *Environmental Protection Act 1986*;
clearing principles	means the principles for *clearing native vegetation* set out in Schedule 5 of the *Environmental Protection Act 1986*;
condition	means the rating given to *native vegetation* using the *Keighery scale* and refers to the degree of change in the structure, density and species present in the particular vegetation in comparison to

	undisturbed vegetation of the same type;
contributing offset	has the same meaning as is given to that term in the Environmental Protection Authority's *Preliminary Position Statement No.9 (Version 2): Environmental Offsets*, June 2005;
defined wetland	has the meaning given to it in clause 3 of the *Environmental Protection (Environmentally Sensitive Areas) Notice 2005*;
Department	means the Western Australian Department of Environment and Conservation;
desktop study	means a literature review, including a map-based information search of all current and relevant literature sources and databases;
deterioration	in relation to water quality, includes sedimentation, turbidity, eutrophication, salinity, or any alteration of pH affecting surface water or groundwater;
dieback	means the effect of *Phytophthora* species on *native vegetation*;
dieback survey	means a site visit undertaken by an *environmental specialist* to: (a) verify *desktop study* information; (b) identify indicator species; and (c) carry out soil sampling in areas significantly affected by *dieback*;
direct offset	has the same meaning as is given to that term in the Environmental Protection Authority's *Preliminary Position Statement No.9 (Version 2): Environmental Offsets*, June 2005;
direct seeding	means a method of re-establishing vegetation through the establishment of a seed bed and the introduction of seeds of the desired plant species;
EIA	means environmental impact assessment, as described in conditions 7(h)-(k)of this Permit;
EIA Report	means the document produced as an outcome of conducting an *EIA* in accordance with conditions 7(h)-(k) of this Permit;
EMP	means environmental management plan, as described in condition 11 of this Permit;
engineering survey	means any inspection or measurement taken by a surveyor engaged by the permit holder for the purpose of planning, investigating and design for a *project activity*;
Environmental	means the permit holder's corporate procedure for providing

Guideline: Revegetation Planning and Techniques	guidance on undertaking revegetation, Document No. 6707/031 Rev 0, dated 22 April 2004, contained in Annexure 4 to this Permit;
Environmental Guideline: Supplementary Guidance on Environmental Impact Assessment	means the permit holder's corporate procedure for providing guidance on undertaking environmental impact assessment, Document No. 6707/003 Rev 1, dated 3 November 2005, contained in Annexure 3 to this Permit;
environmental harm	has the same meaning as it is given in section 3A of the *Environmental Protection Act 1986*;
environmental specialist	means a person who is engaged by the permit holder for the purpose of providing environmental advice, who holds a tertiary qualification in environmental science or equivalent, and has experience relevant to the type of environmental advice that an environmental specialist is required to provide under this Permit;
environmental value	has the same meaning as it is given in section 3 of the *Environmental Protection Act 1986*;
EP Act	means the *Environmental Protection Act 1986*;
EPA	means the Western Australian Environmental Protection Authority;
EPA Guidance Statement No.51	means the publication "Guidance for the Assessment of Environmental Factors: Terrestrial flora and vegetation surveys for environmental impact assessment in Western Australia", No.51, (2004), Environmental Protection Authority;
ESA	means an environmentally sensitive area, as declared by a notice under section 51B of the *Environmental Protection Act 1986*;
ESRI Shapefile	means an ESRI Shapefile with the following properties: (a) Geometry type: polygon; (b) Geographic Coordinate System: Geocentric Datum of Australia 1994; (c) Datum: Geocentric Datum of Australia 1994;
external environmental audit	means an audit conducted by a *lead environmental auditor* in accordance with condition 22 of this Permit;
extraction sites	includes gravel pits, borrow pits, water bores and other sites from which *road building materials* are extracted;
fill	means material used to increase the ground level, or fill a hollow;

firebreak	means a firebreak established in accordance with the *Bush Fires Act 1954*;
geological survey	means a survey conducted in order to obtain information about the suitability of the ground for a *project activity*, and includes geotechnical surveys;
good or better condition	means that the vegetation is in either pristine, excellent, very good or good condition according to *Keighery scale*;
impacts	means any impact of *clearing* on *environmental values*;
internal environmental audit	means an audit conducted by the permit holder in accordance with condition 21 of this Permit;
Keighery scale	means the vegetation condition scale described in *Bushland Plant Survey: A Guide to Plant Community Survey for the Community (1994)* as developed by B.J. Keighery and published by the Wildflower Society of WA (Inc). Nedlands, Western Australia;
land degradation	includes salinity, erosion, soil acidity and waterlogging;
lateral clearance area	has the meaning given to it in Schedule 2 of the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004*;
lead environmental auditor	means an individual certified as a lead environmental auditor by either: (a) RABQSA International; or (b) an organisation accredited to ISO/IEC 17024 by, or by a body recognised by, the Joint Accreditation System of Australia and New Zealand);
management strategy	means any activity, method or approach implemented pursuant to condition 12 of this Permit;
mulch	means the use of organic matter, wood chips or rocks to slow the movement of water across the soil surface and to reduce evaporation;
native vegetation	has the meaning given to it in sections 3 and 51A of the *Environmental Protection Act 1986* and regulation 4 of the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004*;
offset	means an offset required to be implemented under Part V of this Permit;
offset proposal	means an offset determined by the permit holder in accordance with condition 15(a);

optimal time	means the optimal time for undertaking *direct seeding* and *planting* as set out in the table in Schedule 2 of this Permit;
PEIA Report	means the document produced as an outcome of conducting a preliminary environmental impact assessment in accordance with conditions 7(a) and (c) of this Permit;
planting	means the re-establishment of vegetation by creating favourable soil conditions and planting seedlings of the desired species;
pre-construction activities	means establishing storage areas, erecting fences and doing similar activities that are required to be done prior to, and in association with, the carrying out of a project activity;
project activities	means those activities described in condition 1(a) of this Permit;
project surveys	means *authorised surveys*, *engineering surveys* and *geological surveys*;
proposal	has the meaning given to it in section 3 of the *Environmental Protection Act 1986*;
referred	means referred to the Environmental Protection Authority under Part IV of the *Environmental Protection Act 1986*;
regeneration	means *revegetation* that can be established from in situ seed banks contained either within the topsoil or seed-bearing *mulch*;
region	means one of the following regions as designated by Main Roads WA at the date of issue of this Permit and depicted in the maps that form part of this Permit in Schedule 3: (a) Metropolitan; (b) South West; (c) Wheatbelt South; (d) Wheatbelt North; (e) Great Southern; (f) Goldfields-Esperance; (g) Midwest; (h) Gascoyne; (i) Pilbara; and (j) Kimberley;
regional clearing limits	means the maximum amount of clearing, carried out pursuant to this Permit and CPS 817/1, allowed per region per financial year as set out in the table in Schedule 1 of this Permit;
rehabilitation	means actively managing an area containing *native vegetation* in order to improve the ecological function of that area;

rest area	means a cleared area adjacent to a stretch of *road* for the purpose of allowing *road* users to safely exit from the *road* for a temporary stop;
revegetation	means the re-establishment of a cover of *native vegetation* in an area such that the species composition, structure and density is similar to pre-*clearing* vegetation types in that area, and can involve *regeneration*, *direct seeding* and/or *planting*;
Revegetation Plan	means a plan developed by the permit holder for the revegetation and *rehabilitation* of a site in accordance with condition 13;
road	has the meaning given to it in section 6 of the *Main Roads Act 1930*;
road building materials	means rock, gravel, soil, stone, timber, boulders and water;
road formation	means the finished surface of a *road*, including the shoulders of the *road* and associated drainage system;
road realignment	an activity that adjusts the location of an existing *road* or portions of an existing *road*;
road widening	an activity associated with widening of an existing *road* formation;
sightline area	means the area between the edge of a stretch of *road* and the line of sight necessary for the safe use of the stretch of *road*;
site preparation	means management of existing site topsoil and preparation of the finished soil surface, for example by ripping or tilling the soil surface and respreading site topsoil and chipped native vegetation;
Standard Brief for Preliminary Environmental Impact Assessment	means the permit holder's corporate procedure for undertaking preliminary environmental impact assessment, Document No.6707/012 Rev 1, dated 3 November 2005, contained in Annexure 1 to this Permit;
Standard Brief for Environmental Impact Assessment and Environmental Management Plan (Internal)	means the permit holder's corporate procedure for undertaking environmental impact assessment and preparing an environmental management plan, Document No.6707/013 Rev 2, dated 3 November 2005, contained in Annexure 2 to this Permit;
term	means the duration of this Permit, including as amended or renewed;
temporary works	means access tracks, spoil areas, side tracks, site offices, storage

	areas, laydown areas and similar works associated with a project activity that are temporary in nature;
vegetation condition mapping	means to delineate on a map the condition attributes of vegetation within an area, according to the *Keighery scale*;
vegetation establishment period	means a period of at least two summers after the *revegetation* during which time replacement and infill *revegetation* works may be required for areas in which revegetation has been unsuccessful, and involves regular inspections of *revegetation* sites to monitor the success of *revegetation*;
water quality deterioration	includes sedimentation, turbidity, eutrophication, salinity, or alteration of pH affecting surface water or groundwater;
weed	means a species listed in Appendix 3 of the "Environmental Weed Strategy" published by the Department of Conservation and Land Management (1999), and plants declared under section 37 of the *Agricultural and Related Resources Protection Act 1976*;
wetland	has the same meaning as it is given in Schedule 5 of the *Environmental Protection Act 1986*;
wetland field assessment	means a site visit by an *environmental specialist* to: (a) verify *desktop study* information; and (b) delineate key flora and fauna values of *defined wetlands* and their potential sensitivity to impact, in accordance with the permit holder's *Environmental Guideline: Supplementary Guidance on Environmental Impact Assessment*;
World Heritage Property	means a declared World Heritage property as defined in section 13 of the *Environment Protection and Biodiversity Conservation Act 1999*;
written law	has the same meaning as it is given in section 5 of the *Interpretation Act 1984*.

Keith Claymore
A/Assistant Director
Nature Conservation Division
Department of Environment and Conservation
Officer delegated under Section 20
of the Environmental Protection Act 1986
xxxx

SCHEDULE 1

Regional Clearing Limits

Region	Maximum Annual Limits of Clearing under CPS 818/4
Metropolitan	100ha
South West	75ha
Wheatbelt South	20ha
Wheatbelt North	100ha
Great Southern	75ha
Goldfields-Esperance	200ha
Midwest	150ha
Gascoyne	150ha
Pilbara	150ha
Kimberley	500ha
Total	**1,520ha**

SCHEDULE 2

Optimal Timing for Seeding and Planting

Region	Optimal Timing	
	Seeding	Planting
Gascoyne	May in south of *region*; November-December in north of *region*.	No *planting* without irrigation.
Goldfields – Esperance	April-May. Earlier in south than in north.	No *planting* without irrigation.
Great Southern	April-May throughout *region*. Seeding during September-October within 30km of the coast can also be successful due to warm temperatures and spring coastal showers.	May-June.
Kimberley	October-December, preferably just before rain.	No *planting* without irrigation.
Metropolitan	April-June.	May-July.
Midwest	April-May in south of *region*; November-December in extreme north of *region*.	May-June in southern part of *region* only.
Pilbara	November-December but preferably just before rain.	No *planting* without irrigation.
South West	April-June.	May-June.
Wheatbelt North	May – June.	June- July.
Wheatbelt South	April-June.	May-June.

Note: Schedules and Annexures to CPS 818/4 are available at Ftp://Ftp.Dec.Wa.Gov.Au/Permit/818