



1. Application details

1.1. Permit application details

Permit application No.: 1174/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Hanks Pastoral Company & Family Trust

1.3. Property details

Property: LOT 48 ON PLAN 235005 (UDUC 6220)
LOT 47 ON PLAN 235005 (Lot No. 47 GOVERNMENT UDUC 6220)
LOT 3297 ON PLAN 251806 (UDUC 6220)

Local Government Area: Shire Of Harvey
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
	156	Mechanical Removal	Miscellaneous

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description	Clearing Description	Vegetation Condition	Comment
Beard: Unit 968 - Medium woodland; jarrah, marri & wandoo.	Area proposed to be cleared is within a parkland cleared area consisting of scattered paddock trees.	Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)	Vegetation condition established through aerial photography.
Hedde: Guildford Complex - Mixture of open-forest and tall open-forest of marri-wandoo-jarrah and a woodland of wandoo.		Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)	

3. Assessment of application against clearing principles

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

Comments **Proposal is not likely to be at variance to this Principle**
The area proposed to be cleared is Completely Degraded (Keighery 1994). The area has been parkland cleared and consists of pasture and grazing species and has no native under storey species. The area is unlikely to hold a high level of biological diversity and therefore not likely to be at variance to this Principle.

Methodology Keighery (1994)
GIS database:
- Bunbury 1m Orthomosaic - DLI 03

(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.

Comments **Proposal is not likely to be at variance to this Principle**
The area under application and the surrounding areas are parkland cleared containing only scattered paddock trees. The area proposed to be cleared is unlikely to hold significant habitat for native fauna species as the vegetation is Completely Degraded (Keighery 1994) consisting of scattered paddock trees.

Methodology Keighery (1994)
GIS database:
- Bunbury 1m Orthomosaic - DLI 03

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

Comments Proposal is not likely to be at variance to this Principle

There are two Declared Rare Flora populations within the local area (10km radius) of the proposed clearing. The closest, *Drakaea elastica*, is located 8.3km north west of the area proposed to be cleared.

Two Priority 1 populations are found within the local area of the proposed clearing. The closest, *Caladenia uliginosa* subsp. *patulens*, is located 5.9km east of the area under application.

Two Priority 2 populations are found within the local area of the proposed clearing. The closest, *Boronia capitata* subsp. *gracilis*, is found 7.2km south west of the area proposed to be cleared.

There are six Priority 3 populations within the local area of the proposed clearing. The closest, *Rhodanthe pyrethrum*, is located 2.0km east of the area proposed to be cleared.

Three Priority 4 populations are found within the local area of the proposed clearing. The closest, *Jacksonia sparsa*, is found 2.6km west of the area under application.

There are no vegetation links between local Declared Rare and Priority Flora populations. The area proposed to be cleared is parkland cleared with non-native pasture and grazing species and scattered native trees. It is therefore unlikely the proposed clearing would be at variance to this Principle.

Methodology GIS databases:
- Declared Rare and Priority Flora List - CALM 13/08/03
- Bunbury 1m Orthomosaic - DLI 03

(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.

Comments Proposal is not likely to be at variance to this Principle

There are no Threatened Plant Communities within the local area of the proposed clearing.

There are four Threatened Ecological Communities (TEC) within the local area of the proposed clearing. The closest is located 3.0km west of the area under application. There are no vegetation links between local TEC's and the area proposed to be cleared.

Methodology GIS databases:
- Threatened Ecological Communities - CALM 15/7/03
- Threatened Plant Communities - DEP 06/95
- Bunbury 1m Orthomosaic - DLI 03

(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.

Comments Proposal is not likely to be at variance to this Principle

The application is located in the Swan Coastal Plain Bioregion in the Shire of Harvey. The extent of native vegetation in these areas is 41.8% and 60.1% respectively (Shepherd et al. 2001).

The vegetation of the area applied to clear is a component of Beard Unit 968 (Hopkins et al. 2001) of which there is 38.9% (Shepherd et al. 2001) of the pre-European extent remaining, and therefore of 'depleted' status for biodiversity conservation (Department of Natural Resources and Environment 2002).

The vegetation of the area applied to clear is a component of Heddle Guildford Complex (Heddle et al. 1980) of which there is 12.3% of the pre-European extent remaining and therefore of a 'vulnerable' status for biodiversity conservation (Department of Natural Resources and Environment 2002).

The area proposed to be cleared is not considered to be a significant vegetation remnant within an extensively parkland cleared area due to the Completely Degraded (Keighery 1994) condition and scattered nature of the vegetation.

Methodology Department of Natural Resources and Environment (2002)
Heddle et al. (1980)
Hopkins et al. (2001)
Shepherd et al. (2001)
GIS databases:
- Heddle Vegetation Complexes - DEP 21/06/95
- Interim Biogeographic Regionalisation of Australia - EM 18/10/00
- Local Government Authorities - DLI 8/07/04

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

Comments Proposal is not likely to be at variance to this Principle

The Harvey River is located 3.1km east and the Harvey Diversion Drain 4.4km south of the area proposed to be cleared. There are no vegetation links between the area under application and the Harvey River.

The area proposed to be cleared is partially within the Peel Harvey EPP Area but is not within any EPP Lakes, RAMSAR wetlands or ANCA wetlands.

The area proposed to be cleared is within a Multiple Use wetland. Multiple Use wetlands are considered to have 'few important ecological attributes and functions remaining' (WRC Position Statement). The proposed clearing of 156 scattered paddock trees is unlikely to further significantly impact on this wetland.

Due to the lack of vegetation links between the area under application and local watercourses, the proposed clearing is unlikely to be at variance to this Principle.

Methodology Water and Rivers Commission Position Statement: Wetlands (06/06/01)

GIS databases:

- ANCA, Wetlands - CALM 08/01
- EPP Areas - DEP 06/95
- EPP Lakes - DEP 28/07/03
- Geomorphic Wetlands (Mgt Categories) Swan Coastal Plain - DoE 15/9/04
- Hydrography Linear - DoE 1/2/04
- RAMSAR, Wetlands - CALM 21/10/02

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

Comments Proposal is not likely to be at variance to this Principle

The area proposed to be cleared is within a medium risk area for Acid Sulphate Soils, a low risk area for salinity and has a ground water salinity of 3000-7000 mg/L.

The area proposed to be cleared is unlikely to cause appreciable land degradation due to it's size.

Methodology GIS databases:

- Acid Sulfate Soil Risk Map, SCP - DoE 01/02/04
- Salinity Risk LM 25m - DOLA 00.
- Groundwater Salinity, Statewide - 22/02/00

(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.

Comments Proposal is not likely to be at variance to this Principle

The Wellard Nature Reserve is located 2.5km west, The Myalup State Forest 5.4km west and the Harris River State Forest 8km east of the area proposed to be cleared.

There are no vegetation links between local conservation reserves and the area proposed to be cleared. It is therefore unlikely the clearing proposed would be at variance to this Principle.

Methodology GIS database:

- CALM Managed Lands and Waters - CALM 1/06/04
- Register of National Estate - EA 28/01/03
- System 6 Conservation Reserves - DEP 06/95
- Bunbury 1m Orthomosaic - DLI 03

(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.

Comments Proposal is not likely to be at variance to this Principle

The area proposed to be cleared is within the Harvey Estuary-Harvey River Hydrographic Catchment area and the Harvey Irrigation District.

The area under application is not within a RIWI ground water area or RIWI surface water area.

The small scale clearing proposed is unlikely to significantly degrade local water quality.

Methodology GIS databases:
 - Hydrographic Catchments, Catchments - DoE 3/4/03
 - Public Drinking Water Source Areas (PDWSAs) - DOE 29/11/04
 - RIWI Act, Groundwater Areas - WRC 13/06/00
 - RIWI Act, Irrigation Districts - WRC 13/03/02
 - RIWI Act, Surface water Areas - WRC 18/10/02

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

Comments **Proposal is not likely to be at variance to this Principle**
 Due to the scale of the proposed clearing, flooding impacts are unlikely to occur.

Methodology GIS databases:
 - Topographic Contours, Statewide - DOLA 12/09/02

Planning instrument, Native Title, Previous EPA decision or other matter.

Comments
 The area is zoned intensive farming in the Town Planning Scheme.
 No submissions have been received from the Shire or LCDC.
 DoE officer contacted the applicant to enquire as to where the water for the centre pivots will be obtained from. Applicant explained that he already had water from Harvey Water for flood irrigation and they will simply be putting that water into the centre pivots instead of flood irrigating.

Methodology Water Entitlement Certificate TRIM ref SWD46849
 GIS database:
 - Town Planning Scheme Zones - MFP 8/98

4. Assessor's recommendations

Purpose	Method Applied	Decision	Comment / recommendation
Miscellaneous	Mechanical Removal	156 Grant	Centre pivot irrigator. Approximately 156 trees in total. Recommendation to grant with no conditions.

5. References

Department of Natural Resources and Environment (2002) Biodiversity Action Planning. Action planning for native biodiversity at multiple scales; catchment bioregional, landscape, local. Department of Natural Resources and Environment, Victoria.

Hedde, E. M., Loneragan, O. W., and Havel, J. J. (1980) Vegetation Complexes of the Darling System, Western Australia. In Department of Conservation and Environment, Atlas of Natural Resources, Darling System, Western Australia.

Hill, A.L., Semenuik, C. A, Semenuik, V. Del Marco, A. (1996) Wetlands of the Swan Coastal Plain. Volume 2b, Wetland mapping, classification and evaluation. Wetland Atlas. WRC and DEP. Perth WA.

Hopkins, A.J.M., Beeston, G.R. and Harvey J.M. (2001) A database on the vegetation of Western Australia. Stage 1. CALMScience after J. S. Beard, late 1960's to early 1980's Vegetation Survey of Western Australia, UWA Press.

Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

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.

6. Glossary

Term	Meaning
CALM	Department of Conservation and Land Management
DAWA	Department of Agriculture
DEP	Department of Environmental Protection (now DoE)
DoE	Department of Environment
DoIR	Department of Industry and Resources
DRF	Declared Rare Flora
EPP	Environmental Protection Policy
GIS	Geographical Information System
ha	Hectare (10,000 square metres)
TEC	Threatened Ecological Community
WRC	Water and Rivers Commission (now DoE)