

8 July 2021

Department of Water and Environmental Regulation
Locked Bag 10
JOONDALUP WA 6919

Dear Sir/Madam,

RE: Clearing Permit Application for Lot 5257 (2800) Cowalla Road, Cowalla

On behalf of Greenacres Turf Group please find attached a Clearing Permit Application to clear 111.45ha of sparsely scattered native vegetation on Lot 5257 (2800) Cowalla Road, Cowalla (Certificate of Title is provided as Attachment 1).

1 Background

Lot 5257 Cowalla Road, Cowalla is located approximately 100km north-north-west of the Perth Central Business District in the Shire of Gingin. The site is 123.6973ha in size and has been used for stock grazing for many years (Figure 1). The site is predominantly cleared of native vegetation although many native trees occur throughout the site. The trees occur in low-lying areas as well as on higher, well-drained parts of the site.

The site is proposed to be developed for a turf farm which will include the following elements:

- Five centre pivot irrigation plots ranging in area from 10.23ha to 23.33ha;
- three Research and Development Nurseries;
- a constructed wetland;
- solar grid; and
- associated sheds and other buildings.

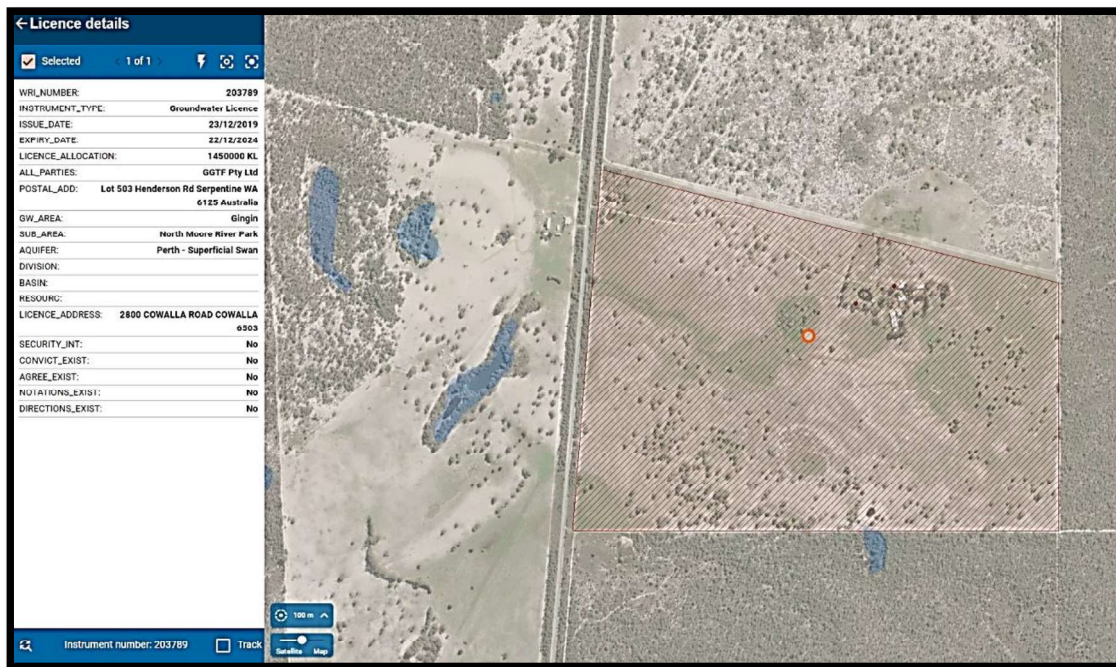
Developing the turf farm will require clearing most of the native trees on the property. The clearing for the turf farm may retain some scattered trees. The Greenacres Turf Farm intend to plant a significant number of trees within perimeter buffers, between the pivots and around the constructed wetland in a similar manner that they have done on their Serpentine Turf Farm.

The overall impact of the development will result in more trees and shrubs on the site than currently exists and in a structure that encourages native wildlife, rather than the predominance of scattered trees in the paddocks.

A Development Application for the Turf Farm was approved by the Shire of Gingin on 23 April 2021 (Attachment 2). The Development Application was forwarded to the Department of Biodiversity, Conservation and Attractions (DBCA) who indicated that ‘the Department does not object to the proposed development’ in emailed correspondence dated 8 March 2021 (Attachment 3).

A water license was granted on 23 December 2019 and is valid until 2024 as per the Western Australian Water Licensing Register (<https://maps.water.wa.gov.au/#/webmap/register>) (Plate 1).

Plate 1: Western Australian Water Licensing Register



2 Vegetation

A Vegetation Assessment was undertaken on the site by PGV Environmental to determine the quantity and quality of any native vegetation species and to assess the areas mapped as wetlands on the site. The report is included as Attachment 4. The vegetation on the site was described as:

- Et *Eucalyptus tottiana* scattered trees over pasture
- Mp *Melaleuca preissiana* scattered trees over pasture
- MrMt *Melaleuca raphiophylla*/M. *teretifolia* Tall Open Scrub over *Lepidosperma longitudinale*/*Gahnia trifida* Sedgeland
- LIgt *Lepidosperma longitudinale*/*Gahnia trifida* Sedgeland
- Fn *Ficinia nodosa* Sedgeland
- Er One *Eucalyptus rudis* tree

A large part of the site was mapped as ‘Cleared’ but does contain a very sparse scattering of some native sedges. Therefore, the ‘Cleared’ area has been included in the application.

The area around the existing house does not contain any native vegetation.

The total area applied for in the clearing permit is 111.45ha, however the actual amount of native vegetation is far less, and likely to be well under 10ha. A firm figure on the amount of native vegetation proposed to be cleared is not possible to provide given the large number of *Eucalyptus todtiana* and *Melaleuca preissiana* trees (400-500) and the scattered nature of the native sedges in some low-lying areas.

3 Ten Clearing Permit Principles

The Ten Clearing Principles have been addressed below to determine the environmental impact that the removal of the native vegetation on the site would have.

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

The vegetation on the site is Completely Degraded due to the past clearing for agricultural purposes. No intact native vegetation is proposed to be cleared. As a result, the vegetation is not representative of a Threatened or Priority Ecological Community.

The proposed clearing is considered not at variance to this principle.

Principle (b): 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 fauna habitat is in poor condition with high levels of disturbance. The site contains parkland cleared *Eucalyptus todtiana* which is listed as a medium priority foraging species for Carnaby's Black Cockatoos. The canopy provides approximately 0.86ha of foraging habitat. High quality foraging habitat for Carnaby's Black Cockatoos occurs on the eastern and southern boundaries and elsewhere in the nearby district, therefore site is not considered to be a significant habitat.

The proposed clearing is considered not at variance to this principle.

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

No Threatened or Priority plant species are likely to occur on the site given the clearing and high levels of disturbance. Therefore, the proposed clearing is not considered at variance to this principle.

Principle (d): 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.

The vegetation on the site is not representative of a Threatened Ecological Community.

Therefore, the proposed clearing is considered not at variance to this principle.

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

The site is not a significant remnant of vegetation.

The proposed clearing is considered not at variance to this principle.

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

Seven wetlands are mapped on the site, either in their entirety or partially (Table 1). The wetlands are mostly Damplands (seasonally waterlogged basins) with the largest wetland (UFI 9068) designated as a Sumpland (seasonally inundated basin). The wetlands show in the Geomorphic on-line database as Resource Enhancement and Conservation Category with one Multiple Use. However, in correspondence from the DBCA (Provided as Attachment 3) to the Shire of Gingin, these wetlands were all downgraded on the site to Multiple Use in the 2020 review of the wetlands database (which is not currently available to the public).

Table 1: Wetlands Mapped on the Site

Wetland UFI	Wetland Type	Management Category	
		Feb 2021	March 2021*
9233	Dampland	Conservation	Multiple Use
9232	Dampland	Multiple Use	Multiple Use
9068	Sumpland	Resource Enhancement	Multiple Use
9234	Dampland	Resource Enhancement	Multiple Use
9218	Dampland	Resource Enhancement	Multiple Use
9078	Dampland	Resource Enhancement	Multiple Use
9230	Dampland	Resource Enhancement	Multiple Use

* DBCA (2021)

The proposed clearing is considered not at variance to this principle.

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

Clearing the vegetation on the site will not result in land degradation. The area of clearing is mapped within the Bassendean System.

The area of clearing is mapped on the following soil phases:

- Bassendean, Phase 9 (212Bs_9) – Humic dark grey swamp soils;
- Bassendean, Phase 7 (212Bs_7) – Bleached sands;
- Bassendean, Phase 7+9 (212Bs_7+9) – Bleached sands and Humic dark grey swamp soils, co-dominant;
- Bassendean, Phase 6 (212Bs_6) – Light grey sand to depth between 90-150 cm overlaying pale yellow to yellow sand; and
- Bassendean, Phase 7+8 (212Bs_7+8) – Bleached sands and lower slopes and flat areas (DPIRD, 2021).

Land Degradation Risk Category Bassendean B9 Phase

Water Erosion >70% of map unit has a high to extreme water erosion risk

Wind Erosion <3% of map unit has a high to extreme wind erosion risk

Waterlogging >70% of map unit has a moderate to very high waterlogging risk

Flooding >70% of the map unit has a moderate to high flood risk
Salinity risk 10-30% of map unit has a moderate to high salinity risk or is presently saline

Land Degradation Risk Category Bassendean B7 Phase

Water Erosion <3% of map unit has a high to extreme water erosion risk
Wind Erosion 10-30% of map unit has a high to extreme wind erosion risk
Waterlogging >70% of map unit has a moderate to very high waterlogging risk
Flooding >70% of the map unit has a moderate to high flood risk
Salinity risk <3% of map unit has a moderate to high salinity risk or is presently saline

Land Degradation Risk Category Bassendean B7+9 Phase

Water Erosion <3% of map unit has a high to extreme water erosion risk
Wind Erosion 50-70% of map unit has a high to extreme wind erosion risk
Waterlogging 50-70% of map unit has a moderate to very high waterlogging risk
Flooding <3% of the map unit has a moderate to high flood risk
Salinity risk <3% of map unit has a moderate to high salinity risk or is presently saline

Land Degradation Risk Category Bassendean B6 Phase

Water Erosion <3% of map unit has a high to extreme water erosion risk
Wind Erosion 50-70% of map unit has a high to extreme wind erosion risk
Waterlogging <3% of map unit has a moderate to very high waterlogging risk
Flooding <3% of the map unit has a moderate to high flood risk
Salinity risk <3% of map unit has a moderate to high salinity risk or is presently saline

Land Degradation Risk Category Bassendean B7+8 Phase

Water Erosion <3% of map unit has a high to extreme water erosion risk
Wind Erosion >70% of map unit has a high to extreme wind erosion risk
Waterlogging 50-70% of map unit has a moderate to very high waterlogging risk
Flooding <3% of the map unit has a moderate to high flood risk
Salinity risk <3% of map unit has a moderate to high salinity risk or is presently saline

The proposed clearing area is generally not susceptible to salinity. There are mapped soil units that have a 50-70% risk of wind erosion which may indicate that appropriate dust management measures will be required during the works which mitigates the risk to the surrounding area. However, the cleared areas will be stabilised very soon after clearing with the installation of turf in the pivot irrigation plots which will prevent any dust blowing off the site.

The risk of water erosion, waterlogging and flooding is high in parts of the site. Water will be managed on the site and will be drained to the constructed wetland which is currently being built. The risk of water erosion will be mitigated by the installation of turf in the pivot irrigation plots soon after clearing. The turfed areas will be managed to avoid water erosion.

The proposed clearing is considered not at variance to this principle.

Principle (h): 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.

There are no adjacent reserves. The Moore River National Park is approximately 2.8km to the east. Furthermore, the site is predominantly cleared already. The proposed clearing of scattered trees and some native will not adversely impact on any nearby areas of native vegetation.

The proposed clearing is considered not at variance to this principle.

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

The proposed turf farm has been granted a water license for which extensive groundwater modelling was undertaken to ensure the proposed development would not impact on groundwater.

The proposed clearing is considered not at variance to this principle.

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

The site is predominantly cleared already, therefore any further clearing will not increase rain infiltration to the groundwater. Flooding and stormwater will be controlled by the stormwater management system including the constructed wetland. Furthermore, the planting program for the site will result in more native trees and shrubs on the site than currently exists with a likely reduction in stormwater infiltration and therefore lower potential for flooding downstream.

The proposed clearing is considered not at variance to this principle.

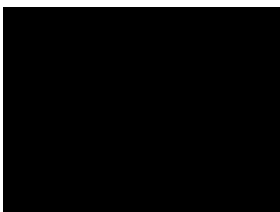
4 Conclusion

The proposed turf farm on Lot 5257 Cowalla Road, Cowalla will result in the clearing of less than 10ha of scattered native species in a 111.45ha parkland cleared footprint. The turf farm will be constructed and managed in accordance with the approved Development Application and Water License. The turf farm is highly likely to contain more native trees and shrubs after full development than currently exists due to the planting of buffer strips, areas around the pivots and the constructed wetland.

The proposed clearing is not expected to be at variance of any of the Ten Clearing principles.

Please contact me if you would like any further information or if you would like some assistance with a site inspection.

Yours sincerely





Accompanying Documentation

Form C1 Application for a Purpose Permit
Shapefiles
IBSA package

Figures

Figure 1: Clearing Permit Area

Attachments

- Attachment 1: Certificate of Title
- Attachment 2: Approved Development Application
- Attachment 3: Correspondence from DBCA
- Attachment 4: Vegetation Assessment