



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose permit number:	CPS 8132/1
Permit holder:	South West Irrigation Management Co-operative T/A Harvey Water
Duration of permit:	13 September 2018 – 13 September 2023

The permit holder is authorised to clear native vegetation subject to the following conditions of this Permit.

PART I – CLEARING AUTHORISED

1. Purpose for which clearing may be done

Clearing for the purpose of installing an underground water pipeline.

2. Land on which clearing is to be done

Lot 253 on Deposited Plan 411027, Wellesley

3. Area of Clearing

The permit holder must not clear more than 1.1 hectares of native vegetation within the area shaded yellow on attached Plan 8132/1.

4. Application

This Permit allows the permit holder to authorise persons, including employees, contractors and agents of the permit holder, to clear native vegetation for the purposes of this Permit subject to compliance with the conditions of this Permit and approval from the Permit Holder.

5. Type of clearing authorised

This Permit authorises the Permit Holder to clear native vegetation for activities to the extent that the Permit Holder has the right to access land under the *Land Administration Act 1997* or any other written law.

PART II – ASSESSMENT SEQUENCE AND MANAGEMENT PROCEDURES

6. Avoid, minimise and reduce the impacts and extent of clearing

In determining the amount of native vegetation to be cleared authorised under this Permit, the Permit Holder must have regard to the following principles, set out in order of preference:

- avoid the clearing of native vegetation;
- minimise the amount of native vegetation to be cleared; and
- reduce the impact of clearing on any environmental value.

7. Dieback and weed control

When undertaking any clearing or other activity authorised under this Permit, the Permit Holder must take the following steps to minimise the risk of the introduction and spread of *weeds* and *dieback*:

- (a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
- (b) ensure that no known *dieback* or *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
- (c) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

8. Records must be kept

The Permit Holder must maintain the following records for activities done pursuant to this Permit, in relation to the clearing of native vegetation authorised under this Permit:

- (a) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings or decimal degrees;
- (b) the date that the area was cleared;
- (c) the size of the area cleared (in hectares); and
- (d) actions taken to avoid, minimise and reduce the impacts and extent of clearing in accordance with condition 6 of this Permit.
- (e) actions taken to minimise the risk of the introduction and spread of *weeds* and *dieback* in accordance with condition 7 of this Permit.

9. Reporting

The Permit Holder must provide to the CEO the records required under condition 8 of this Permit, when requested by the CEO.

DEFINITIONS

The following meanings are given to terms used in this Permit:

CEO means the Chief Executive Officer of the Department responsible for administering the *Environmental Protection Act 1986*;

dieback means the effect of *Phytophthora* species on native vegetation;

dry conditions means when soils (not dust) do not freely adhere to rubber tyres, tracks, vehicle chassis or wheel arches;

fill means material used to increase the ground level, or fill a hollow;

mulch means the use of organic matter, wood chips or rocks to slow the movement of water across the soil surface and to reduce evaporation;

weed/s means any plant -

- (a) that is a declared pest under section 22 of the *Biosecurity and Agriculture Management Act 2007*; or
- (b) published in a Department of Biodiversity, Conservation and Attractions Regional Weed Rankings Summary, regardless of ranking; or
- (c) not indigenous to the area concerned.

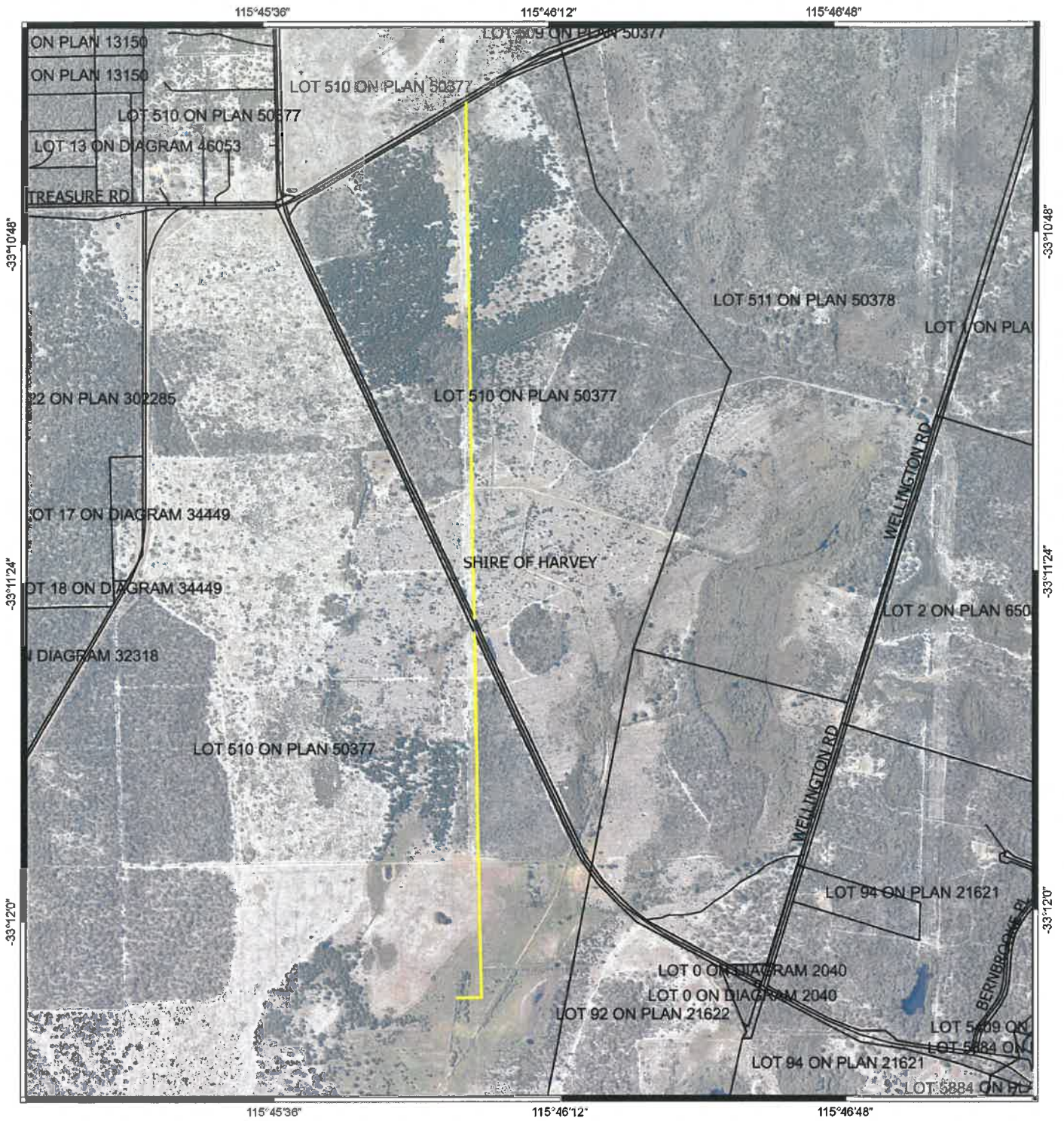


Mathew Gannaway
MANAGER
NATIVE VEGETATION REGULATION

*Officer delegated under Section 20
of the Environmental Protection Act 1986*

16 August 2018

Plan 8132/1



Legend

-  CPS areas approved to clear base layers
-  Cadastre
-  LOCAL_GOV_AUTHORITIES_DLI
-  roads



600 0 600 m



MGA 94
Geocentric Datum of Australia 1994

Matthew Gorman Date: 16/8/2018

Officer with delegated authority under Section 20
of the Environmental Protection Act 1986



GOVERNMENT OF
WESTERN AUSTRALIA



1. Application details

1.1. Permit application details

Permit application No.: 8132/1
Permit type: Purpose Permit

1.2. Applicant details

Applicant's name: South West Irrigation Management Co-operative t/a Harvey Water
Application received date: 15 July 2018

1.3. Property details

Property: Lot 253 on Deposited Plan 411027, Wellesley
Local Government Authority: Harvey, Shire of
Localities: Wellesley

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	Purpose category:
1.1		Mechanical Removal	Water/gas/cable/pipeline/power installation

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 16 August 2018
Reasons for Decision: The clearing permit application received on 15 July 2018 has been assessed against the clearing principles, planning instruments and other matters in accordance with section 510 of the *Environmental Protection Act 1986*. It has been concluded that the proposed clearing is at variance to Principle (f), and is not likely to be at variance to the remaining clearing principles.

The Delegated Officer took into consideration the purpose of the clearing, being the installation of an underground water pipeline and noted the application areas historical and current land-use and the vegetation's Degraded to Completely Degraded (Keighery, 1994) condition. The assessment determined that the proposed clearing may impact the environmental values of adjacent vegetation through the introduction or spread of weeds and dieback. A weed and dieback management condition has been placed on the permit to mitigate this risk.

The Delegated Officer further determined that the proposed clearing of 1.1 hectares of re-growth native vegetation is not likely to cause an unacceptable risk to the environment.

Given the above, the Delegated Officer decided to grant a clearing permit subject to conditions.

2. Site Information

Clearing Description This application is for the proposed clearing of 1.1 hectares of re-growth native vegetation along a 3.09 kilometre long by 5 metre wide corridor within Lot 253 on Deposited Plan 411027, Wellesley for the purpose of the installation of an underground water pipeline to be buried at 1.1 metres. The application area is within a Western Power Transmission Line corridor easement.

Vegetation Description The application area is mapped as Heddle vegetation complex - Bassendean Complex-Central And\South: woodland to low woodland and sedgeland. Vegetation ranges from woodland of *Eucalyptus marginata* (Jarrah) - *Allocasuarina fraseriana* (Sheoak) - Banksia species to low woodland of Melaleuca species, and sedgelands on the moister sites. This area includes the transition of *Eucalyptus marginata* (Jarrah) to *Eucalyptus tottiana* (Pricklybark) in the vicinity of Perth (Heddle e al., 1980).

A site inspection (Harvey Water, 2018a) noted the application areas historical and current land-use as a maintenance corridor and that the corridor also traverses agricultural land. This has resulted in the current vegetation structure to vary from areas with no vegetation to weedy areas with re-growth native vegetation and little understorey, dominated predominately by *Kunzea* and *Melaleuca* flora species. This vegetation is considered to be in a Degraded to Completely Degraded (Keighery, 1994) condition. (Figures 1-3)

Vegetation Condition

Degraded to Completely Degraded (Keighery, 1994) condition with areas also devoid of any vegetation (Harvey Water, 2018a).

Soil types

Two soil types occur over the application area:

- Predominate soil present is mapped as the “Bassendean B6 Phase” described as sandplain and broad extremely low rises with imperfectly drained deep or very deep grey siliceous sands; and
- A small section comprises the “Bassendean B3a Phase” described as a broad depression and narrow swales between sand ridges with poor to very poorly drained grey and brown sands, with an iron-organic (or siliceous) hardpan at generally less than one metre (Department of Primary Industries and Regional Development, 2017).

Comments

The local area considered in the assessment of the application is described as a 10 kilometre radius measured from the application area.



Figure 1: Northern portion of the Western Power maintenance corridor, facing south. Re-growth native vegetation (dominant *Kunzea/Melaleuca* species) observed over sedges (source: Harvey Water, 2018a).



Figure 2: Scattered *Xanthorrhoea* species within the Western Power maintenance corridor mid-section, facing south (source: Harvey Water, 2018a).



Figure 3: Western Power maintenance corridor, southern extent, facing south. Agricultural land with some sedges and minor flooding at the southern extent (source: Harvey Water, 2018a).

3. Assessment of application against clearing principles

As noted in Section 2 above, the application area has been previously cleared and is currently maintained as a Western Power Transmission Line maintenance corridor. The corridor also exhibits evidence of historical cattle grazing, weed invasion and unauthorised access (vehicle use and rubbish dumping) (Harvey Water, 2018a). Whilst there are sections within the application areas 3.09 kilometre long by 5 metre wide corridor (a 1.5 hectare footprint) devoid of vegetation (approximately 0.4 hectares), other sections comprise re-growth native vegetation with little understorey and dominated predominately by *Kunzea* and *Melaleuca* flora species. The application area is considered to be in a Degraded to Completely Degraded (Keighery, 1994) condition (Harvey Water, 2018a).

Two Priority One (P1) listed flora species, one P2, seven P3 and five P4 species, and seven rare flora species (six orchids and one perennial grass) are mapped within the local area. None are recorded within the application area corridor. The closest records are a P4 and one rare flora species located approximately 600 metres from this corridor. During a site inspection (Harvey Water, 2018a) it was noted that the application corridor does not intersect wetland margins known to be the recorded habitat of two of the rare flora species likely to occur in the application area (both *Drakaea* species). The relatively high number of flora survey records within approximately 0.6 to one kilometre of the application corridor is indicative of the survey effort undertaken within the local area. The lack of records within the corridor may be due to the absence of suitable and/or sustainable habitat due to the past and current clearing activities and current use as a maintenance corridor. Due to the current and historical land use, it is unlikely the conservation significant flora species known to occur within the local area would be found within the application area.

Given its Degraded to Completely Degraded (Keighery, 1994) condition, past and current clearing activities and current landuse, the application area is unlikely to comprise vegetation with a high level of biodiversity, suitable habitat for fauna indigenous to Western Australia or is necessary for the existence of flora of conservation significance.

The application corridor is surrounded by many large remnants of a threatened ecological community (TEC), known as the "Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region" listed as Priority Three by the Department of Biodiversity, Conservation and Attractions and Endangered under the Commonwealth *Environmental Protection Biodiversity Act 1999* (EPBC Act). Only four small, isolated remnants are mapped within close proximity to the application corridor, but none are intersected by the corridor. A 570 metre segment of the southern extent of the application corridor occurs adjacent to one of these remnants. Given the past and current clearing activities and use of this area as a maintenance corridor, this section does not comprise suitable vegetation necessary for the existence of this TEC. The proposed clearing activities may increase the likelihood of the spread of weeds and dieback into the adjacent area. Weed and dieback management practices will assist to mitigate this risk.

The application corridor intersects several mapped Geomorphic Multiple-use, Sumpland and Palusplain wetland cells. A site inspection (Harvey Water, 2018a) noted that no vegetation occurs where it intersects these wetland margins. As noted above, the area has been historically impacted by previous clearing and current corridor maintenance activities where the existing re-growth vegetation is in a Degraded to Completely Degraded (Keighery, 1994) condition. It is unlikely given the small amount of clearing, that the proposed clearing activities will cause any additional, un-acceptable environmental impacts to these features. Potential impacts, if any, will be localised and short term.

As described in Section 2, the vegetation proposed to be cleared forms part of the Swan Coastal Plain's (SCP) Bassendean Central and South vegetation complex. This complex has been historically and extensively cleared throughout its distribution in the SCP where now less than 27 percent of its pre-European extent remains (Government of Western Australia, 2018). Noting this extent, and the application area's Degraded to Completely Degraded (Keighery, 1994) condition, the vegetation under application is not considered to be representative of the mapped vegetation complex nor is it considered significant as a remnant in the local area.

The application corridor intersects areas with a moderate to high risk of acid sulphate soils (ASS). It is noted that there is a potential risk of ASS developing within three metres of the surface. Therefore the pipe will be installed at 1.1 metres, in 300 metre sections at a time, and the trench backfilled so that the longest period of time any part of the trench may be open will be no more than one to two hours, or up to 10 hours maximum (Harvey Water, 2018c). The proposed management activities will assist in mitigating impacts associated with ASS.

Given the poor draining characteristics of the soils within some areas of the application corridor, there is some risk of waterlogging occurring. To mitigate this risk, any excavation activities conducted in waterlogged areas will be undertaken with a "drain bucket" attachment to the excavator. This allows for water to drain back into the trench, allow the pipe to be strung in the trench directly following the excavator, the trench backfilled in the same action, thus bypassing the need for pumping water and reducing the risk of local flooding (Harvey Water, 2018c). A site specific 'Construction and Environmental Management Plan' will be implemented during the construction phase addressing the ASS and waterlogging mitigation measures (Harvey Water, 2018c).

Given the small size and linear nature of the application corridor and the management measures proposed within the 'Construction and Environmental Management Plan', it is not likely the proposed clearing will cause appreciable land degradation in the form of water erosion, cause or exacerbate the intensity of flooding or significantly impact surface or underground water quality. Potential impacts, if any, will be localised and short term.

Given the above, the proposed clearing is at variance to Principle (f), and is not likely to be at variance to the remaining principles.

Planning instruments and other relevant matters

The applicant, South West Irrigation Management Cooperative, trades as "Harvey Water".

Harvey Water has been engaged by Albemarle Lithium Pty Ltd to construct and supply industrial water for their proposed Albemarle Kemerton plant site, and ultimately this pipeline will also supply industrial water to other industries within the Kemerton Strategic Industrial Area (KSIA) (Harvey Water, 2018a).

The application area (formally Lot 510 on Plan 50377, Wellesley) is located in the KSIA, approximately 17 kilometres north-east of Bunbury. The KSIA is a 7,508 hectare industrial park comprising a 2,024 hectare Strategic Industry Zone (Industrial Core), a 284 hectare Ancillary Industry Zone (support industry area) and a 5,200 hectare Industry Buffer Zone (Harvey Water, 2018a).

Lot 253 is registered with Western Australian Land Authority (Land Corp) who support Harvey Water's clearing application (Harvey Water, 2018a). A section of the land parcel is utilised by Western Power under Easement F418882 as a transmission line maintenance corridor. Harvey Water has been granted an "easement in gross" over the easement area and a non-exclusive

access licence over the designated Licence Area on standard terms and conditions as per Transfer of Land Act 1893 (Harvey Water, 2018b).

Shire of Harvey have granted Development Approval for construction of the water pipeline (Shire of Harvey, 2018).

The Department of Water and Environmental Regulation's South West Landuse Planning (Water) have advised that as there are no watercourses proclaimed under the *Rights in Water and Irrigation Act 1914* (RIWI Act) within the application area, no permit under the RIWI Act is required. A groundwater license is also not required as the pipeline construction activities will not require de-watering of the site and any pumping of water that may be required will not be taken at a pump rate greater than 10 litres per second over a period of less than 30 consecutive days (DWER, 2018). These conditions also form part of Harvey Water's Construction and Environmental Management Plan mitigation measures (Harvey Water, 2018c).

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

The clearing permit application was advertised on the Department of Water and Environmental Regulation website on 24 July 2018 with a 14 day submission period. No public submissions have been received in relation to this application.

4. References

- Department of Primary Industries and Regional Development (2017). NRInfo Digital Mapping. Department of Primary Industries and Regional Development. Government of Western Australia. URL: <https://maps.agric.wa.gov.au/nrm-info/> (accessed 24 April 2018)
- Department of Water and Environmental Regulation (DWER) (2018) Landuse Planning (Water) advice – CPS 8132/1 (DWER Ref: A1708960)
- Government of Western Australia. (2018). 2017 South West Vegetation Complex Statistics. Current as of October 2017.
- Harvey Water (2018a) Application for clearing permit supporting documentation - Kemerton Strategic Industrial Area CPS 8132/1 (DWER Ref: A1705161)
- Harvey Water (2018b) Application for clearing permit supporting documentation CPS 8132/1 - LandCorp and Western Power finalised "easement in gross" (DWER Ref: A1708957)
- Harvey Water (2018c) Application for clearing permit supporting documentation - CPS 8132/1 - Construction Environmental Management Plan (DWER Ref: A1708957)
- 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.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Shire of Harvey (2018) Development Approval for water pipeline installation activities (DWER Ref: A1708976).

GIS Databases:

- Aboriginal Sites of Significance
- Department of Biodiversity, Conservation and Attractions, Tenure
- Pre-European vegetation complexes
- SAC bio datasets
- Soils, Statewide
- TPFL Data July 2018
- WAHerb Data July 2018
- WA TEC PEC Boundaries