Native Vegetation Clearing Permit supporting document:

The purpose of this document is to provide supporting information for a Native Vegetation Clearing Permit (NVCP) application to clear vegetation under section 51e of the *Environmental Protection Act 1986*. The clearing is proposed to be undertaken on Lot 11, Richardson Road, Northcliffe, WA, 6262 by the land owner. The indicative property and permit area boundary is identified in yellow on Figure 1.

Purpose of vegetation clearing:

The vegetation clearing is proposed to be undertaken for the following purposes.

1. Increased agricultural output:

The property is an active agricultural enterprise. Teatree scrub, bulrush and bracken regrowth reduces available pasture for livestock. This limits the stocking level which can be sustained on the property. The clearing is proposed to allow for removal of remnant and regrowth vegetation competing with pasture allowing additional pasture to be established.

2. Fire risk reduction, protection of property and livestock:

The property is occupied on a semi-permanent basis by the landowner. Although firebreaks are installed and maintained in accordance directions under the *Bush Fires Act 1954*, they are not able to be actively defended in the event of a bush fire. The property is abutted by forest with contiguous vegetation extending from reserves onto the land holding through neighbouring properties.

During extreme fire events (such as those experienced in February 2015) there is a high risk of property and livestock losses. The proposed clearing will increase breaks between the adjacent forest and scrub at the southern end of the property and remove vegetation on the western boundary of the property.

3. Other agricultural activities:

Clearing may also be undertaken to support other permitted agricultural activities and infrastructure such as but not limited to tracks, fences, dams, sheds, water tanks and buildings where not covered by existing clearing exemptions.

Vegetation to be cleared:

Vegetation clearing is planned to be undertaken utilising mechanical, glyophoshate spray and/or fire as appropriate. Where fire is utilised for the purpose of clearing, this will be undertaken during the appropriate season in accordance with permits required by the *Bush*

Fires Act 1954 when relevant. Herbicides will be applied in accordance with manufacturer specifications, will not be used in proximity to pooling water or drainage lines and will only be applied during drier months when there is no surface water drainage from the property.

A maximum of 20 ha of vegetation is proposed to be cleared on the property.

The areas of vegetation to be cleared are degraded by historical clearing and grazing and are generally of low conservation value. Vegetation proposed for clearing is predominantly areas of degraded bulrush, bracken and teatree scrub and pasture. There is high retention of representative vegetation proposed for clearing within reserves adjacent to the property and in local conservation estates.

Vegetation is not proposed to be cleared in the three remnant stands of vegetation on the property depicted in Figure 1 by the red polygons. These areas of remnant vegetation are located:

- At the north west corner of the property where the shed and farm house is located (Figure 2);
- Approximately half way down the property on the eastern boundary (Figure 3); and
- At the south west corner of the property (Figure 4).

Further it is not proposed to clear established trees which do not inhibit establishment of pasture and provide shelter for livestock. Some vegetation on the defined drainage line will be retained except where crossings and access is required.

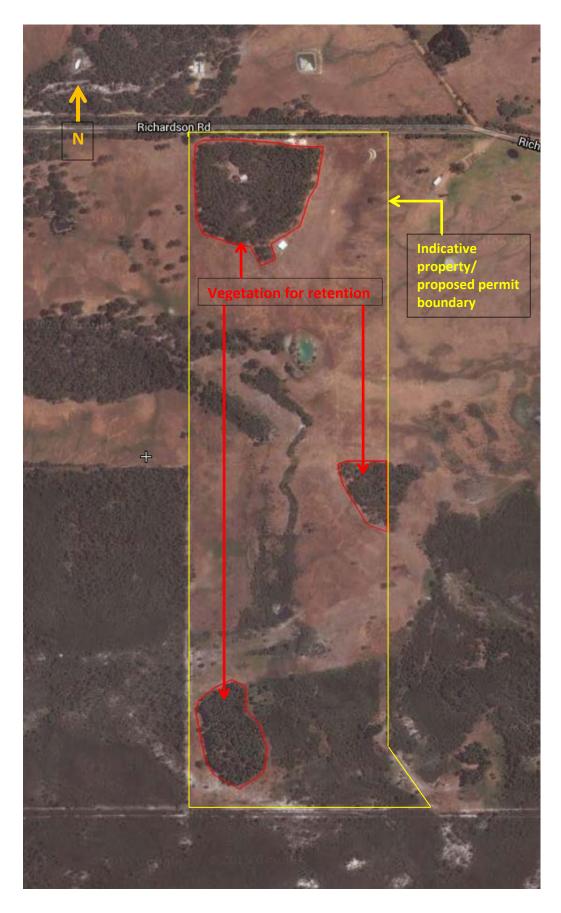


Figure 1: Remnant stands of vegetation for retention. These areas are not proposed for clearing in this proposal.



Figure 2: Remnant vegetation in the north west corner of the property where the shed and farm house is located.



Figure 3: Remnant vegetation approximately half way down the property on the eastern boundary.



Figure 4: Remnant vegetation in the south west corner of the property. Vegetation in foreground proposed for clearing.

Conservation value of vegetation to be cleared:

As described above the areas of vegetation to be cleared have been subject to historical clearing and now consist predominantly of degraded bulrush, bracken and teatree scrub and pasture. As an operating agricultural enterprise and in accordance with the General Agriculture land use zoning (Shire of Manjimup Town Planning Scheme No.4), the property has been and will continue to be subject to livestock grazing and other agricultural activities, which in combination with historical clearing activities have significantly degraded the vegetation's conservation value.

Further the property is located in a region were large holdings of native vegetation remain intact including crown reserves, state forest and D'Entrecasteaux National Park (1188 km²) and Shannon National Park (526 km²) providing representative habitat to that affected which will be retained in perpetuity.

A desktop assessment of data accessed from the Atlas of Living Australia (Accessed 29/06/2015 at http://www.ala.org.au/ Figure 5) has not identified any threatened or priority flora or vulnerable, endangered or critically endangered fauna on the property.

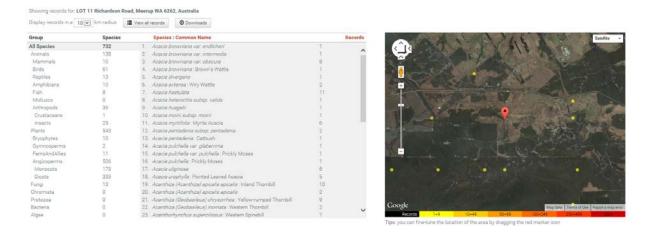


Figure 5: Data accessed from the Atlas of Living Australia

Assessment of the 10 native vegetation clearing principles:

Native vegetation should not be cleared if —

(a) it comprises a high level of biological diversity; or

The areas proposed for clearing have been cleared previously and are subject to ongoing cattle grazing. The biological diversity of the areas is generally low with degraded bulrush, bracken, teatree scrub and pasture present.

(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; or

There are no known rare or endangered fauna species present on the property. The areas proposed for clearing have been cleared previously and are subject to ongoing cattle grazing. The biological diversity of the areas is low with degraded bulrush, bracken, teatree scrub and pasture present. It is therefore considered unlikely that the proposed clearing will have an adverse impact on rare or endangered fauna species or their habitat. Further fauna habitat representative of that originally on the property is held in national parks providing suitable habitat for the continued existence of rare and endangered fauna species.

(c) it includes, or is necessary for the continued existence of, rare flora; or

There are no known occurrences of rare or priority flora on the property. The areas proposed for clearing have been cleared previously and are subject to ongoing cattle grazing. The biological diversity of the areas is low with degraded bulrush, bracken, teatree scrub and pasture present. It is therefore considered unlikely that any declared rare or priority flora is present on the property. Further vegetation representative of that originally on the property is held in national parks providing suitable habitat for the continued existence of rare flora.

(d) it comprises the whole or a part of, or is necessary for the maintenance of, a threatened ecological community; or

There are no known occurrences of threatened or priority ecological communities on the property. The areas proposed for clearing have been cleared previously and are subject to ongoing cattle grazing. The biological diversity of the areas is low with degraded bulrush, bracken, teatree scrub and pasture present. It is therefore considered unlikely that any threatened or priority ecological communities are present on the property.

(e) it is significant as a remnant of native vegetation in an area that has been extensively cleared; or

The property is located in a region were large holdings of native vegetation remain intact including D'Entrecasteaux National Park (1188 km²) and Shannon National Park (526 km²), providing representative habitat to that affected which will be retained in perpetuity.

(f) it is growing in, or in association with, an environment associated with a watercourse or wetland; or

The Department of Environment Regulation Native Vegetation Map Viewer (https://cps.der.wa.gov.au/main.html#%5B%7B%22xclass%22%3A%22app.map.Main%22%7D%5D) was accessed in 26/6/2015 and identifies an extensive area of wetland (Figure 6) that intersects the property (Figure 7) and the areas of proposed clearing. The extent of area identified as wetland on the property is inaccurate and no extensive or significant wetland habitat is present on the property (See Figures 8-10). Figures 8-10 were taken in July 2015 and represent typical winter water pooling and drainage flows on the property.

A very minor drainage line runs through the property which has minor flows during wet months. The vegetation present on the drainage line is predominantly bulrush and teatree. The southern paddock where the majority clearing is proposed and wetland area is mapped, contains free draining white coastal sand with very little organic content. No significant areas of water pooling occurs and only the small drainage line evident in Figures 8-10 is present. Small areas in the northern paddock on the property are subject to minor water pooling in wetter months however these areas are already cleared of native vegetation.

Given the extent of the identified wetland area in the region (Figure 6) on the Native Vegetation Map Viewer, clearing of any minor areas of degraded remnant wetland on the property would not have a significant or detrimental impact to the wetland's functioning or ecosystem health. As noted the property has been historically cleared and agricultural activities have affected the remaining vegetation's conservation value. It is noted that existing permits to clear within the area classified as wetland have already been granted by DER to landholders in the vicinity of the proposed clearing.

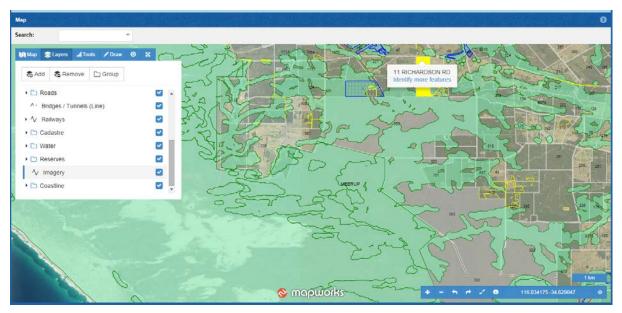


Figure 6: Extent of wetland mapped by DER on Native Vegetation Map Viewer

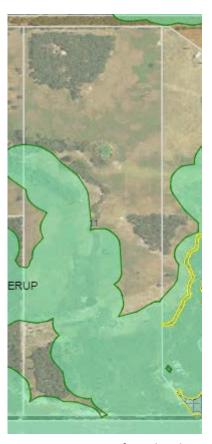


Figure 7: Extent of wetland area identified on Lot 11 Richardson Road, Northcliffe.



Figure 8: Drainage line at the boundary between first and second paddock. Area Identified as wetland in Native Vegetation Map Viewer.



Figure 9: Drainage line at the boundary between second and third paddock facing north. Area Identified as wetland in Native Vegetation Map Viewer.



Figure 10 Drainage line at the boundary between second and third paddock facing north. Area Identified as wetland in Native Vegetation Map Viewer.

(g) the clearing of the vegetation is likely to cause appreciable land degradation; or

The proposed vegetation clearing will not result in appreciable land degradation. The clearing is proposed to increase the agricultural output of the property. To achieve this objective, the cleared areas will be scarified, seeded and fertilized as required to establish pasture. Please see the environmental management measures in the section below that will be adopted in the unlikely event that unforeseen impacts occur.

(h) the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area; or

The proposed clearing will not have any detrimental impacts to the environmental values adjacent to or surrounding the property. All foreseeable detrimental impacts from the proposed clearing are easily managed and no new threatening processes to environmental values will result from the proposed activities and subsequent land use. Please see the environmental management measures in the section below that will be adopted in the unlikely event that unforeseen impacts occur.

(i) the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water; or

The proposed clearing will not cause deterioration in the quality of surface or underground water. There are no significant surface water flows from the property with only low volume and velocity surface flows occurring during wet months.

Only minor areas of water pooling occur on the property and no dryland salinity is present. No new threatening processes are proposed to surface or groundwater at the completion of the clearing with existing agricultural activities to continue which have been demonstrated to be managed in an environmentally acceptable manner.

(j) the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.

The proposed clearing will not cause, or exacerbate, the incidence or intensity of flooding. There are no significant surface water flows from the property with only low volume and velocity surface flows occurring during wet months. Only minor areas of water pooling occur on the property. Given predications of a generally drying climate in the south west of Western Australia, it is considered external factors will likely result in generally decreased incidence and intensity of future flooding events.

The proposed clearing on the property meets the requirements of the 10 native vegetation clearing principles.

Environmental Management:

- The three strands of remnant eucalypt forest depicted on Figure 1, are not proposed to be cleared under this permit.
- Established trees encountered in areas proposed for clearing will also be retained.
- If any erosion channels form on the property these will immediately be repaired by replacing eroded materials, spreading vegetation and rock armouring to reduce velocity and increase infiltration allowing pasture and vegetation to be established.
- Glyophosphate and other herbicides will be stored, handled, applied and disposed of in accordance with manufacture specifications. Herbicides will not be used in proximity to pooling water or drainage lines and will only be applied during drier months when there is no surface water drainage from the property.
- Burning will be undertaken during the appropriate season in accordance with permits required by the *Bush Fires Act 1954* when relevant.
- Cleared areas will be actively managed to ensure pasture is quickly established. This may include but is not limited to:
 - Restriction/management of grazing on cleared areas until pasture is established;
 - o Application of seed; and
 - o Application of fertilizer.