Government of Western Australia
Department of Water and Environmental Regulation

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 7846/1
Permit type: Area Permit

1.2. Applicant details

Applicant's name: Mrs Anna Louise Ditri
Mr Simone Ditri
Application received date: 2 November 2017

1.3. Property details

Property: Lot 8876 on Deposited Plan 201636, Meerup
Local Government Authority: Manjimup, Shire of
Localities: Meerup

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	Purpose category:
9.7		Mechanical Removal	Dam construction and pasture for grazing livestock.

1.5. Decision on application

Decision on Permit Application: Refusal
Decision Date: 10 July 2018
Reasons for Decision: The clearing permit application has been assessed against the clearing principles, planning instruments and other matters in accordance with section 51O of the *Environmental Protection Act 1986* (EP Act). It has been concluded that the proposed clearing is at variance to principles (a), (b), (f), (g), (i) and (j) and is not likely to be at variance to the remaining principles.

On 1 May 2018, the Department of Water and Environmental Regulation advised the applicant that the proposed clearing will result in the following impacts:

- Clearing of a wetland in very good condition that has values consistent with a Conservation Category wetland.
- Clearing of significant habitat for wetland fauna and including potential habitat for two conservation significant fish species classed as Rare under the *Wildlife Conservation Act 1950*, the black-strip Minnow (*Galaxiella nigrostriatal*) and the salamanderfish (*Lepidogalaxias salamandroides*).
- Significant impact on surface water quality and cause appreciable land degradation in the form of eutrophication and waterlogging.

On 7 June 2018, the applicant advised that no further information to address the matters outlined above will be provided.

After consideration of the above, the Delegated Officer determined to refuse the clearing permit application.

2. Site Information

Clearing Description The application is to clear 9.7 hectares of native vegetation within Lot 8876 on Deposited Plan 201636, Meerup, for the purpose of dam construction and cropping (Figure 1).

Vegetation Description The application area is mapped as Mattiske vegetation complex BWp which is described as 'Mosaic of low open woodland of *Melaleuca preissiana*, low open woodland of *Melaleuca cuticularis*, open heath of Myrtaceae-Proteaceae spp. and sedgelands of Restionaceae spp. on low lying flats in hyperhumid and perhumid zones (Mattiske and Havel, 1998).

Vegetation Condition Completely Degraded; No longer intact, completely/almost completely without native species (Keighery, 1994).
To
Very good: Vegetation Structure altered, obvious signs of disturbance (Keighery, 1994).

Soil type The application area is mapped as the Brook System landform described as poorly drained plain with low granitic rises, along the coast of the Warren-Denmark Southland. The application area is mapped as non-saline wet soils and pale deep sand (Schoknecht et al., 2004).

Comment

The condition of the vegetation within the application area was determined by a site inspection conducted by Department of Water and Environmental Regulation (DWER) officers on 20 December 2017 (DWER, 2017a).

Figure 1: Application area hatched blue.

3. Assessment of application against clearing principles

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

Proposed clearing is at variance to this Principle

The vegetation within the application area ranges from very good to completely degraded (Keighery, 1994) condition. There are clear edge effects on the periphery of the application area as a result of cattle activity, whereby these areas are in a degraded to completely degraded (Keighery, 1994) condition (extend up to 20 metres from the edges). Progressing from the edges inwards, the application area improves markedly in condition, and with the exception of the edges of the application area, the majority of the vegetation is largely in a very good (Keighery, 1994) condition (DWER, 2017a).

The application area is representative of a permanently inundated wetland environment, with the majority of the application area exhibiting various levels of inundation and including riparian species. The highly disturbed edge areas were dominated by bracken fern (*Pteridium esculentum*) and exotic grasses with scattered *Astartea scoparia, Juncus* sp., and Myrtaceae sp. Progressing from the edges inwards, the vegetation changes to a *Melaleuca* sp. forest, over a mid-storey including *Callistachys lanceolata, Astartea scoparia, Juncus* sp., and Myrtaceae sp. over a suite of native sedges/grasses, the majority of which are from the Cyperaceae family, including species such as *Cyperus* sp., *Baumea* sp., *Isolepis* sp. and *Cyathochaeta avenacea*. In some of the denser *Melaleuca* woodland areas the mid-storey was completely lacking, with native sedges and inundated areas comprising the understorey (DWER, 2017a).

As discussed under Principle (f), current datasets show that lakes such as the one occurring within the application area, are not common in the area and is likely to support important representative values (DBCA, 2018a).

Three priority flora species have been recorded within 10 kilometres of the application area and may occur within the application area, however these species are fairly widespread and are well represented in nearby conservation areas (DBCA, 2018b). Therefore, the application area is not likely to provide significant habitat for priority flora.

As discussed under Principle (b), the application area contains a diverse range of habitats and it is considered likely for the wetland to provide habitat for a range of fauna species including conservation significant species (DBCA, 2018a). The application area may provide habitat for two conservation significant fish species classed as Rare under the *Wildlife Conservation Act 1950* (WC Act), including the black-strip Minnow (*Galaxiella nigrostriatal*) and the salamanderfish (*Lepidogalaxias salamandroides*). A targeted freshwater fish/ aquatic fauna survey would be required to determine the presence of these species (DBCA, 2018b). It is also considered for the application area to provide an important habitat for local wetland bird species and may provide habitat for the priority 4 species, the water-rat/Rakali (*Hydromys chrysogaster*) (DBCA, 2018b) and the quenda (*Isoodon obesulus* subsp. *fusciventer*). No fauna survey has been provided in support of the clearing permit application.

Given the predominantly very good (Keighery, 1994) condition of the vegetation, possible habitat for conservation significant fauna and that the wetland habitat is uncommon and supports important representative values, the application area comprises a high level of biodiversity and the proposed clearing is at variance to this 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.

Proposed clearing is at variance to this Principle

According to available databases, a total of six bird, four fish, four mammal, one reptile and three invertebrate species have been recorded within 10 kilometres of the application area, including one fauna specially protected under the WC Act, five priority fauna and 12 fauna species classed as rare or likely to become extinct under the WC Act (DBCA, 2007-).

The application area is representative of a permanently inundated wetland environment (lake) surrounded by palusplain wetland (seasonally waterlogged flat), with the majority of the application area exhibiting various levels of inundation and supporting riparian species, with the majority of the application area being in a very good (Keighery, 1994) condition. A diverse range of habitats occur within the application area including dense canopy with understorey, dense canopy over inundated sedges/rushes, open water, seasonally inundated areas with sedges/rushes and shrub land areas and it is considered likely for the wetland habitat to provide habitat for a range of fauna species (DBCA, 2018a).

Current datasets show that lakes such as the one occurring within the application area, are not common in the area and is likely to support important representative values (DBCA, 2018a).

The application area may provide habitat for two conservation significant fish species classed as Rare under the WC Act, including the black-strip Minnow (*Galaxiella nigrostriatal*) and the salamanderfish (*Lepidogalaxias salamandroides*). Both these species are restricted to near –coastal wetlands and occupies ephemeral habitats including shallow pools and swamps that dry in summer (DBCA, 2018b). A targeted freshwater fish/ aquatic fauna survey would be required to determine the presence of these species (DBCA, 2018b). No fauna survey has been provided in support of the clearing permit application.

It is also considered for the application area to provide an important habitat for local wetland bird species and may provide habitat for the priority 4 species, the water-rat/Rakali (*Hydromys chrysogaster*) and the quenda (*Isoodon obesulus* subsp. *fusciventer*) (DBCA, 2018b).

Based on the habitat requirements of the remaining conservation significant aquatic fauna, these species are not likely to occur within the application area (DBCA, 2018b).

Given the above, the application area is considered to comprise of significant habitat for local and conservation significant fauna and the proposed clearing is at variance to this Principle.

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

Proposed clearing is not likely to be at variance to this Principle

A search of the DBCA rare flora database revealed that no rare flora species have been recorded within the local area (10 kilometre radius).

The closest known record of rare flora species is located over 20 kilometres from the application area and occurs within a different soil and vegetation type as the application area.

Given the distance to the nearest recorded rare flora species and the habitat present within the application area, the proposed clearing is not likely to be at variance to this 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.

Proposed clearing is not likely to be at variance to this Principle

A search of the DBCA's Threatened Ecological Community (TEC) database revealed that no TECs have been recorded within the local area (10 kilometre radius).

The closest known record of a TEC is over 100 kilometres from the application area. Given the distance to the nearest record of a TEC, the proposed clearing is not likely to be at variance to this 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.

Proposed clearing is not likely to be at variance to this Principle

The national objectives and targets for biodiversity conservation in Australia has a target to prevent clearance of ecological communities with an extent below 30 per cent of that present pre-1750, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia, 2001).

As indicated in Table 1, the application area is represented by Mattiske vegetation complex BWp which has approximately 85 per cent pre –European vegetation remaining. The remaining extents of native vegetation within the bioregion and the Shire of Manjimup, and mapped vegetation association within the bioregion are all above the 30 per cent threshold (Government of Western Australia, 2018).

The local area retains approximately 55 per cent native vegetation cover. Noting this, the application does not occur in an extensively cleared landscape.

Noting the vegetation extents, the application area is not likely to be significant as a remnant within an extensively cleared area. The proposed clearing is not likely to be at variance to this Principle.

Table 1: Vegetation extents	Pre-European	Current Extent	Remaining	Current Extent in DCBA Managed Lands
	(ha)	(ha)	(%)	(%)
IBRA Bioregion*				
Warren	833,985	660,310	79	84
Local Government Agency				
Shire of Manjimup	697,368	586,852	84	94
Mattiske vegetation complex				
BWp	33,366	28,334	85	77

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

Proposed clearing is at variance to this Principle

The application area is representative of a permanently inundated wetland environment, with the majority of the application area exhibiting various levels of inundation and including riparian species (DWER, 2017a).

The majority of the application area is mapped as a lake (permanently inundated basin) with three small areas in the south of the property classified as palusplain (seasonally waterlogged flat). The palusplain areas are a part of a wider palusplain system that extends out of the application area (DBCA 2018a).

The current wetland database does not provide management categories within the Warren bioregion. However, in consideration of the very good (Keighery, 1994) condition of the majority of the wetland vegetation within the application area, the application area would appear to support environmental values consistent with the criteria for Conservation category (DBCA, 2018a). Conservation category wetlands are wetland that possess a high level of attributes and functions and are the highest priority for protection.

Current databases also show that few lakes have been identified in the local area and therefore the lake within the application area may support important representative values (DBCA, 2018a). The proposed clearing will result in the direct loss of a lake with potential to support high conservation values and will result in direct loss of high quality vegetation associated with a palusplain wetland. While there are other nearby areas of the same palusplain, the proposed clearing will contribute to the cumulative loss of wetland vegetation within this extensive palusplain system (DBCA, 2018a).

Given the above, the proposed clearing is at variance to this Principle.

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

Proposed clearing is at variance to this Principle

The application area is located within the Blackwater Podzols Phase which consists of flat poorly drained plain with some linear dunes and granite domes on unconsolidated sediments on granite and siltstone in the South Coast between Northcliff and Denmark. The soils are wet soils, semi-wet soils and pale deep sands (DPIRD, 2018).

This soil type has a high risk of phosphorus loss if native vegetation is cleared. It is considered significant eutrophication of waterlogged areas within the application area to occur as a result of the proposed clearing (DPIRD, 2018).

The proposed clearing is located on the lowest parts of the landscape and the majority of the application area is inundated or waterlogged for most of the year. The proposed clearing of 9.7 hectares in this area is likely to increase the risk of waterlogging (DPIRD, 2018).

Noting the application areas position in the landscape and the soil types present, the risk of water erosion, wind erosion and salinity causing land degradation as a result of the proposed clearing is considered to be low (DPIRD, 2018).

Given the above, it is considered for the proposed clearing to cause appreciable land degradation in the form of waterlogging and eutrophication and the proposed clearing is at variance to this 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.

Proposed clearing is not likely to be at variance to this Principle

The nearest conservation area to the proposed clearing is Boorara – Gardner National Park located 2.4 kilometres west of the application area and Hawke National Park located 3.8 kilometres north west of the application area. In addition, two land for wildlife sites are located 1.1 kilometres south and 1.4 kilometres north of the application area.

The local area (10 kilometre radius) of the application area is highly vegetated and it is not considered that the application area provides an ecological linkage or stepping stone for movement of fauna between these conservation areas. Given this and the distance to the nearest conservation area, it is not likely for the proposed clearing to impact on the environmental values of any adjacent or nearby conservation areas.

Given the above, the proposed clearing is not likely to be at variance to this 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.

Proposed clearing is at variance to this Principle
The application area is representative of a permanently inundated wetland environment, with the majority of the application area exhibiting various levels of inundation (DWER, 2018a).

The majority of the application area is mapped as a lake (permanently inundated basin) with three small areas in the south of the property classified as palusplain (seasonally waterlogged flat). The palusplain areas are a part of a wider palusplain system that extends out of the application area (DBCA 2018a).

The application area contains soils that are classed as wet soils, semi-wet soils and pale deep sands (Schoknecht et al., 2004). This soil type has a high risk of phosphorus loss if native vegetation is cleared. It is considered for significant eutrophication of waterlogged areas within the application area to occur as a result of the proposed clearing (DPIRD, 2018). The proposed clearing is likely to cause deterioration of the quality of surface water within the application area.

No salinity occurs within the application area and no offsite salinity was observed (DPIRD, 2018). It is unlikely for the proposed clearing to cause an increase in salinity of groundwater.

Given the above, the proposed clearing is at variance to this Principle.

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

Proposed clearing is at variance to this Principle
The majority of the application area is mapped as a lake (permanently inundated basin) with three small areas in the south of the property classified as palusplain (seasonally waterlogged flat). The palusplain areas are a part of a wider palusplain system that extends out of the application area (DBCA 2018a).

The proposed clearing is located on the lowest parts of the landscape and the majority of the application area is inundated or waterlogged for most of the year. The proposed clearing of 9.7 hectares in this area is likely to increase the risk of waterlogging (DPIRD, 2018).

Given the above, it is considered for the proposed clearing to exacerbate the incidence of flooding by increasing the risk of waterlogging. The proposed clearing is at variance to this Principle.

Planning instruments and other relevant matters.

The application area is zoned as General Agriculture under the Shire of Manjimup Town Planning Scheme Zone and planning approval for clearing of vegetation is not required (Shire of Manjimup, 2017). It is noted however that the purpose of the clearing is for the construction of a dam and cropping. If the expanded edge of the dam and/or the dam wall is to be less than 20 metres from any lot boundary, Shire approval for the dam works will be required (Shire of Manjimup, 2017).

The application area falls within the Gardner River surface water catchment which is not proclaimed and therefore no water licences are required (DWER, 2017b).

No Aboriginal sites of significance have been mapped within the application area.

The clearing permit application was advertised on the DWER website on 30 November 2017 with a 21 day submission period. No public submissions have been received in relation to this application.

4. Applicant's Submissions

On 1 May 2018, a letter was sent to the applicant outlining the environmental impacts of the proposed clearing. On 7 June 2018, the applicant replied stating that they do not have any further information to provide.

5. Consideration of variances following applicants submission / further information

No changes to the variances of the proposed clearing following the applicant's submission.

6. References

Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.

Department of Biodiversity, Conservation and Attractions (DBCA) (2007-) DEC Fauna Habitat Notes.xls. February 2007. Department of Environment and Conservation, Western Australia.

Department of Biodiversity, Conservation and Attractions (DBCA) (2018a) Wetland Advice for clearing application CPS 7846/1 – Mr Simone and Mrs Anna Ditri – Lot 8876 on Deposited Plan 201636, Meerup. DWER ref A1642627

Department of Biodiversity, Conservation and Attractions (DBCA) (2018b) Fauna Advice for clearing application CPS 7846/1 – Mr Simone and Mrs Anna Ditri – Lot 8876 on Deposited Plan 201636, Meerup, DWER ref A1642628

Department of Primary Industries and Resource Development (DPIRD) (2018), Land degradation advice for clearing application CPS 7846/1 – Mr Simone and Mrs Anna Ditri – Lot 8876 on Deposited Plan 201636, Meerup, Department of Primary Industry and Regional Development. DWER ref A1619604.

Department of Water and Environmental Regulation (DWER) (2017a) Site inspection report for clearing application CPS 7846/1 – Mr Simone and Mrs Anna Ditri – Lot 8876 on Deposited Plan 201636, Meerup. DWER ref A 1642631
Department of Water and Environmental Regulation (DWER) (2017b) Water licencing advice for clearing application CPS 7846/1 – Mr Simone and Mrs Anna Ditri – Lot 8876 on Deposited Plan 201636, Meerup, South Coast Region, Department of Water and Environmental Regulation. DWER ref A1642626
Government of Western Australia (2018). 2016 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of October 201. WA Department of Biodiversity onservation and Attractions, Perth.
Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
Mattiske, E.M. and Havel, J.J. (1998) Vegetation Complexes of the South-west Forest Region of Western Australia. Maps and report prepared as part of the Regional Forest Agreement, Western Australia for the Department of Conservation and Land Management and Environment Australia.
Schoknecht, N., Tille, P. and Purdie, B. (2004) Soil-landscape mapping in South-Western Australia – Overview of Methodology and outputs' Resource Management Technical Report No. 280. Department of Agriculture.
Shepherd, D.P., Beeston, G.R. and Hopkins, A.J.M. (2001) Native Vegetation in Western Australia, Extent, Type and Status. Resource Management Technical Report 249. Department of Agriculture, Western Australia.
Shire of Manjimup (2017) Planning advice for clearing application CPS 7846/1 – Mr Simone and Mrs Anna Ditri – Lot 8876 on Deposited Plan 201636, Meerup. DWER ref A1582942

GIS Databases:
- Hydrography, linear
- Hydrography, hierarchy
- DBCA tenure
- Pre-European vegetation
- SAC bio datasets accessed March 2018
- Virtual mosaic
- Aboriginal sites register system
- Town Planning Scheme Zones