

**PRELIMINARY ENVIRONMENTAL IMPACT ASSESSMENT AND
ENVIRONMENTAL MANAGEMENT PLAN (MINOR PROJECTS)**

Tom Starcevich Road / Coolgardie – Esperance
Highway Intersection Improvement
SLK 289.95



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August 2008

CONTENTS

1	PROJECT DESCRIPTION	3
2	BACKGROUND	3
3	DESCRIPTION OF THE PROJECT	3
3.1	PROJECT LOCATION.....	3
4	METHODOLOGY	5
4.1	PRELIMINARY DESKTOP STUDY	5
4.2	STATUTORY REFERRAL.....	6
4.3	SITE INVESTIGATION	6
5	EXISTING ENVIRONMENT	6
6	CLEARING OF NATIVE VEGETATION	7
6.1	ASSESSMENT AGAINST CLEARING PRINCIPLES	7
7	ASSESSMENT OF ASPECTS AND IMPACTS	8
8	DECISION TO REFER	9
9	STAKEHOLDER CONSULTATION	9
10	ENVIRONMENTAL MANAGEMENT PLAN	10
10.1	COMMUNICATION PLAN.....	10
11	MONITORING	13
12	CONTINGENCY MEASURES	13
13	AUDITING	13
	APPENDIX A LOW IMPACT ENVIRONMENTAL SCREENING CHECKLIST	14
	APPENDIX B RELEVANT GOVERNMENT AGENCY DATABASE SEARCHES	15
	APPENDIX C WAPC'S ACID SULPHATE SOILS SELF-ASSESSMENT FORM.....	26
	APPENDIX D CONSULTATION.....	27
	APPENDIX E SITE PHOTOS.....	31
	APPENDIX F VEGETATION CLEARING ASSESSMENT REPORT	35

PRELIMINARY ENVIRONMENTAL IMPACT ASSESSMENT AND ENVIRONMENTAL MANAGEMENT PLAN (MINOR PROJECTS)

Tom Starcevich Road / Coolgardie – Esperance Highway Intersection Improvement SLK 289.95

1 PROJECT DESCRIPTION

The project involves realignment of Coolgardie Esperance Highway (CEH) at the intersection of Tom Starcevich Rd (SLK 289.95) in order to allow sufficient stacking distance for 36.5m road trains to safely exit or enter the highway.

2 BACKGROUND

Recent incidents involving iron ore trains and 36.5m road trains entering or exiting CEH have raised safety concerns in regards to the lack of sufficient stacking distance. The stacking distance between road and railway (which runs parallel to the road) is currently insufficient to allow a 36.5m road train to safely exit or enter the highway.

In response to these incidents Goldfields-Esperance region undertook planning and design works in 07/08 for the realignment of CEH at several intersections. Up to eight side roads were identified as being affected.

The upgrade of the intersection at Tom Starcevich Rd was identified as a priority as it provided direct access to a CBH facility at Grass Patch. Funding to proceed with the project was not in the original 08/09 Program of Works (POW) but has since been announced in a press release from the HMPI on the 18th July. Planning to deliver the works in September 2008 prior to the grain season is now proceeding.

As per Main Roads' Environmental Assessment and Approvals process, the Low Impact Environmental Screening Checklist was completed for the project and can be found at Appendix A. As the proposed works involve the clearing of native vegetation, the preparation of a project specific Preliminary Environmental Impact Assessment (PEIA) and Environmental Management Plan (EMP) are required. This report fulfils this requirement.

3 DESCRIPTION OF THE PROJECT

The project involves realignment of the highway to the west to provide a type B intersection treatment with a left turn arrow and bulb on the western side. This is to accommodate both the swept path of road trains from the side road, and adequate stacking distance for a 36.5m road train.

3.1 Project Location

The location and boundaries of the study area are shown in Figures 1 and 2 below.

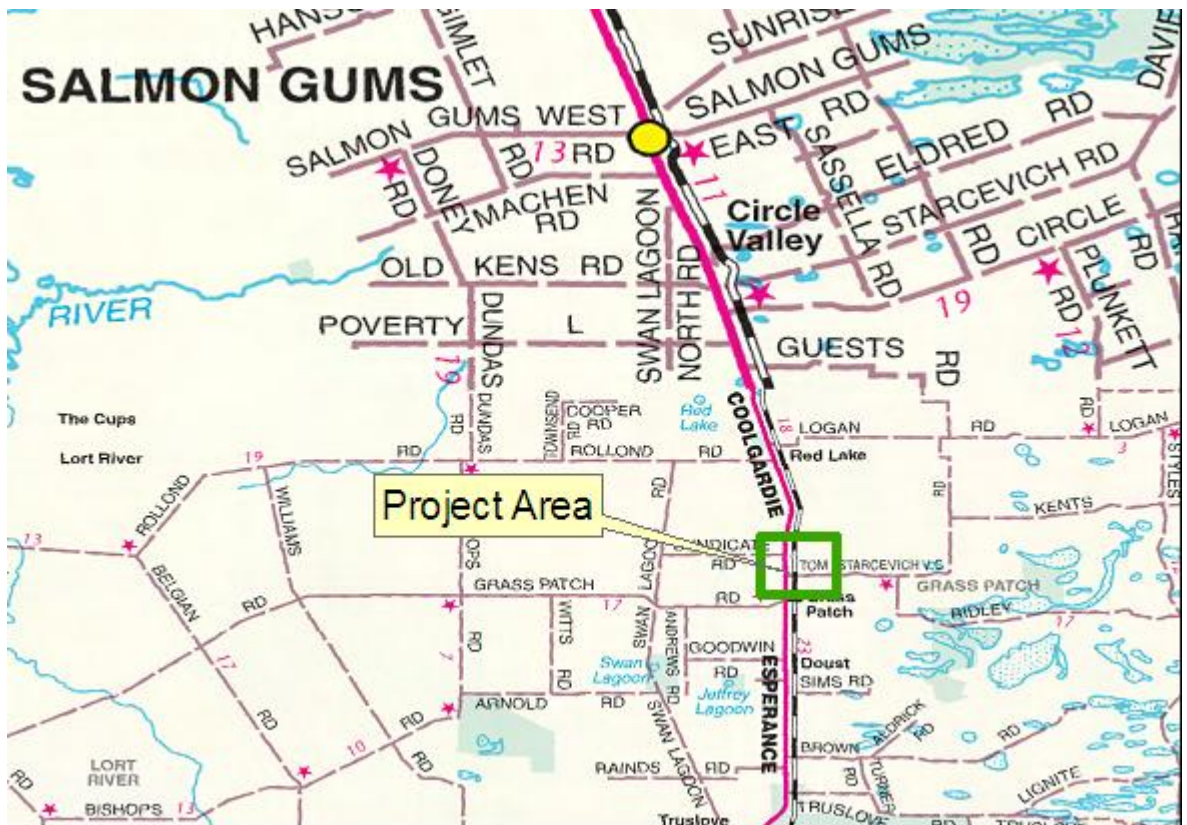


Figure 1. Project Location.



Figure 2. Aerial view of project area.

4 METHODOLOGY

4.1 Preliminary Desktop Study

A preliminary assessment of the project area and its potential constraints was undertaken by reviewing a number of government agency managed databases (see Appendix B) and consulting where necessary (see Appendix D).

4.1.1 Threatened Flora, Fauna and Communities

The Department of Environment and Conservation's (DEC) database was searched for known populations of threatened flora and fauna. The presence of Threatened Ecological Communities (TECs) was determined by examining Main Roads GIS data (TEC data is supplied to Main Roads by DEC every 6 months).

4.1.2 ESAs and Conservation Reserves

DEC's Native Vegetation Map Viewer (http://portal.environment.wa.gov.au/portal/page?_pageid=53,2569721&_dad=portal&_sc_hema=PORTAL) was used to determine the location of any ESAs. The location of any Conservation Reserves was determined by examining the Shared Land Information Platform (SLIP) Natural Resource Management (NRM) database (<http://spatial.agric.wa.gov.au/slip/>) and consulting with the local DEC office where necessary.

4.1.3 Vegetation Type, Extent and Status

Vegetation types and associations were determined by examining the SLIP NRM database. Vegetation extent and status data was sourced from the Main Roads file "Native Vegetation in Western Australia - Extent, Type and Status" (car_reserve_analysis_2006.xls) located on the Main Roads Environment Intranet site.

4.1.4 Air Quality

The need for a local air quality assessment was determined using the criteria outlined in the MRWA environmental guideline, Air Quality.

4.1.5 Heritage

Non-indigenous heritage was examined utilising the Australian Heritage Places Inventory (<http://www.heritage.gov.au>), Heritage Council of Western Australia (<http://register.heritage.wa.gov.au/>) and the Shire of Esperance Municipal Heritage Inventory where necessary.

4.1.6 Aboriginal Heritage

A Search of the Department of Indigenous Affairs' (DIA) database (<http://www.dia.wa.gov.au/Heritage--Culture/Heritage-management/Register-of-Aboriginal-sites/>) was undertaken to determine whether the project area contains any Aboriginal Heritage sites.

4.1.7 Wetlands

The location of wetlands within the project area was determined by using one or a combination of the following:

- DEC's Geographic Data Atlas mapping tool (<http://maps.dec.wa.gov.au/idelve/doedataext/>)
- DEC's WetlandBase (<http://www.dec.wa.gov.au/management-and-protection/wetlands/wetlandbase.html>)
- SLIP NRM database.

4.1.8 Sensitive Water Resources

The Department of Water's (DoW) Geographic Data Atlas was examined (<http://portal.water.wa.gov.au/portal/page/portal/MapsDataAtlases/GeographicDataAtlas>) to determine whether the project area supported, or was adjacent to, any significant lakes, rivers or wetlands or proclaimed areas (including public drinking water source areas).

4.1.9 Contaminated Sites

The presence of contaminated sites in the project area was determined by examining DEC's contaminated sites database (http://portal.environment.wa.gov.au/portal/page?_pageid=53,34343&_dad=portal&_schema=PORTAL), and evaluating the surrounding land use history.

4.1.10 Acid Sulphate Soils

The Western Australian Planning Commission's (WAPC) acid sulphate soils maps were reviewed and the self assessment done (<http://www.wapc.wa.gov.au/Publications/213.aspx>) to determine what level of risk the project area is exposed to, refer to Appendix C.

4.1.11 Weeds

Where relevant, consultation was undertaken with the Department of Agriculture and Food (DAFWA) to determine whether there are any known populations of declared plants or significant weeds in or adjacent to the project area.

4.1.12 Dieback

Dieback was considered a potential issue for the project if the mean annual rainfall of the area is >400mm and the project lies below the 26th parallel. DEC was consulted accordingly.

4.2 Statutory Referral

The decision whether to refer the project to the Commonwealth's Department of Environment, Water, Heritage and the Arts (DEWHA) was based upon whether the project would impact upon matters of national significance (refer to Appendix B - DEWHA's EPBC Act Protected Matters Database search).

The decision whether to refer the project to the WA Environmental Protection Authority (EPA) was based upon whether the project would be a "significant proposal" as defined by the Environmental Protection Act 1986. All potential environmental aspects relating to the project were therefore examined for significance (see Section 7).

4.3 Site Investigation

A site visit was carried out by Lee Hunt (PM), Joann Johnston (EO) and Simon Weighell (GEnv) on the 2/04/08 to examine the general features of the area. The broad vegetation types in the vicinity of the project area were identified. Other issues that were considered included topography, the impacts on creek lines, property access and the potential for noise and vibration impacts (dilapidation). Site photos were taken and are included in Appendix E.

5 EXISTING ENVIRONMENT

The vegetation of the project area is generally in very good condition with no evidence of any significant weed infestations apparent at the time of the site visit. There is a narrow cleared access track running parallel with CEH approximately 20 metres from the road

edge on the western side. This track does not appear to be having any significant effect on the surrounding vegetation however.

Two different vegetation associations have been identified within the project area. These are vegetation associations 512 and 519. Further information on these is provided in Table 1 below.

The total area of native vegetation to be cleared for the project is approximately 1.1 hectares. Works will be contained to the existing road reserve with no clearing of native vegetation to occur on Tom Starcevich Rd or the eastern side of CEH. Additional summary information from the site investigation can be found in Table 2 below.

Table 1. Vegetation association related information for the project area.

Vegetation Association	512	519
Description	Shrublands; mallee scrub, <i>Eucalyptus eremophila</i> & Forrest's marlock (<i>Eucalyptus forrestiana</i>)	Shrublands; mallee scrub, <i>Eucalyptus eremophila</i>
Current Extent (ha)	60 653	1 400 703
% Pre-European Extent Remaining	25.5	60.0
Approximate area to be cleared for project (ha)	0.7	0.4
% Current Extent to be cleared	0.00115	0.00003

Table 2. Summary information from the project site investigation.

Site Investigation	Description/Comment
<i>Total area (ha) of <u>native vegetation</u> to be cleared</i>	1.1 hectares
<i>Total area (ha) of other vegetation, including regrowth, landscape areas, to be cleared</i>	Nil
<i>Weeds present</i>	Low
<i>Drainage areas or wetlands present</i>	1 culvert on Tom Starcevich Rd
<i>Adjacent land uses</i>	Agriculture, bushland

6 CLEARING OF NATIVE VEGETATION

Native vegetation for this project will be cleared using Main Roads Statewide Project Purpose Permit (CPS 818/4). Native vegetation describes all indigenous aquatic and terrestrial vegetation (living or dead). The term does not include vegetation that was intentionally sown, planted or propagated unless it was required under a statutory condition. Apart from activities that are exempt under the clearing regulations, such as clearing vegetation that is less than 10 years old for maintenance, typically all Main Roads clearing will be undertaken using its Statewide Project Purpose Permit.

No temporary clearing will be carried out for this project and therefore a revegetation plan is not required as stipulated by the purpose permit.

6.1 Assessment against Clearing Principles

In assessing whether the project is likely to have a significant impact on the environment, the project has been assessed against DEC's 10 clearing principles, refer to Appendix F.

This assessment indicated that the project is not likely to be at variance with any of the DEC's 10 clearing principles.

7 ASSESSMENT OF ASPECTS AND IMPACTS

The following table provides a summary of environmental aspects for the project and their subsequent evaluation for potential environmental impacts.

Table 3: Aspects and Impacts – Tom Starcevich Rd – Coolgardie-Esperance Highway Intersection Improvement SLK 289.95

Aspect	Evaluation of Potential Impacts
Air quality	Not relevant to the proposed works. Local air quality assessment is not required for the project since: <ul style="list-style-type: none"> the project is in a rural area and the predicted traffic flow is less than 15,000 vehicles per day; and residential and other sensitive receptors are not within 200 meters of the road centre.
Dust	Likely to be a minor issue during earthworks. No major sensitive receivers adjacent to the proposed works, but excessive dust could impact vegetation. Activities will need to be subject to dust suppression to control short-term dust generation. Likely to be easily managed by standard construction dust management techniques.
Fauna	Several threatened species and/or their habitat have been identified as potentially occurring within the project area (see Appendix B). With the small amount of clearing involved however, and the presence of a reasonably large area of bushland to the west of the project, the impacts on native fauna and fauna habitat is expected to be insignificant. No Matters of National Environmental Significance as protected under the EPBC Act (1999) (see Appendix B) are expected to be impacted.
Vegetation – clearing	<ul style="list-style-type: none"> 1.1 ha of native vegetation will need to be cleared for the proposed works. The condition of this vegetation is generally very good. Some of the native vegetation to be cleared isn't well represented regionally with vegetation association 512 having less than 30% of its pre-European extent remaining (25.5% to be exact). Despite this only 0.7ha of this association is to be cleared equating to just 0.001% of its current extent remaining. The clearing will also only be of a thin strip of vegetation from a much larger existing stand of remnant native vegetation. The native vegetation to be cleared does not occur within an ESA. The native vegetation to be cleared will be done so using the purpose permit.
Vegetation – TECs/DRF	According to various database searches, no TECs or threatened flora are likely to be located in the proposed works areas. Therefore no significant impact on threatened flora or ecological communities is expected. No Matters of National Environmental Significance as protected under the EPBC Act (1999) will be impacted.
Vegetation – weeds	Very few weed species (no declared weeds) were identified in the immediate vicinity of the project area during the site investigation back in April 2008. As a result the risk of spreading weeds as part of the proposed work is considered low, but standard weed hygiene measures should still be applied for all earthworks in the area. This includes ensuring that plant and equipment brought on to the site are clean of soil.
Vegetation – dieback	Not an issue given the project area receives less than 400 mm of average annual rainfall (Nearest meteorological station is Salmon Gums which has an average annual rainfall of 349.2mm).
Reserves / Conservation areas	There are no conservation areas or reserves adjacent to the project area.
Heritage (non-indigenous)	A search of the Australian Heritage Places Inventory and the Heritage Council of Western Australia's on-line databases has indicated that there are no heritage listed sites present in the proposed works areas. Furthermore no items of significance were identified during the site visit.

Table 3: Aspects and Impacts – Tom Starcevich Rd – Coolgardie-Esperance Highway Intersection Improvement SLK 289.95

Aspect	Evaluation of Potential Impacts
Aboriginal heritage	A search of DIA's database identified no known sites of Aboriginal heritage significance within the vicinity of the project area. No impacts are expected.
Surface water/drainage	The proposed works will not likely disturb or interrupt any natural drainage and surface run-off patterns. There is a culvert running under Tom Starcevich Rd but this does not appear to feed into any significant drainage lines.
Wetlands	Various Government Agency database searches have not revealed any wetlands within the vicinity of the project area. This was confirmed during the site visit.
Groundwater	No dewatering or significant drainage modifications are required, hence no likely change to groundwater level or quality.
Noise and vibration	No major sensitive local receivers. Construction works are not expected to significantly contribute to noise levels at the nearest sensitive receivers, provided works are limited to normal working hours. The requirements of the Shire of Esperance must be met in respect of noise management and construction working hours.
Visual amenity	The proposed works will only result in minor and short-term visual impacts during construction.
Public safety and risk	Provided traffic management and signage to Main Roads standards is employed, none of the proposed works present any significant hazards to public safety. The proposed works will serve to enhance public safety by improving local road conditions.
Hazardous substances	Not relevant to the proposed works.
Contamination	Given the relatively superficial nature of the required earthworks, there appears to be a low risk of any significant contamination issues. The works are also confined to the road reserve and no known previous land use activities on or adjacent to the project area have had the potential to create contamination.
Salinity	Given the nature and scale of the project salinity is not considered an issue.
Acid Sulphate Soils	The WAPC's self-assessment (Planning Bulletin 64) indicates that no further soil investigation is required for the project (see Appendix C). No further investigations are necessary as there is no dewatering or excavation below the water table planned.
Environmentally Significant Landforms	There are no significant landforms in the vicinity of the project area.
Statutory Land Use Planning / Adjacent Land Use	As the proposed works are entirely within the existing road reserve, no further amendments would be required to the Local Government Planning Scheme or Region Scheme. Furthermore, the works are not expected to significantly impact upon any surrounding land uses.

8 DECISION TO REFER

Given the scale of the project, the low significance of its impacts to the surrounding environment and the environmental management measures proposed, the project does not require referral to the EPA or DEWHA.

9 STAKEHOLDER CONSULTATION

A summary table of stakeholder consultation carried out for the project is provided below. Evidence of stakeholder consultation can be found in Appendix D.

Table 4. Summary of stakeholder consultation carried out for environmental aspects of the project.

Name	Agency	Date	Comments
Amy Mutton	DEC Species and Communities Branch	5/08/08	Threatened Fauna
Jessica Donaldson	DEC Species and Communities Branch	5/08/08	Threatened Flora
Mia Podesta	DEC Species and Communities Branch	5/08/08	TECs
Emma Adams	DEC Esperance	12/08/08	General project issues

10 ENVIRONMENTAL MANAGEMENT PLAN

This section of the report (the EMP – see Table 6) has been developed for the project area following the completion of the above sections. The main aim of this EMP is to provide a management plan to assist in minimising the environmental impacts of the activities associated with the proposed works, and identify who is responsible for the implementation of the management strategies.

This EMP will only address the actions already listed as well as any site-specific issues that were identified during the PEIA. The project specific management measures identified within this EMP are in addition to the standard specifications used for Category 2 projects. The environmental management measures/conditions in Main Roads' Specifications 203, 204, 301, 302 and 304 are still to be followed where applicable.

The areas that require special management will be addressed in terms of:

- the timing of the various management actions;
- the topic (e.g. vegetation);
- the objectives for each area;
- the actions that are necessary to minimise the impact;
- the responsible party for implementing the action; and
- whether the action arose from external advice or is a Main Roads requirement.

10.1 Communication Plan

Environmental issues specific to the project will be communicated as outlined in Table 5.

Table 5. Project specific communication plan.

Method	Frequency	Participants	Reference	Record
Project Site				
Induction	Prior to Work	All personnel and subcontractors	EMP and Contractor Environmental Policy	Induction Meeting
Toolbox Meetings	Weekly	Project Personnel	Contractor Safety Plan	Minutes of Meeting
Contract Meetings	To be determined	Main Roads' Project Manager and Contractor Project Manager	EMP	Minutes of Meeting
Authority Consultation				
Department of Environment and Conservation	As required	Main Roads' Project Manager and Contractor Project Manager	-	Minutes of meeting

Table 6. ENVIRONMENTAL MANAGEMENT PLAN					
Timing	Topic	Objective	Action	Responsible Party	Advice
All phases of construction	Vegetation Clearing - Record-keeping	All projects should maintain the required records relating to clearing native vegetation under the purpose permit.	Clearing: a copy of the PEIA & EMP (Minor projects) for small projects; a map showing the location where the clearing occurred, recorded in an ESRI Shapefile; the size of the area cleared (in hectares); and the dates on which the clearing was done.	Project Manager	DEC
			Control of weeds: a copy of any management plan prepared	Project Manager	Main Roads
Pre-Construction	Vegetation - Clearing	Ensure that the overall objectives of the alignment and construction works are compatible with maintaining and, where possible, enhancing the biological integrity of the surrounding environment and minimising vegetation loss and degradation; and Ensure the retention of as many habitat trees, shrubs and vegetated corridors for fauna as possible, particularly where associated with riparian zones.	Selection of designs/locations that minimise adverse impacts on the biological environment.	Project Manager	Main Roads
			Construction works to be undertaken in summer to reduce the potential for soil erosion and drainage line siltation due to vegetation removal and heavy rains.	Project Manager	Main Roads
			Control/spray weeds species within the project area prior to construction to limit the amount of propagative material that may be spread during disturbance.	Contractor	Main Roads
			Any stockpiled vegetation from clearing works shall not be burnt. This vegetation shall be used during any rehabilitation works and either chipped or replaced according to the EMP.	Contractor	Main Roads
Pre-Construction	Surface Drainage	Maintain the hydrological regime that exists prior to the construction of the proposal.	Stormwater drainage shall be treated and disposed of in accordance with DEC requirements.	Project Manager	DEC
Pre-Construction	Visual Amenity	Ensure that the road blends in with the surrounding environment.	Ensure that the road blends in with the surrounding environment.	Project Manager	Main Roads
Construction	Noise, Vibration and Dust	Ensure that the construction of the proposal does not become a nuisance to the public.	Access to private property and appropriate traffic management measures should be planned and implemented prior to the construction of works.	Contractor	Main Roads
			Works associated with the construction of the development should not prevent public access along the adjacent reserve. Public access should be maintained along the reserve at all times.	Contractor	Main Roads
			Any complaints regarding dust will be attended to as soon as possible.	Contractor/Project Manager	Main Roads
			Where it is found that trucks leaving the site are carrying excessive material onto sealed surfaces, these areas will be swept to reduce dust generation and maintain traffic safety.	Contractor	Main Roads
			Watering, the use of hydromulch or other forms of mulching to protect loose surfaces shall be used as mitigation measures.	Contractor	Main Roads

Table 6. ENVIRONMENTAL MANAGEMENT PLAN					
Timing	Topic	Objective	Action	Responsible Party	Advice
Construction	Pollution and Litter	Ensure that the construction of the proposal is managed to a standard that minimises any adverse impacts on the environment.	The designated servicing area will be bunded to contain any spills or leaks and shall not be located in an area adjacent to any drainage areas or watercourses or will drain into a temporary sump.	Contractor	Main Roads
			Emergency cleanup procedures shall be implemented in the case of any spillage. These will include control of spilled material and removal of contaminated soil to an approved site. The contractor shall ensure appropriate equipment is available at all times and shall notify the Superintendent's Representative of a spill.	Contractor	Main Roads
			All waste oil will be collected for recycling and any empty fuel/oil containers, used filters and waste hydraulic parts to be collected and stored in an allocated area then removed to an approved site.	Contractor	Main Roads
			Dumping or temporary storage of bitumen, asphalt, concrete or aggregate should only occur at designated depots or controlled hardstands.	Contractor	Main Roads
			The project areas, including hardstand areas, will be kept in a tidy manner at all times.	Contractor	Main Roads
Construction	Fire	Ensure that the fire risk associated with the construction of the proposal is minimised.	No fires shall be lit within the project area.	Contractor	Main Roads
			Machinery will be fitted with approved spark arresting mufflers.	Contractor	Main Roads
			A water tanker will be on site at all times.	Contractor	Main Roads
Construction	Site Management	Ensure that the site is managed to ensure that construction of the proposal will have minimal impact upon the surrounding environment.	Site office and materials storage areas will be located on previously disturbed/ designated area.	Contractor	Main Roads
Post-Construction	Rehabilitation	Leave the project area free from debris.	All waste materials from the development are to be completely removed from the site upon completion of the development. Final clean-up shall be to the satisfaction of the Project Manager and the Site Superintendent.	Contractor	Main Roads
					Main Roads

11 MONITORING

After project completion, the project area will be inspected every six months for the first two years to ensure weed spread or establishment has not occurred.

Monitoring of the weeds identified in the project area will comprise the use of input criteria listed below (Table 7).

Table 7. Weed monitoring criteria.

Criterion	Target	After three months	After one year	After two years
Mean weed foliage cover (%).	<20	<20	<20	<20

12 CONTINGENCY MEASURES

Given the scale and nature of the project, no contingency measures are identified as the inherent environmental risks are small.

13 AUDITING

Given the scale and nature of the project, there is no requirement for auditing the implementation of the EMP as the environmental risks are small.

Appendix A

Low Impact Environmental Screening Checklist

PROJECT NO.

FILE:

Form No. 6707/001/01

SLX: 289-95

Checklist - Low Impact Screening Checklist

The Low Impact Screening Checklist is part of the environmental assessment and approval process, refer to Figure 2 in the Main Roads environmental guideline Environmental Assessment and Approval. It should be noted that the checklist does not address Aboriginal Heritage issues. Please refer to Main Roads guideline *Aboriginal Heritage* for the heritage assessment process.

All projects are to be screened to identify those that are Low Impact.

Projects that have "No" to all items are classed as Low Impact and should be implemented using standard contract clauses in the Tender Document Process.

Projects that have "Yes" to any item will require further environmental assessment and will be implemented using an Environmental Management Plan.

Tick "Yes" or "No" for every item.

Project Name COOLGARDIE-ESPERANCE HOV0 Grass Patch
Tom Starcevich VE ROAD WORKS

ITEM NO.	ITEM	Y	N
1	New road or road reserve to be created or expansion of existing road reserve.		<input checked="" type="checkbox"/>
2	Works require clearing of native vegetation outside the maintenance zone.	<input checked="" type="checkbox"/>	
3	Works require clearing of native vegetation that is older than 10 years and within the maintenance zone.		<input checked="" type="checkbox"/>
4	Works to occur outside normal working hours.		<input checked="" type="checkbox"/>
5	Passes over, adjoins or drains directly into a wetland or sensitive watercourse.		<input checked="" type="checkbox"/>
6	Local natural drainage regime / hydrology will be changed.		<input checked="" type="checkbox"/>
7	Dosecoring or a new water course required.		<input checked="" type="checkbox"/>
8	Known potential source of hazardous materials within or adjoining project area, e.g. Acid Sulphate Soils, existing petrol storage, industrial site or waste disposal site (landfill).		<input checked="" type="checkbox"/>
9	Buildings will require demolition.		<input checked="" type="checkbox"/>

Completed By: Signature [Signature] Date 12/2/08
Name Colleen Rowan Title EAH


To be reviewed by a Main Roads Environment Officer: Signature [Signature] Date 13/02/08
Name JOHN JOHNSTON Title EO

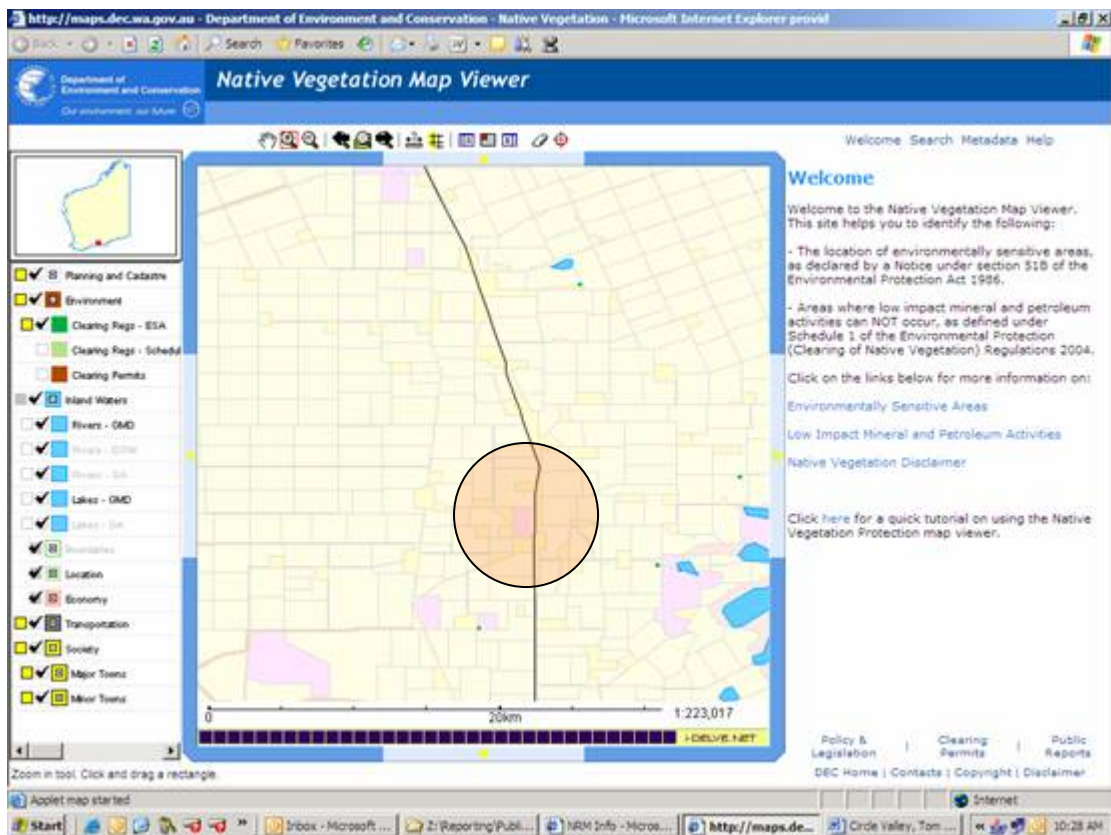
Comments:

Appendix B

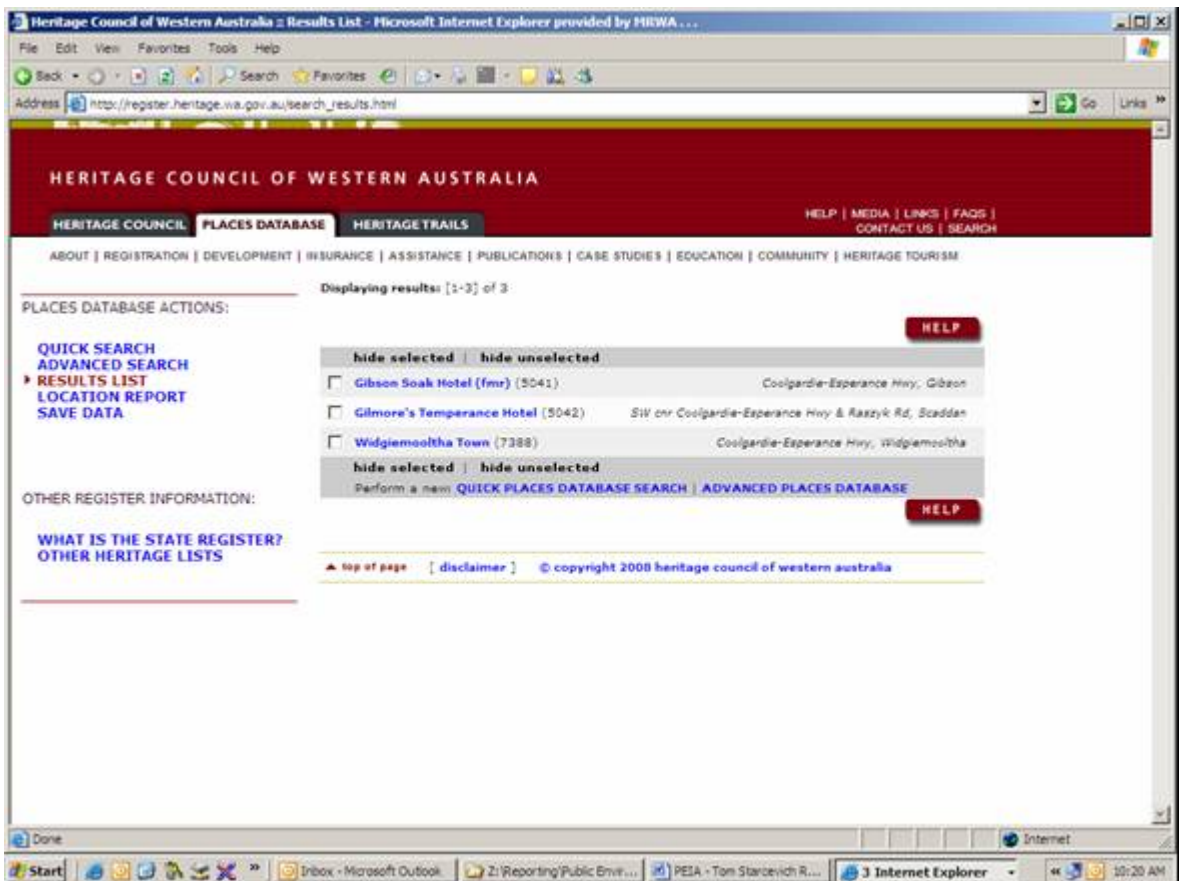
Relevant Government Agency Database Searches

Key:

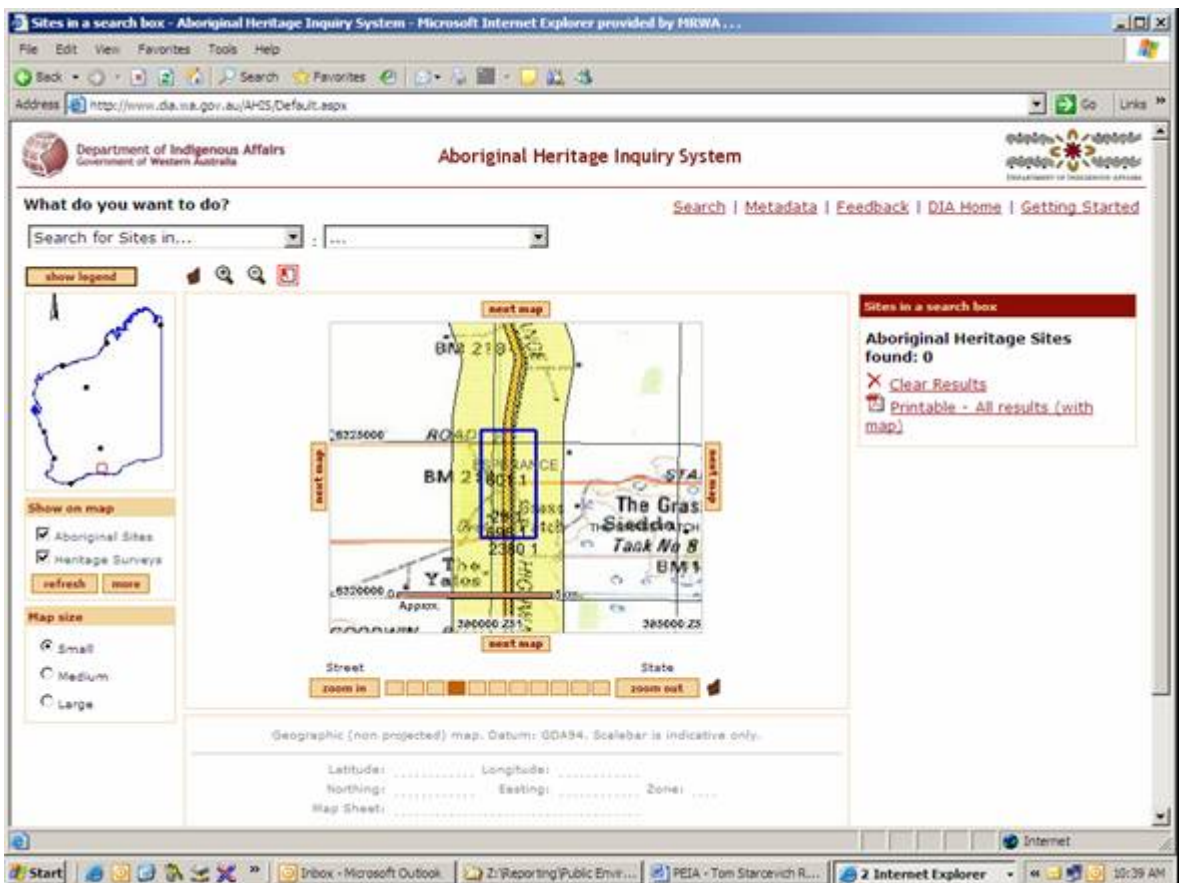
 = Approximate project area



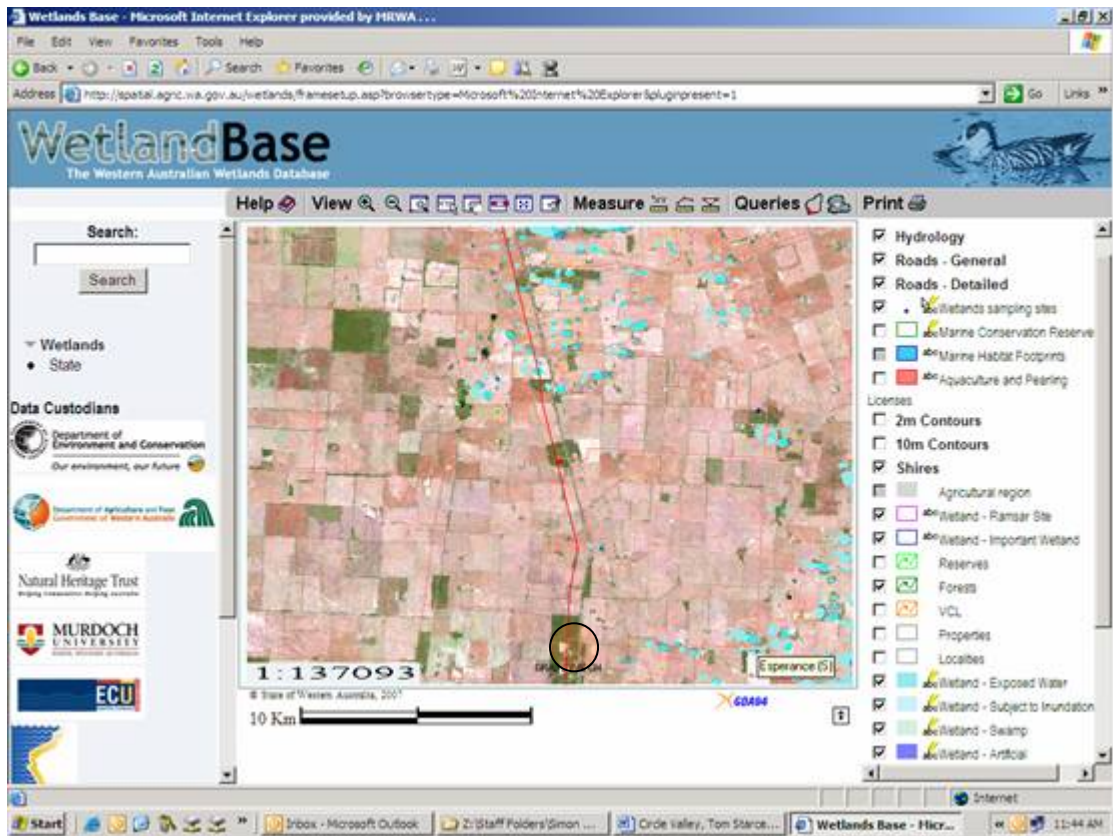
DEC's Native Vegetation Map Viewer showing no ESAs within the project area.



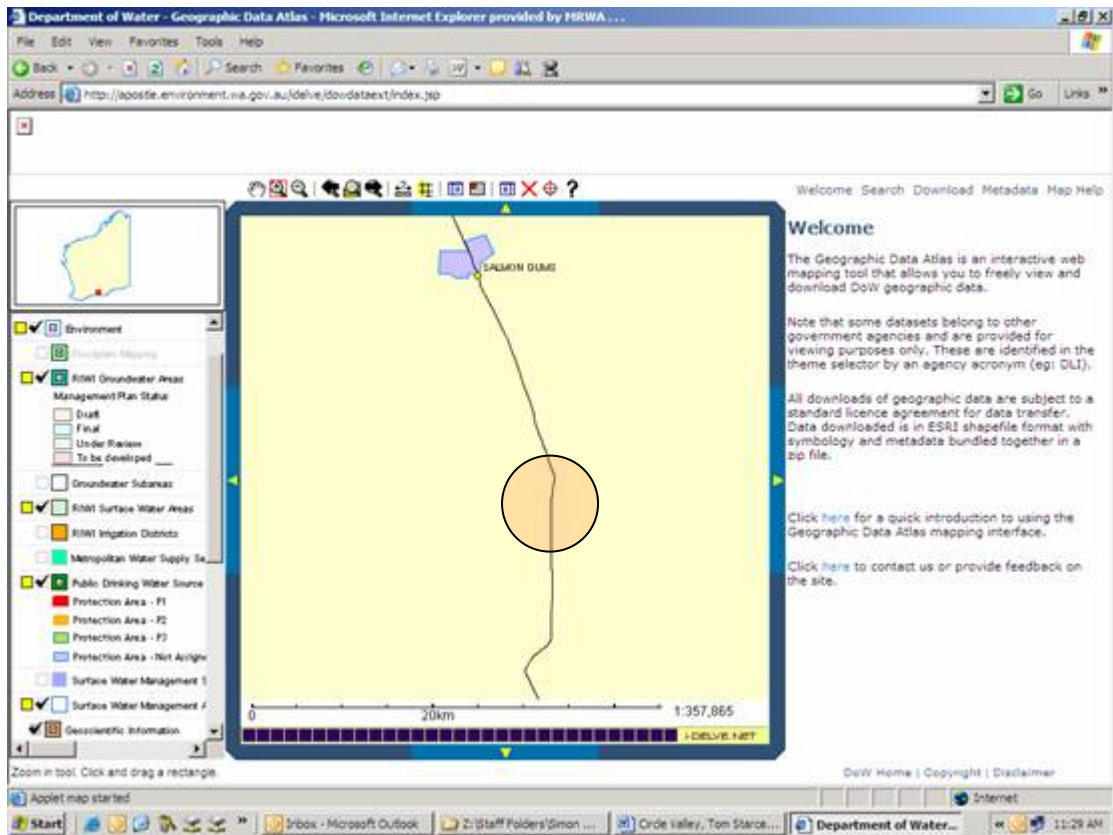
Heritage Council of WA database search for Coolgardie-Esperance Hwy. None of these sites shown are located near the project area.



DIA's Aboriginal Heritage Inquiry System search showing no sites in the project area.



DEC's WetlandBase search showing no wetlands within the project area.



DoW's Geographic Data Atlas showing no significant water protection areas in the project area.

32.7606°S 121.2535°E / 33.6705°S 122.1752°E Tom Starcevich Rd & Hwy Int. (plus ~50km buffer)

* Date	Certainty	Seen	Location Name	Method
Schedule 1 - Fauna that is rare or is likely to become extinct				
<i>Dasyurus geoffroyi</i>		Chuditch		2 records
This carnivorous marsupial occupies large home ranges, is highly mobile and appears able to utilise bush remnants and corridors.				
1998	1	1	Salmon Gums	Caught or trapped
2008	1	1	Salmon Gums	Dead
<i>Platycercus icterotis xanthogenys</i>		Western Rosella (inland ssp)		2 records
This subspecies of the Western Rosella occurs in eucalypt and casuarina woodlands and scrubs, especially of Salmon Gum and tall mallee.				
1991	1	2	Red Lake Townsite Nature Reserve	Day sighting
1991	1	1	Red Lake Townsite Nature Reserve	Day sighting
Schedule 4 - Other specially protected fauna				
<i>Falco peregrinus</i>		Peregrine Falcon		1 records
This species is uncommon and prefers areas with rocky ledges, cliffs, watercourses, open woodland or margins with cleared land.				
1985	1	1	Salmon Gums	Day sighting
Priority One: Taxa with few, poorly known populations on threatened lands				
<i>Parasuta spectabilis bushi</i>				1 records
This subspecies of Kieff's Snake occurs as an isolated population in the Esperance area and is known only from three specimens.				
1986	1	4	Scadden	Caught or trapped
Priority Four: Taxa in need of monitoring				
<i>Charadrius rubricollis</i>		Hooded Plover		1 records
This species frequents the margins and shallows of salt lakes, also along coastal beaches, where it forages for invertebrates along the water's edge.				
1997	1	29	Crystal Lake	Day sighting
<i>Pomatostomus superciliosus ashbyi</i>		White-browed Babbler (western wheatbe		1 records
This species of bird lives in eucalypt forests and woodlands, and forages on or near the ground for insects and seeds.				
1991	2	0	Red Lake Townsite Nature Reserve	Definite signs
* Information relating to any records provided for listed species:- Date: date of recorded observation Certainty (of correct species identification): 1=Very certain; 2=Moderately certain; and 3=Not sure. Seen: Number of individuals observed. Location Name: Name of reserve or nearest locality where observation was made Method: Method or type of observation				

Monday, 11 August 2008

Department of
Environment and Conservation

DEC's Threatened Fauna database search results.

DEWHA's EPBC Act Protected Matters Report for the project area:



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Protected Matters Search Tool

You are here: [Environment Home](#) > [EPBC Act](#) > [Search](#)

1 April 2008 21:46

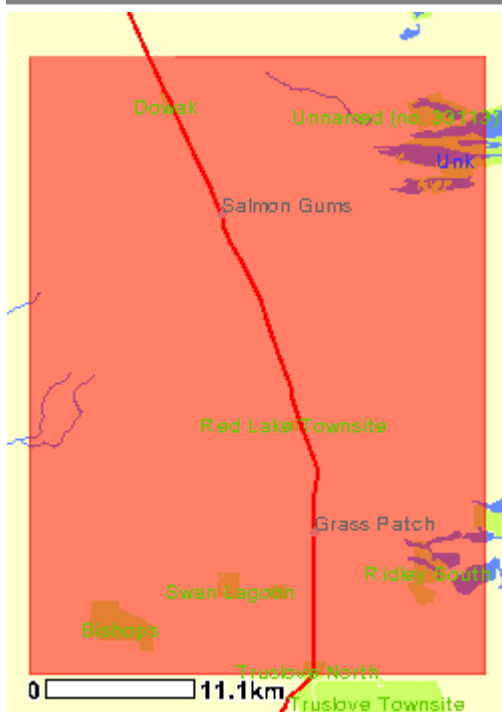
1. EPBC ACT PROTECTED MATTERS REPORT

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Information on the coverage of this report and qualifications on data supporting this report are contained in the [caveat](#) at the end of the report.

You may wish to print this report for reference before moving to other pages or websites.

The Australian Natural Resources Atlas at <http://www.environment.gov.au/atlas> may provide further environmental information relevant to your selected area. Information about the EPBC Act including significance guidelines, forms and application process details can be found at

<http://www.environment.gov.au/epbc/assessmentsapprovals/index.html>



This map may contain data which are
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Search Type: Area

Buffer: 0 km

Coordinates: -32.8569,121.4911, -33.3455,121.4911, -33.3455,121.8514, -32.856,121.8514



Report Contents: [Summary](#)

[Details](#)

- [Matters of NES](#)
- [Other matters protected by the EPBC Act](#)
- [Extra Information](#)

[Caveat](#)

[Acknowledgments](#)

Summary

Matters of National Environmental Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the Administrative Guidelines on Significance - see

<http://www.environment.gov.au/epbc/assessmentsapprovals/guidelines/index.html>.

World Heritage Properties: None

National Heritage Places: None

Wetlands of International Significance: 2
(Ramsar Sites)

Commonwealth Marine Areas: None

Threatened Ecological Communities: None

Threatened Species: 6

Migratory Species: 8

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by

Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place and the heritage values of a place on the Register of the National Estate. Information on the new heritage laws can be found at <http://www.environment.gov.au/heritage/index.html>.

Please note that the current dataset on Commonwealth land is not complete. Further information on Commonwealth land would need to be obtained from relevant sources including Commonwealth agencies, local agencies, and land tenure maps.

A permit may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species. Information on EPBC Act permit requirements and application forms can be found at <http://www.environment.gov.au/epbc/permits/index.html>.

<u>Commonwealth Lands:</u>	1
Commonwealth Heritage Places:	None
Places on the RNE:	None
<u>Listed Marine Species:</u>	6
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves:	None

Extra Information

This part of the report provides information that may also be relevant to the area you have nominated.

<u>State and Territory Reserves:</u>	9
Other Commonwealth Reserves:	None
Regional Forest Agreements:	None

Details

Matters of National Environmental Significance

Wetlands of International Significance [[Dataset Information](#)]
(Ramsar Sites)

LAKE GORE	Within same catchment as Ramsar site
LAKE WARDEN SYSTEM	Within same catchment as Ramsar site

Threatened Species [[Dataset Information](#)]

Status	Type of Presence
--------	------------------

Birds

Cereopsis novaehollandiae grisea * Cape Barren Goose (south-western), Recherche Cape Barren Goose	Vulnerable	Species or species habitat likely to occur within area
---	------------	--

<u>Leipoa ocellata</u> * Malleefowl	Vulnerable	Species or species habitat likely to occur within area
<u>Psophodes nigrogularis oregon</u> * Western Whipbird (western mallee)	Vulnerable	Species or species habitat likely to occur within area

Plants

<u>Eremophila lactea</u> * Milky Emu Bush	Endangered	Species or species habitat known to occur within area
<u>Eucalyptus merrickiae</u> * Goblet Mallee	Vulnerable	Species or species habitat likely to occur within area
<u>Ricinocarpos trichophorus</u> * Barrens Wedding Bush	Endangered	Species or species habitat likely to occur within area

Migratory Species [Dataset Information]	Status	Type of Presence
---	--------	------------------

Migratory Terrestrial Species

Birds

<u>Haliaeetus leucogaster</u> White-bellied Sea-Eagle	Migratory	Species or species habitat likely to occur within area
<u>Leipoa ocellata</u> * Malleefowl	Migratory	Species or species habitat likely to occur within area
<u>Merops ornatus</u> * Rainbow Bee-eater	Migratory	Species or species habitat may occur within area

Migratory Wetland Species

Birds

<u>Ardea alba</u> Great Egret, White Egret	Migratory	Species or species habitat may occur within area
<u>Ardea ibis</u> Cattle Egret	Migratory	Species or species habitat may occur within area

Migratory Marine Birds

<u>Apus pacificus</u> Fork-tailed Swift	Migratory	Species or species habitat may occur within area
<u>Ardea alba</u> Great Egret, White Egret	Migratory	Species or species habitat may occur within area
<u>Ardea ibis</u> Cattle Egret	Migratory	Species or species habitat may occur within area

Other Matters Protected by the EPBC Act

Listed Marine Species [Dataset Information]	Status	Type of Presence
---	--------	------------------

Birds

<u>Apus pacificus</u> Fork-tailed Swift	Listed - overfly marine area	Species or species habitat may occur within area
<u>Ardea alba</u> Great Egret, White Egret	Listed - overfly marine area	Species or species habitat may occur within area

Ardea ibis Cattle Egret	Listed - overfly marine area	Species or species habitat may occur within area
Cereopsis novaehollandiae grisea Cape Barren Goose (south-western), Recherche Cape Barren Goose	Listed - overfly marine area	Species or species habitat likely to occur within area
Haliaeetus leucogaster White-bellied Sea-Eagle	Listed	Species or species habitat likely to occur within area
Merops ornatus * Rainbow Bee-eater	Listed - overfly marine area	Species or species habitat may occur within area

Commonwealth Lands [[Dataset Information](#)]

Unknown

Extra Information

State and Territory Reserves [[Dataset Information](#)]

Bishops Nature Reserve, WA
Dowak Nature Reserve, WA
Jeffrey Lagoon Nature Reserve, WA
Red Lake Townsite Nature Reserve, WA
Ridley North Nature Reserve, WA
Ridley South Nature Reserve, WA
Swan Lagoon Nature Reserve, WA
Truslove North Nature Reserve, WA
Un-named (No. 33113) Nature Reserve, WA

Caveat

The information presented in this report has been provided by a range of data sources as [acknowledged](#) at the end of the report.

This report is designed to assist in identifying the locations of places which may be relevant in determining obligations under the *Environment Protection and Biodiversity Conservation Act 1999*. It holds mapped locations of World Heritage and Register of National Estate properties, Wetlands of International Importance, Commonwealth and State/Territory reserves, listed threatened, migratory and marine species and listed threatened ecological communities. Mapping of Commonwealth land is not complete at this stage. Maps have been collated from a range of sources at various resolutions.

Not all species listed under the EPBC Act have been mapped (see below) and therefore a report is a general guide only. Where available data supports mapping, the type of presence that can be determined from the data is indicated in general terms. People using this information in making a referral may need to consider the qualifications below and may need to seek and consider other information sources.

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other

sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

For species where the distributions are well known, maps are digitised from sources such as recovery plans and detailed habitat studies. Where appropriate, core breeding, foraging and roosting areas are indicated under "type of presence". For species whose distributions are less well known, point locations are collated from government wildlife authorities, museums, and non-government organisations; bioclimatic distribution models are generated and these validated by experts. In some cases, the distribution maps are based solely on expert knowledge.

Only selected species covered by the [migratory](#) and [marine](#) provisions of the Act have been mapped.

The following species and ecological communities have not been mapped and do not appear in reports produced from this database:

- threatened species listed as [extinct or considered as vagrants](#)
- some species and ecological communities that have only recently been listed
- [some terrestrial species](#) that overfly the Commonwealth marine area
- migratory species that are very [widespread, vagrant, or only occur in small numbers](#).

The following groups have been mapped, but may not cover the complete distribution of the species:

- non-threatened seabirds which have only been mapped for recorded breeding sites;
- seals which have only been mapped for breeding sites near the Australian continent.

Such breeding sites may be important for the protection of the Commonwealth Marine environment.

Acknowledgments

This database has been compiled from a range of data sources. The Department acknowledges the following custodians who have contributed valuable data and advice:

- [New South Wales National Parks and Wildlife Service](#)
- [Department of Sustainability and Environment, Victoria](#)
- [Department of Primary Industries, Water and Environment, Tasmania](#)
- [Department of Environment and Heritage, South Australia Planning SA](#)
- [Parks and Wildlife Commission of the Northern Territory](#)
- [Environmental Protection Agency, Queensland](#)
- [Birds Australia](#)
- [Australian Bird and Bat Banding Scheme](#)

- [Australian National Wildlife Collection](#)
- Natural history museums of Australia
- [Queensland Herbarium](#)
- [National Herbarium of NSW](#)
- [Royal Botanic Gardens and National Herbarium of Victoria](#)
- [Tasmanian Herbarium](#)
- [State Herbarium of South Australia](#)
- [Northern Territory Herbarium](#)
- [Western Australian Herbarium](#)
- [Australian National Herbarium, Atherton and Canberra](#)
- [University of New England](#)
- Other groups and individuals

[ANUCliM Version 1.8, Centre for Resource and Environmental Studies, Australian National University](#) was used extensively for the production of draft maps of species distribution. Environment Australia is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

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Appendix C

WAPC's Acid Sulphate Soils Self-Assessment Form



Acid Sulfate Soils Applicant Self-Assessment Form



Important information for applicants

This form need only be completed if there is evidence of significant risk of disturbing acid sulfate soils at this location or having completed Form 1A - Application for approval of freehold subdivision or survey strata you have indicated yes to either question 1 or 2, Acid sulfate soils assessment, section 7.

Applicant

The applicant is the person with whom the WAPC will correspond and, if the application is approved, the person to whom the approval will be sent.

Full name

Applicant signature Date

Application property details

Step 1

If you have previously indicated yes to question 1 or 2 on form 1A, go to Step 2.

Is there evidence of a significant risk of disturbing acid sulfate soils at this location?
The WAPC has published maps showing the levels of risk of acid sulfate soils. The maps are shown on figures 1-29 of planning bulletin no. 64 and can be downloaded at www.wapc.wa.gov.au/bulletins

Question 1: Do figures 1-29 of the WAPC's Planning Bulletin No 64 Acid Sulfate Soils show the land as having a high to moderate risk of acid sulfate soil occurring within 3 m of natural soil surface? yes no

Question 2: Is the land located in an area, whether depicted in figures 1-29 or not, where site characteristics and local knowledge lead you to form the view that there is a significant risk of disturbing acid sulfate soils at this location? yes no

If yes to either of these questions go to step 2.

If no to both of these questions then no further investigation is required. Sign this form and submit it with your application together with the written results of the preliminary site assessment.

Step 2

Are any of the following works proposed, or likely to be carried out, on the land?

Question 3: Are any dewatering works proposed to be undertaken? yes no

Question 4: Is the surface elevation \leq 5m AHD and is excavation of \geq 100m³ of soil proposed? (ie 10 standard dump truck loads) yes no

Question 5: Is the surface elevation $>$ 5m AHD and is excavation of \geq 100m³ of soil (ie 10 standard dump truck loads) with an excavation depth of \geq 2m proposed? yes no

If yes to any of these questions go to step 3.

If no to all of these questions no further investigation is required. Sign this form and submit it with your application.

Step 3

Carry out preliminary site assessment in accordance with Department of Environment and Conservation guidelines.

Note: Copies of documents in the acid sulfate soils guidelines series and further technical advice and information can be obtained from contaminated sites page on the Department of Environment and Conservation's website at <http://www.dec.wa.gov.au>

Question 6: Did the preliminary site assessment reveal the presence of acid sulfate soils? yes no

If yes to this questions go to step 4.

If no to this questions then no further investigation is required. Sign this form and submit it with your application together with the written results of the preliminary site assessment.

PTD for information of submissions
Version 01 (February 2008)

Appendix D

Consultation

Threatened Fauna:

From: Mutton, Amy [mailto:Amy.Mutton@dec.wa.gov.au]
Sent: Tuesday, 12 August 2008 9:52 AM
To: WEIGHELL Simon (GEnv)
Subject: FW: Fauna search

Hi Simon,

Sorry I forgot to change the name on the email below. I always say the same thing so I just copy paste.

Regards,
Amy

From: Mutton, Amy
Sent: Monday, 11 August 2008 4:39 PM
To: 'WEIGHELL Simon (GEnv)'
Subject: RE: Fauna search

Hi Georgia

Please find attached the results for the Threatened and Priority Fauna Database search for the vicinity of the intersection of the Coolgardie-Esperance Highway and Tom Starcevich Road (plus ~50km buffer).

Please refer to the attached letter for the conditions relating to the supplied data.

Let me know if you have any questions regarding the information supplied.

Regards,
Amy

Amy Mutton
Species and Communities Branch
Department of Environment and Conservation
Phone (08) 9219 8636
Fax (08) 9334 0278

From: WEIGHELL Simon (GEnv) [mailto:simon.weighell@mainroads.wa.gov.au]
Sent: Monday, 11 August 2008 4:12 PM
To: Mutton, Amy
Subject: RE: Fauna search

Hi Amy

Sorry about that, the central coordinate is 121°42'58"E, 33°13'9"S.

Thanks
Simon

Simon Weighell
Graduate Environment (GEnv)
Environment Branch
Main Roads Western Australia
Ph: (08) 9323 4544

From: Mutton, Amy [mailto:Amy.Mutton@dec.wa.gov.au]
Sent: Monday, 11 August 2008 4:09 PM
To: WEIGHELL Simon (GEnv)
Subject: Fauna search

Hi Simon,

Kellie has asked me to perform the fauna search you requested.

Can you please provide me with more information on the intersection location, as the Coolgardie-Esperance Hwy is long; do you have coordinates, a postal locality, or the closest townsite?

Regards,
Amy

Amy Mutton
*Species and Communities Branch
Department of Environment and Conservation
Phone (08) 92 19 8636
Fax (08) 9334 0278*

Threatened Flora:

From: Long, Bridgitte [mailto:Bridgitte.Long@dec.wa.gov.au]
Sent: Wednesday, 6 August 2008 2:32 PM
To: WEIGHELL Simon (GEnv)
Subject: FW: Threatened Flora Search

Hi Simon

Please find attached the results from the WA Herbarium database (WAHerb) and the Declared Rare and Priority Flora Species List for the Coolgardie-Esperance Hwy area. There were no results from the search of the Threatened (Declared Rare) Flora Database.

Please refer to the attached letter for the Conditions of Supply for this information.

Regards

Jessica Donaldson for

Bridgitte Long
Threatened Flora Database Officer

Species and Communities Branch
Department of Environment and Conservation
Ph (08) 9334 0123 Fax (08) 9334 0278
bridgitte.long@dec.wa.gov.au

From: WEIGHHELL Simon (GEnv) [mailto:simon.weighell@mainroads.wa.gov.au]
Sent: Tuesday, 5 August 2008 5:31 PM
To: Long, Bridgitte
Subject: Threatened Flora Search

Hi Bridgitte

Main Roads Goldfields-Esperance region is proposing to realign the intersection of Coolgardie-Esperance Highway and Tom Starcevich Rd for safety reasons.

In order to complete a preliminary environmental impact assessment for the project, could you please provide me with a threatened flora search of an area up to 5km in radius from the intersection?

Thanks
Simon

Simon Weighell
Graduate Environment (GEnv)
Environment Branch
Main Roads Western Australia
Ph: (08) 9323 4544

TECs:

From: Podesta, Mia [mailto:Mia.Podesta@dec.wa.gov.au]
Sent: Wednesday, 6 August 2008 9:21 AM
To: WEIGHHELL Simon (GEnv)
Subject: Results of TEC/PEC Search - Coolgardie/ Tom Starcevich (MR)

Hi Simon,

I refer to your request on the 5th of August 2008 for information on threatened and priority ecological communities occurring within the search area provided. Please note that Elizabeth Chandler at Main Roads is sent an update of the TEC/PEC data every 6 months, it would be to your advantage to source this data.

A search was undertaken on the Department's Threatened Ecological Communities database. Please note that there are no known occurrences of threatened ecological communities recorded within this boundary.

Please note not all priority ecological communities are currently recorded on our database. You may like to view the current list in related documents at <http://www.dec.wa.gov.au/management-and-protection/threatened-species/wa-s-threatened-ecological-communities.html>.

Attached are the conditions under which this information has been supplied. The information supplied should be regarded as an indication only of the threatened and priority ecological communities that may be present.

It would be appreciated if any occurrences of threatened and priority ecological communities encountered by you in the area could be reported to this Department to ensure their ongoing management.

Mia

Mia Podesta

Ecologist - Threatened Ecological Community Database
Department of Environment and Conservation, Kensington
Ph: 9334 0116
Fax: 9334 0300
Email: Mia.Podesta@dec.wa.gov.au

From: WEIGHELL Simon (GEnv) [mailto:simon.weighell@mainroads.wa.gov.au]
Sent: Tuesday, 5 August 2008 5:34 PM
To: Podesta, Mia
Subject: TEC search

Hi Mia

Main Roads Goldfields-Esperance region is proposing to realign the intersection of Coolgardie-Esperance Highway at Tom Starcevich Rd for safety reasons.

In order to complete a preliminary environmental impact assessment for the project, could you please provide me with a threatened ecological community search of an area up to 5km in radius from the intersection?

Thanks
Simon

Simon Weighell
Graduate Environment (GEnv)
Environment Branch
Main Roads Western Australia
Ph: (08) 9323 4544

Appendix E

Site Photos



Intersection looking West



Intersection looking East



Looking South from Tom Starcevic Rd



Looking South from Coolgardie-Esperance Hwy



Looking North from Coolgardie-Esperance Hwy



Bush West of intersection showing power pole to be moved.



Bush West of intersection

Appendix F

Vegetation Clearing Assessment Report

MRWA Vegetation Clearing Assessment Report

This report has been prepared to assist MRWA in addressing condition 7 "Assessment of Clearing Impacts" under Clearing Permit CPS 818/4.

For guidance on how to complete the form, refer to DEC completed reports (active permits) at http://203.20.251.100/cps_reports/.

AREA UNDER ASSESSMENT DETAILS

Proponent details

Proponent's name: **MRWA**
Contacts: Name: Lee Hunt (PM)
Phone: (08) 9080 1400
Fax: (08) 9080 1452
Email: lee.hunt@mainroads.wa.gov.au

Property details

Property: N/A
Colloquial name: Intersection of Coolgardie-Esperance Hwy and Tom Starcevich Rd

Area under assessment

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:	Site Plan Attached
1.1	n/a	Mechanical	Road project	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Avoidance/Minimise clearing

How have the clearing impacts been minimised?
N/A

BACKGROUND

Existing environment and information

Description of the native vegetation under application

Site Visit Undertaken	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Fauna / Flora Survey Undertaken	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Site Report Attached	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Fauna / Flora Survey Report Attached	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Site Photos Attached	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Other Relevant References Attached	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Vegetation Complex	Clearing Description	Vegetation Condition	Comment
Veg Associations 512 and 519 (25.5% and 60.0% remaining respectively)	0.7ha of 512, 0.4ha of 519	Very Good	

ASSESSMENT OF APPLICATION AGAINST CLEARING PRINCIPLES

(a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

Comments **Proposal is not likely to be at variance to this Principle**

The vegetation of the project area is in very good condition but does not comprise a higher level of biological diversity than that in a large area of remaining bushland adjacent to the project area.

Methodology Site visit

(b) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia.

Comments **Proposal is not at variance to this Principle**

Only a small amount of clearing is involved and plenty of remaining habitat exists in bushland to the west of the project area.

Methodology Site visit

(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.

Comments **Proposal is not likely to be at variance to this Principle**

No records of rare flora were identified in the project area as a result of numerous database searches. It is therefore unlikely that any will exist in the project area.

Methodology Desktop study.

(d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community.

Comments **Proposal is not at variance to this Principle**

No TECs were identified in the vicinity of the project area as a result of a DEC database search.

Methodology Desktop study.

(e) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.

Comments **Proposal is not likely to be at variance to this Principle**

Vegetation Association 512 is under represented but the project will only involve a small amount of clearing which equates to just 0.001% of the Vegetation Association's current extent. As a result the area can not be considered significant as a remnant of native vegetation in the area.

Methodology Desktop study.

(f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.

Comments **Proposal is not at variance to this Principle**

No wetlands or watercourses are present within the project area.

Methodology Desktop study and site visit.

(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

Comments **Proposal is not at variance to this Principle**

Only a small amount of native vegetation is being cleared and the project is only a minor realignment meaning no new significant degrading processes are likely to develop. No significant weed species were identified and no significant drainage modifications are envisaged.

Methodology Desktop study and site visit.

(h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.

Comments **Proposal is not at variance to this Principle**

No conservation areas exist adjacent to or nearby the project area. Bushland adjacent to the project area is under freehold title.

Methodology Desktop study and site visit.

(i) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.

Comments **Proposal is not at variance to this Principle**

The project will only have a small clearing footprint meaning impacts relating to water quality are considered highly unlikely.

Methodology Site visit.

(j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.

Comments **Proposal is not at variance to this Principle**

The project will only have a small clearing footprint meaning impacts relating to flooding are considered highly unlikely.

Methodology Site visit.

Planning instrument, Native Title, RIWI Act Licence, EP Act Licence, Works Approval, Previous EPA decision or other matter.

Comments n/a

Methodology n/a

SUBMISSIONS

If required have submissions been requested and addressed

Submission Requested from	Request Sent (Date)	Submission Received (Date)	Issues Raised / Comments Made
n/a			

ASSESSOR'S RECOMMENDATIONS

List of Principles seriously at variance, at variance or maybe at variance **Recommendation**

Nil	This clearing does not require a Revegetation Management Plan / Offset Proposal / Environmental Management Plan / Management Strategy/New Application, under CPS 818/4
-----	--

References

Nil

OFFICER PREPARING REPORT

Simon Weighell
Graduate Environment
Environment Branch
MRWA

13/08/08