

ASSESSMENT AGAINST THE CLEARING PRINCIPLES

**STORM CLEANUP THROUGHOUT THE SOUTH WEST REGION OF MAIN
ROADS WA**

October 2012



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STORM CLEANUP THROUGHOUT THE SOUTH WEST REGION OF MAIN ROADS - ASSESSMENT AGAINST THE CLEARING PRINCIPLES

BACKGROUND

Two storm events on the 10th and 12th of June 2012 resulted in extensive damage to vegetation and property in the south west of WA. The incident was proclaimed an *eligible (natural) disaster* under the Western Australia Natural Disaster Relief and Recovery Arrangements (WANDRRA), and pursuant to Section 4.2 of the Natural Disaster Relief and Recovery Arrangements Determination 2011 Version 1, issued by the Commonwealth Government Attorney-General.

The report (Appendix One) stated:

“Preliminary indications are that the major damage and costs will be associated with Counter Disaster Operations type activities e.g., clean-up of green waste debris such as fallen trees and branches. It is expected that a significant amount of this clean-up will involve the road network infrastructure and some repair and/or restoration could also be anticipated”.

“Assistance under this proclamation is available in respect of the cost of restoration and replacement (to pre-disaster standard) of certain essential public assets which would include the road network infrastructure. Consideration will be given to proposals involving the betterment of roads to a more disaster-resilient standard than its pre-disaster standard”.

MRWA state-wide emergency Purpose Permit (CPS 817) allows for clearing associated with restoring access to the State’s road network, including within an ESA, following an unplanned (or unforeseeable) event. This includes clearing of native vegetation associated with emergency situations and unplanned events, such as, but not limited to, restoring access during flooding, recovering errant vehicles, establishing emergency camps, repairing burst pipelines, removing imminent danger, etc.

Part 1, Section 1(b) of the Permit states that: "This Permit authorises the Permit Holder to clear *native vegetation* for *project activities* in *unplanned events* 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*".

Part 1, Section 4 states that "Prior to clearing any *native vegetation* under this Permit, the Permit Holder must conduct a *desktop study* pursuant to condition 7 of this Permit, and where *clearing* may be at variance with one or more of the *clearing principles* the Permit Holder must:

- a) Demonstrate that the *clearing* could not be undertaken in an area where the *clearing* would not be at variance with the *clearing principles*; and
- b) Demonstrate that the *clearing* cannot be undertaken under any other valid clearing Permit granted to this Permit Holder".

The storm damage was very wide-spread and there was a requirement to urgently clear blocked roads for access and safety concerns especially as the Bureau of Meteorology had forecast a comparable (or even worse) event in the next few days. Emergency clean-up crews were mobilized immediately following the storm on the afternoon of Sunday 10th June. The initial, primary focus being to clear the roads and relieve obvious hazardous situations and risks to humans.

The initial works were undertaken in accordance with Schedule 2(2)table (*Environmental Protection (Clearing of Native Vegetation) Regulations 2004*) and Regulation 5: Item 2 (a & b), Item 11 and Item 22 (A Guide to the Exemption for Clearing Native Vegetation for Maintenance in Existing Transport Corridors: *Environmental Protection Act 1986*).

The following assessment against the Clearing Principles is based on a desktop assessment of the regions road network that was undertaken in June 2012 in accordance with Main Roads' Purpose Permit (CPS 817). The assessment has limitations imposed by the wide range of the works (1015 kilometres of the road network) (Appendix D) and the variety of the scope of works at the various locations. The works involved ten teams of contractors and have recently been completed in November after extending for nearly a five month period and costing over 6 million dollars.

DESCRIPTION OF THE PROJECT

Main Roads is undertaking a clean-up throughout the majority of the South West Regional network of fallen or dangerous trees following the Category 3 (AIIMS) storm incident on 10 June 2012 (and the additional high pressure system on 12th June 2012).

As a consequence of the severe weather, vegetation was heavily damaged with fallen trees and broken limbs causing road closures and general disruptions. The road reserve vegetation was particularly vulnerable being mostly narrow corridors and accrued an excessive amount of debris that would ultimately present a potential fire hazard.

Crews were mobilised to initially clear the roads leaving piles of vegetation along the roadside. The final clean-up involves the removal of these piles as well as accumulated debris and hazardous trees from the road reserve areas. Particular attention was given to the removal of fallen trees on fence lines to allow their repair so as to prevent the movement of stock onto the road. Due to the enormous scale of the works and for safety reasons, machinery was used wherever possible, except in identified significant environmental areas; where hand tools and man-handling techniques were employed.

The practises for the storm clean-up are described below:

- Conduct a desktop assessment of clean-up work locations using external and internal GIS data sources.
- Limit machinery movement to within the maintenance zone.
- Use excavator “grabs” to reach and pull out fallen trees etc. from outside of the maintenance zone.
- Chain saw tree stumps off at ground level.
- Clean-up crews to exercise judgement in clearing any dead / dangerous trees.

A desktop assessment was undertaken throughout the SWR network to primarily identify threatened flora and ecological communities that have not been registered on Main Roads’ IRIS database, so that the clean-up operations could be modified in these environmentally significant areas.

It is noted that only a preliminary assessment of the clearing principles was undertaken prior to the clean-up, which identified areas containing DRF as well as any other areas of significance on the IRIS system. It was noted that the IRIS system was not up-to-date. A full assessment of the clearing principles was conducted after the start of the clean-up and is documented below.

ASSESSMENT AGAINST THE CLEARING PRINCIPLES

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

The damage to vegetation caused by the storm is likely to have impacted a range of biological ecosystems. The extent of the impact to specific areas is difficult to assess and would vary according to the nature of the vegetation.

The native vegetation removed to achieve the storm clean-up was regarded as being an immediate hazard to the safety of road users and also a potential fire hazard in the future. The variety and type of vegetation was of an assorted range as the works were undertaken throughout the majority of the South West region. However, if the fallen vegetation remained in many locations, the denseness of the debris would likely to have smothered and killed lower level plants.

A desktop investigation was undertaken to identify all registered threatened flora and ecological communities adjacent to the roads in the region. This information was used to bring significant environmental areas to the attention of the contractors so they could modify their operations accordingly to avoid impacts. The prevention of the spread of dieback over such an extensive area was managed by machines avoiding where possible leaving the road verge, which has ultimately had public access throughout the years.

MRWA does not consider that the clean-up works were likely to compromise areas of high biological diversity due to the nature of the works consisting of removal of damaged storm debris.

Principle (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.

The damage caused by the storm is likely to have had an effect on the habitat of many species. Besides the actual trauma of the event, the ferocity of the winds would have targeted dead and hollow tree specimens, which would be less capable of withstanding the

force of the winds. Additionally, an extensive amount of foraging material would have been stripped from living specimens.

The clean-up operation removed the majority of the fallen vegetation structure and took trees that were considered unstable and likely to fall in a future storm event, so posing a safety hazard.

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

It is unlikely that threatened flora species were impacted by the clean-up operation.

The desktop investigation identified all registered threatened flora sites adjacent to the roads that required treatment (within 30m) and these areas were brought to the attention of the contractors so they could modify their operations accordingly.

Principle (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.

It is unlikely that threatened ecological communities were impacted by the clean-up operation.

The desktop investigation identified all threatened ecological communities adjacent to the roads that required treatment and these areas were brought to the attention of the contractors so they could modify their operations accordingly.

Principle (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.

The clean-up operation was primarily to remove vegetation that had fallen or was likely to fall in a future storm event. Solitary trees specimens were especially liable to being blown over due to the intensity of the winds. As the operation was conducted over such an extensive area, it is likely that there was vegetation removed from areas that could be regarded as significant as a remnant of native vegetation in an area that had been extensively cleared. Given the nature of the clearing, this was unavoidable so as to ensure the safety of road users but is unlikely to have made a significant impact.

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

Vegetation growing near watercourses would have been particularly prone to damage and uprooting due to their exposed location and reduced stability. It is likely that there were areas of the clean-up where vegetation growing in, or in association with, an environment associated with a watercourse or wetland was removed. Again, given the nature of the clearing, this was unavoidable so as to ensure the safety of road users but is unlikely to have made a significant impact.

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

The random uprooting of trees by the storm in the wide range of situations would have increased the likelihood of erosion and the potential for future weed invasion. The removal of fallen trees and on some occasions when necessary their root systems; may also have exacerbated the movement of soil particularly in the proximity of watercourses. Overall though, the impact would not likely cause appreciable land degradation throughout the south west region.

Principle (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.

As the operation was conducted over such an extensive area, it is likely that there was vegetation removed from areas adjacent to or near conservation areas. However, it is

unlikely that there would be an impact on the environmental values of these areas as only roadside material was removed with occasional necessary machine movement from the verge to remove trees that had fallen on fence lines.

Principle (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.

It is unlikely that the removal of fallen timber and foliage would cause deterioration in the quality of surface or underground water and any root system removal would not have exceeded 1-1.5m in depth.

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

It is unlikely that the storm damage or the clean-up operation caused, or exacerbated the incidence or intensity of flooding.

RESULTS OF ASSESSMENT

Likely at variance to Principle (e) & (f).

OFFSET REQUIREMENT

In accordance with Part III, Section 8(b) of CPS 817/1, *“if part or all of the clearing may be or is at variance to one or more of the Clearing Principles, then the Permit Holder must implement an offset.”* However, in this instance, Main Roads does not consider that the clearing of native vegetation is significant and therefore that an offset should not be required.

MRWA will request that the Department of Environment and Conservation grant an exemption to the requirement for an offset.

OUTCOMES

- All sites of environmental significance (threatened flora / ecological communities / Environmentally Sensitive Areas) have been identified and listed for the entire south west region of Main Roads (Appendix B).
- Main Roads database of Special Environmental Areas is being updated.
- Mulched material to be donated to community rehabilitation groups and used on Main Roads projects.
- Letter of Education from DEC regarding clean-up works on Railway Road Boyanup (Appendix C)
- The region will undertake a desktop of the regions network to determine areas that have high environmental values and document this for future unforeseen events.
- The region will advise all crews of areas of high environmental value immediately prior to the clean-up of any unforeseen events so that these areas can be managed accordingly.

REFERENCES

2011/12 WANDRRA ELIGIBLE DISASTER PROCLAMATION NOTIFICATION
Tornadoes and Storms (7-13 June 2012)

Environmental Protection (Clearing of Native Vegetation) Regulations 2004

A Guide to the Exemption for Clearing Native Vegetation for Maintenance in Existing
Transport Corridors: *Environmental Protection Act 1986*

APPENDIX A

2011/12 WANDRRA ELIGIBLE DISASTER PROCLAMATION NOTIFICATION

2011/12 WANDRRA ELIGIBLE DISASTER PROCLAMATION NOTIFICATION Tornadoes and Storms (7-13 June 2012)

The above event has been proclaimed an *eligible disaster* under the Western Australia Natural Disaster Relief and Recovery Arrangements (WANDRRA), and pursuant to Section 4.2 of the Natural Disaster Relief and Recovery Arrangements Determination 2011 Version 1, issued by the Commonwealth Government Attorney-General. The State Government will provide immediate financial assistance to those people who have been affected through joint State and Commonwealth disaster relief and recovery arrangements.

The passage of a cold front associated with thunderstorm activity on **Thursday, 7 June 2012**, resulted in a number of tornadoes impacting the south west of the State. Two occurred in the Perth metropolitan area, Dianella and Kinross, with a third tornado being identified near York.

On **Sunday 10 June 2012**, a severe weather event impacted South West Western Australia. According to the Bureau of Meteorology this type of weather event is extremely rare for southern Western Australia, especially during the winter period. Wind gusts in excess of 90 km/h were recorded at numerous sites with the strongest wind gust recorded for the event being 146 km/h at Cape Naturaliste.

On **Tuesday 12 June 2012**, a strong cold front passed over the southern half of the State bringing strong winds, with hail being reported in Bunbury. Maximum wind gusts of 113 km/h were recorded at Cape Leeuwin and Rottnest. The Bureau of Meteorology advise that a strong front comparing to the Tuesday event commonly occurs once or twice each winter. Pursuant to Section 2.1.1 of the NDRRA Determination 2011 Version 1, 'Tornado' and 'Storm' are deemed to be eligible *natural disaster* events. These separate events are being combined for administration purposes under the Western Australia Natural Disaster Relief and Recovery Arrangements (WANDRRA) and will be referred to as '*Tornadoes and Storms (7-13 June 2012)*'.

WANDRRA is jointly funded by the State and Commonwealth Governments and administered by FESA, with assistance from other agencies. Through WANDRRA, the Western Australian and Commonwealth Governments provide help to people who have suffered the direct impact of a proclaimed natural disaster event.

The Local Government districts subject to this proclamation will be those local government districts in parts of WA south of a line from Geraldton to Laverton to Forrest.

In the event that additional local government districts are identified as having been directly impacted by this natural disaster event, and subject to further assessment, they may be included in the affected area at a later date.

Preliminary indications are that the major damage and costs will be associated with Counter Disaster Operations type activities e.g., cleanup of greenwaste debris such as fallen trees and branches. It is expected that a significant amount of this cleanup will involve the road network infrastructure and some repair and/or restoration could also be anticipated.

Assistance under this proclamation is available in respect of the cost of restoration and replacement (to pre-disaster standard) of certain essential public assets which would include the road network infrastructure in the Local Government districts listed above.

Consideration will be given to proposals involving the *betterment* of roads to a more disaster-resilient standard than its pre-disaster standard.

Assistance may be available for the following measures (*where appropriate*) typically covered by the WANDRRA:

☐ **For individuals and families** – Personal Hardship and Distress grants which are administered by the Department for Child Protection (DCP). Potential measures include emergency food, accommodation, clothing, temporary living expenses, replacement of essential household contents and housing repairs to return housing to a habitable, safe and secure condition. **Note – some of these measures are subject to income and/or assets testing.**

☐ **For small businesses** – interest rate subsidies on ‘new’ loans approved by Authorised Deposit-taking Institutions.

☐ **For Primary Producers** – Assistance may be available toward freight costs, materials for boundary fences (*where public safety is at risk*), professional advice grants and interest rate subsidies on ‘new’ loans approved by Authorised Deposit-taking Institutions. These eligible measures are administered by the Department of Agriculture and Food. **Important Note** - Claims should be lodged before 14 December 2012.

☐ **For Local Governments & State Government Agencies** – Clean-up costs and the restoration or replacement (to pre-disaster standard) of essential public assets including local road damage. State road damage is also included through Main Roads Western Australia (MRWA). Only costs incurred that are ‘additional’ costs, and are directly related to the event, will be eligible for reimbursement. **Important Note** - The *allowable time limit* for eligible claims expires on 30 June 2014.

Claims in respect of any other *eligible measures* may also be considered.

It should be noted that assistance under the WANDRRA is not designed to supplant, or operate as a disincentive for self-help by way of commercial insurance.

Primary Contacts

Primary contacts for assistance/advice are:

☐ Department for Child Protection, by phone on 1800 032 965 or via website [here](#);

☐ Local Government – Main Roads Western Australia regional offices for road infrastructure via website [here](#);

☐ Department of Agriculture and Food, Rural Business Development, by phone on 1800 198 231 or via website [here](#); and

☐ Other enquiries may be directed to the Fire and Emergency Services Authority of Western Australia contact (WANDRRA Administrator) by phone on 9323 9552, or by email to - [wandrra@fesa.wa.gov.au](mailto:wandr@fesa.wa.gov.au)

END

APPENDIX B

Environmental Sites SWR Network 30m from road centerline

Environmental Sites within 30m of Road Centreline - Main Roads SWR (JULY 2012)

H002 Melville Mandurah Road

Start SLK	Finish SLK	Side of Road
48.0	48.6	B

H009 South Western Highway

Start SLK	Finish SLK	Side of Road
35.0	37.2	B
40.8	44.0	B
45.4	46.8	B
49.9	52.7	B
54.7	56.5	B
57.4	58.0	B
59.3	59.5	L
72.2		R
75.7	81.2	B
83.0		B
93.5	98.0	B
142.5	144.8	B
151.9	152.0	B
154.6	154.7	L
156.0	158.3	B
162.8	163.6	B
178.9		L
259.0		B
271.3		L
326.4		B
330.0		L
330.5	331.3	L
344.2		L
347.0	408.0	B

H015 Kwinana Freeway

Start SLK	Finish SLK	Side of Road
57.7		R
62.8	63.3	B
63.8	63.9	B
66.4	66.6	B
69.7	69.8	B

H043 Bussell Highway

Start SLK	Finish SLK	Side of Road
0.5	1.5	B
2.2	3.8	B
10.8		B
13.3	14.2	B
41.4	46.5	B
58.0	60.0	B
66.5	68.0	B
72.2		R
104.0	104.2	B
110.2	110.5	B
117.5	118.2	B
119.0	119.5	B
121.8	129.9	B
135.5	136.7	B
137.3		B
138.5	139.1	B

H045 Coalfields Highway

Start SLK	Finish SLK	Side of Road
21.2		R
23.9		B
25.2		B
26.0	30.5	R

H057 Forrest Highway

Start SLK	Finish SLK	Side of Road
0.1	0.2	B
1.0	1.2	B
2.1	2.2	B
5.6	46.2	B

70.5	71.7	B
73.1	73.4	L
79.9	80.8	B
85.0	85.2	L
86.9	89.8	B
94.2	95.4	B

H059 Willinge Drive

Start SLK	Finish SLK	Side of Road
0.4	0.6	B

H061 Australind-Roelands Link

No sites within 30m of road centreline

M003 Bannister Marradong Road

No sites within 30m of road centreline

M006 Bridgetown Boyupbrook Road

Start SLK	Finish SLK	Side of Road
29.4		L

M008 Vasse Highway

Start SLK	Finish SLK	Side of Road
3.0		B
4.7		B
9.0	10.3	B
13.1	21.5	B
26.4		B
46.2		B
49.0		B
64.5		B
65.2		B
66.0	66.6	B
71.0		B
75.5		B
90.9	91.5	B
94.2	94.6	B
96.0	96.4	L
97.4	98.7	B
101.0	101.7	B
109.6		B
114.0	117.5	B
120.0	122.5	B

M013 Donnybrook Kojunup Road

No sites within 30m of road centreline

M023 Pinjarra Road

(note this road starts at SLK 2.5)

Start SLK	Finish SLK	Side of Road
4.0	4.8	B
6.8	7.2	R
8.6	10.0	L
12.3	13.6	B
14.5		R
16.7	18.6	B

M024 Muirs Highway

Start SLK	Finish SLK	Side of Road
8.5	9.2	B
50.5		B
54.4		B
55.0		R
55.2		B
57.7	58.3	R
58.8	58.9	R
59.7	70.2	B
70.7	71.6	B
72.0		B

M027 Brockman Highway

Start SLK	Finish SLK	Side of Road
2.7		B
8.2		B
28.4		R
34.6		B
37.5	37.8	B
40.2		B
42.0	42.2	B
42.7	43.2	B
45.0	45.4	B
45.2	45.3	R
47.6		R
48.5	48.7	B
49.2	49.6	B
50.2	50.4	B
51.8	52.1	B
53.4	56.3	B

59.5	59.7	R
60.4	63.3	B
63.6	64.0	L
66.6	66.8	B
70.6	70.8	B
72.2	72.6	L

M036 Pemberton-Northcliffe Road

Start SLK	Finish SLK	Side of Road
21.1		B
25.8	26.2	R
27.1		B

M037 Collie-Lake King Road

No sites within 30m of road centreline

M042 Goodward Road

Start SLK	Finish SLK	Side of Road
12.8	13.6	B
15.2		R
16.1	16.2	R
17.5	17.6	B

M043 Caves Road

Start SLK	Finish SLK	Side of Road
0.0	0.8	B
2.8	3.8	B
10.5	14.5	B
16.5	18.2	B
22.0	26.4	B
47.6	49.0	B
50.8	51.3	R
52.8	53.9	R
57.4	57.7	B
58.7		B
61.7		B
72.0	94.4	B
97.6	97.8	R
100.2	100.6	B
101.9	109.2	B
111.0		B

M046 Collie Preston Road

Start SLK	Finish SLK	Side of Road
4.2		L

M052 Boyanup Picton Road

Start SLK	Finish SLK	Side of Road
0.2	0.8	B
6.2		R
11.7		L
16.3	16.6	L

M053 Pinjarra Williams Road

Start SLK	Finish SLK	Side of Road
9.4	10.4	B
23.8		L
61.9		B

M061 Boyunup Capel Road

Start SLK	Finish SLK	Side of Road
2.9		B
7.0		L
7.5		R
7.7		B
8.2	8.3	B
9.3		R
9.5		B
10.4		B
11.1		B
14.6		B

M066 Collie Williams Road

Start SLK	Finish SLK	Side of Road
54.2		L
60.7		L

M073 Greenlands Road

Start SLK	Finish SLK	Side of Road
0.0	2.4	B

Lakelands - Lake Clifton / Old Coast M074 Road

Start SLK	Finish SLK	Side of Road
1.2	1.6	B
10.3	10.5	L
11.5	12.0	B
14.7	55.0	B

M080 Stewart Road

Start SLK	Finish SLK	Side of Road
0.2	0.3	B
1.0	3.0	B
4.2	4.7	B
9.1	9.3	L
14.1		B
18.6		R

M081 Sues Road

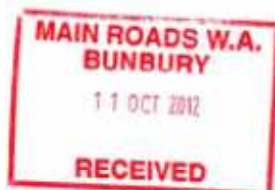
Start SLK	Finish SLK	Side of Road
0.0	0.1	B
12.2	16.3	B
18.6		B
24.7		B
28.6		B
47.5	48.3	B
49.2	49.3	B
49.8	49.9	B
57.4	57.6	B

APPENDIX C

DEC Letter of Education



Government of Western Australia
Department of Environment and Conservation



Mr Peter Swanson
Main Roads Western Australia
PO Box 5010
Bunbury WA 6231

Your ref:
Our ref: ICMS 25412
Enquiries: Jeff Fussell
Phone: 08 9725 4300
Email: Jeffrey.fussell@dec.wa.gov.au

05/387
BIZ# 19442
PEO SWANSON

Attention: Mr Peter Swanson

Dear Mr Swanson,

LETTER OF EDUCATION - CLEARING OF NATIVE VEGETATION ON RAILWAY ROAD, BOYANUP

Location Owner: Public Transport Authority of Western Australia
Location: Railway Road, Boyanup.

The Department of Environment and Conservation (DEC) has conducted an investigation into the clearing of native vegetation between the road reserve and the railway reserve along Railway Road, Boyanup.

As you are aware on the 10th July 2012, DEC officer Ms Flowers was travelling along Railway Road, Boyanup when she observed that employees from Fulton-Hogan, contracted by Main Roads, had cleared trees and undergrowth vegetation between the road reserve and the railway reserve. The remnant vegetation along Railway Road is known to contain Declared Rare Flora (DRF).

Ms Flowers spoke with the supervisor from Fulton-Hogan, Mr Paul Cassidy who stated that they were not aware of and had not been advised that there was DRF along Railway Road.

A site meeting was held on the 11th July with yourself, Mr Paul Cassidy, Mr Michael Tichbon from Capel LCDC and DEC officers Ms Flowers and Mr Fussell.

As a result of that meeting and further communications with DEC staff it has been established that, whilst Fulton-Hogan was operating under the Main Roads statewide Purpose Permit which allows for general clearing of roadside vegetation and maintenance and the removal of hazardous trees in transportation corridors, in future Main Roads will:

- Conduct more robust desktop assessments of clean-up work locations using external data sources.
- Limit machinery movement to within the maintenance zone.
- Use excavator "grabs" to reach and pull out fallen trees etc from within the maintenance zone.
- Chain saw tree stumps off at ground level.
- Clean-up crews to exercise judgment in clearing any dead / dangerous trees.

South West Region
South West Highway, Bunbury WA 6230
Phone: 08 97254300 / Fax: 08 97254351
PO Box 1693, Bunbury, WA 6230
www.dec.wa.gov.au

Further, the deficiencies within the Main Roads database are being addressed with the assistance of DEC in identifying and recording environmentally sensitive sites in order for Main Roads to update their 'sites of sensitivity' to negate this type of incident occurring in the future.

It is also noted that no DRF was disturbed, destroyed or cleared and that Main Roads, in respect to the Railway Road Boyanup location, have now recorded the DRF sites and installed road side markers

DEC also acknowledges the cooperation and professional response from Main Roads during this investigation and the ongoing interaction with DEC to maintain current databases containing sites of sensitivity.

After consideration of the circumstances in this case and in accordance with DEC's Enforcement and Prosecution Policy, DEC has elected to deal with this matter by way of a Letter of Education.

This correspondence is a formal Letter of Education for this matter.

If upon receiving this letter you believe further clarification is required or have any queries regarding this matter please contact Jeff Fussell at the South West Region Office on 9725-4300 for assistance.

Yours sincerely



Robert Chandler
Regional Manager
South West Region

9 October 2012

APPENDIX D

SW Region road network with storm damage extents

