

31 May 2022

Department of Water and Environmental Regulation
Locked Bag 10
Joondalup DC WA 6919



Dear Sir/Madam,

RE: Lot 9500 Gull Road, East Keralup – Clearing Permit Application

On behalf of the Western Australian Land Authority (trading as DevelopmentWA), please find the attached Application for a 'Purpose' Permit to clear areas of native vegetation within areas of regrowth Blue Gum (*Eucalyptus globulus*) plantations on Lot 9500 Gull Road, East Keralup (see Attachment 1).

1 Site Description

Lot 9500 Gull Road, Keralup (the site) is located in the Shire of Murray and is part of a large government-owned landholding known as Keralup. Lot 9500 is 1,608.9ha and is currently partially used for grazing cattle but is otherwise unused. Lot 9500 contains large areas of flat, low-lying paddocks, vegetated wetlands and several low rises which are mostly bare or lightly vegetated. The site contains several large areas used previously for Blue Gum plantations which have since been cleared.

This clearing permit application is focused on Lease Areas 2 (north) and 5 (south) as shown in Attachment 2. The two lease areas were historically planted with Blue Gum plantations.

2 Site History

Prior to the Blue Gums being planted in the early 1990s the areas were used for rural pasture and grazing (Plate 1). The Blue Gum plantations are the dark areas evident in the 2000 aerial photo (Plate 2). The Blue Gum plantations were harvested on a staged basis during the period 2008-2015 (Plates 3 and 4).

Many of the Blue Gums have since coppiced from the cut stump and are interspersed with native vegetation that has regenerated in the old plantation areas (see Plate 5).

Plate 1: Lease Areas 2 and 5 (1974)



Plate 2: Lease Areas 2 and 5 (2000)

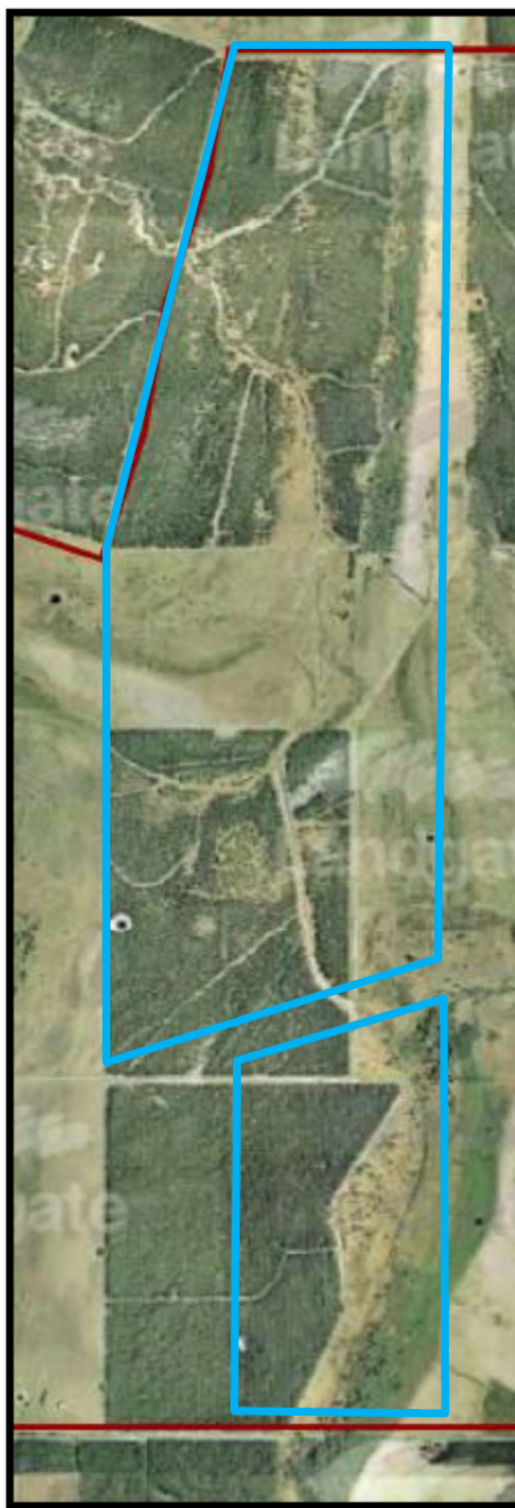




Plate 3: Lease Areas 2 and 5 (2005)

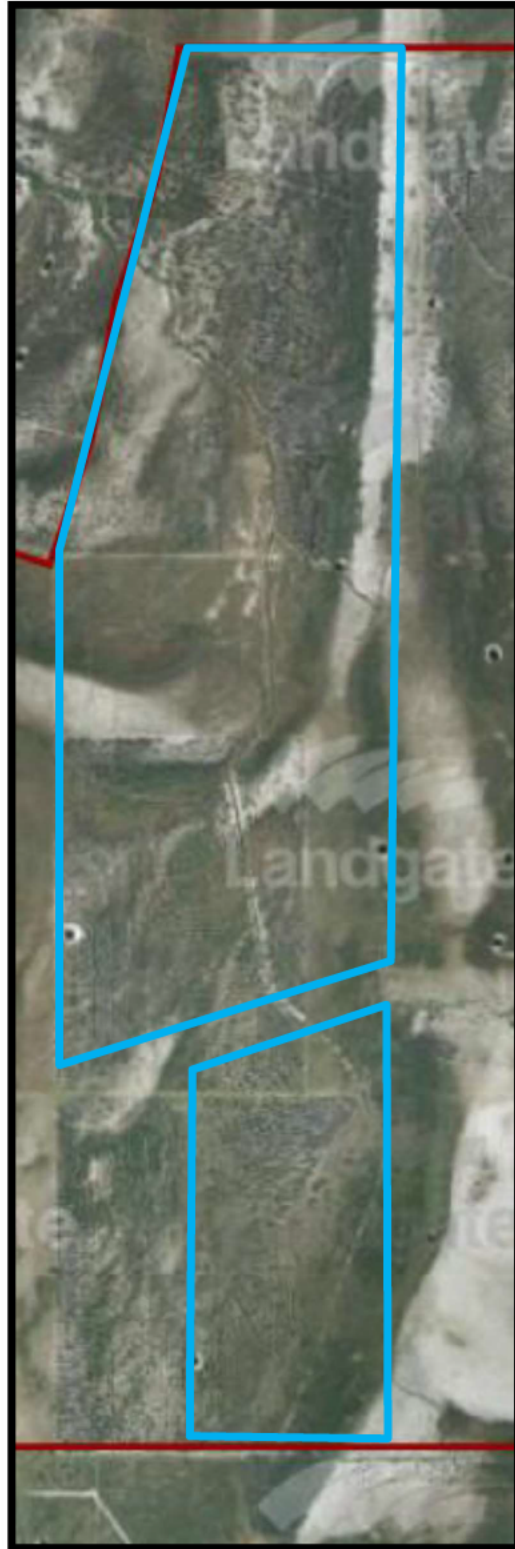


Plate 4: Lease Areas 2 and 5 (2012)

3 Vegetation

PGV Environmental undertook a detailed flora and vegetation survey of Lot 9500 in spring 2021 which included the Blue Gum plantation areas.

The area subject to this clearing permit application was mapped as *Eucalyptus globulus* (Blue Gum) Woodland over *Kunzea glabrescens* Tall Shrubland over *Astartea affinis* Shrubland. Many areas contain mature regrowth Blue Gum trees 15-18m tall (Plate 5). A tall shrub layer of *Kunzea glabrescens* to 3m and *Astartea affinis* 1.5-2m is regenerating in most of the old plantation area. The understorey is sparse and the surface landform retains the parallel ridges upon which the original Blue Gums were planted. The presence of native understorey species including *Astartea affinis*, *Hypocalymma angustifolium*, *Juncus pallidus*, *Drosera glanduligera* and *Lepidosperma longitudinale* indicate the Blue Gums were planted in wetland areas.

The condition of the vegetation in the plantation areas was rated as Good for those areas where the native shrubs are quite dense and Degraded for areas containing fewer native species.

Plate 5: Regenerating Blue Gum Plantation



3.1 Clearing Footprint

The Blue Gum plantations cover four discrete areas totalling 354ha (Attachment 2). The plantation areas are traversed by agricultural drainage lines, are adjacent to some well-vegetated wetlands and areas of Good or better quality vegetation. To clearing footprint has been drawn to avoid clearing any native vegetation in the following areas:

- 15m either side of agricultural drainage lines; and
- 50m buffer around Conservation and Resource Enhancement wetlands.

There are no trees with a DBH greater than 50cm within the clearing footprint and there are no known occurrences of conservation significant flora occurring in the plantation areas (PGV, Environmental 2021; Terrestrial Ecosystems, 2022). The clearing footprint is 154ha (Attachment 2).

Calculating the area of native vegetation interspersed with the Blue Gum trees is complex due to the size of the plantation area and the ability to discern native vegetation from aerial photographs as the native vegetation is all medium and small shrubs which are often under a canopy of regenerating Blue Gum trees. We have applied the following method to calculate the amount of native vegetation within the plantation areas. During the flora and vegetation survey, four quadrats were set up in the plantation areas and the percentage cover of native vegetation in each of the quadrats (K11, K13, K16, and K17) was 37%, 15%, 34% and 38%, giving an average cover of 30.5%.

The clearing footprint is 154ha, of which we estimate that 30.5%, or 53ha is native vegetation. Therefore, this application is to clear 53ha of native vegetation from the 154ha clearing footprint (Attachment 2).

4 Ten Clearing Principles

The Ten Clearing Principles have been addressed below to determine the environmental impact that the removal of the native vegetation in the plantation areas would have (Table 1).

Table 1: Clearing Principles Assessment

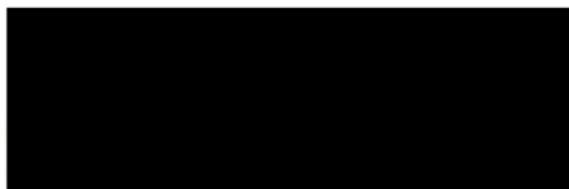
Number	Clearing Principle	Assessment
1	Vegetation should not be cleared if it comprises a high level of biological diversity.	<p>The vegetation in the plantation areas is regrowth after harvesting the Blue Gums. Many areas contain mature regrowth Blue Gum trees 15-18m tall. A tall shrub layer of <i>Kunzea glabrescens</i> to 3m and <i>Astartea affinis</i> 1.5-2m is regenerating in most of the old plantation area.</p> <p>The understorey is sparse and is mostly a monoculture of two native shrubs <i>Kunzea glabrescens</i> to 3m and <i>Astartea affinis</i>. Species richness in the four quadrats sampled in the old Blue Gum plantation contained an average of 7.0 native species (range 5-10) which is very low diversity.</p>

		<p>The condition of the vegetation is rated as Good in areas where the native vegetation is dense and Degraded for areas containing fewer native species.</p> <p>The proposed clearing is not considered at variance to this principle.</p>
2	<p>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.</p>	<p>The plantation areas provide fauna habitat for avian, reptile, amphibian and mammals in areas where there is significant understory. Black Cockatoos would not forage in the vegetation within the old plantations as the plant species are not foraging habitat species. Quenda (<i>Isoodon fusciventer</i>) may be present in areas that have a dense understory.</p> <p>The proposed clearing may be at variance to this principle due to the potential presence of Quenda.</p>
3	<p>Vegetation should not be cleared if it includes, or is necessary for, the continued existence of rare flora.</p>	<p>No Threatened or Priority plant species have been recorded in the plantation areas and are not expected to given the past clearing and high level of disturbance.</p> <p>Therefore, the proposed clearing is not considered at variance to this principle.</p>
4	<p>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</p>	<p>The vegetation in the plantation area is too degraded to be representative of a Threatened Ecological Community.</p> <p>Therefore, the proposed clearing is not considered at variance to this principle.</p>
5	<p>Vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.</p>	<p>The plantation area is not a significant remnant of vegetation.</p> <p>The proposed clearing is not considered at variance to this principle</p>
6	<p>Vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.</p>	<p>The plantation area is traversed by agricultural drains and is adjacent to conservation and resource enhancement category wetlands.</p> <p>A separation distance of 15m either side of the drainage lines and 50m buffer around the</p>

		<p>wetlands has been applied to protect these areas (see Attachment 2).</p> <p>The area is mapped as Multiple Use wetland. The presence of native wetland species in the old plantation areas supports the mapping of the areas as wetland. The condition of the vegetation is consistent with a Multiple Use management category.</p> <p>The proposed clearing is not considered at variance to this principle.</p>
7	Vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.	<p>Clearing the plantation areas will not cause appreciable land degradation as the areas will be replanted for horticultural use.</p> <p>The proposed clearing is not considered at variance to this principle.</p>
8	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.	<p>Clearing the plantation areas will not impact on any adjacent or nearby conservation areas.</p> <p>The proposed clearing is not considered at variance to this principle</p>
9	Vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.	<p>Clearing the plantation areas will not cause deterioration in the quality of surface water or ground water. Separation areas have been put in place between agricultural drains (30m) and wetlands (50m).</p> <p>The proposed clearing is not considered at variance to this principle</p>
10	Vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence of flooding.	<p>Clearing the plantation areas will not cause or exacerbate the incidence of flooding. The area will be replanted for horticultural land use.</p> <p>The proposed clearing is not considered at variance to this principle</p>

If you have any queries regarding this application, please contact the undersigned.

Yours sincerely





Attachment 1: Clearing Permit Form

Attachment 2: Clearing Footprint

Attachment 3: Flora, Vegetation and Fauna Survey