



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 7844/1
Permit Holder:	Shire of Murray
Duration of Permit:	14 April 2018 – 14 April 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 disposal of dredging spoil.

2. Land on which clearing is to be done

Harvey Estuary water feature (PIN 11834258), South Yunderup

3. Area of Clearing

The Permit Holder must not clear more than 3.322 hectares of native vegetation within the areas cross-hatched yellow on attached Plan 7844/1.

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 the activities described in condition 1 of this Permit to the extent that the Permit Holder has the power to carry out works involving clearing for those activities under the *Local Government Act 1995* or any other written law.

6. Clearing not authorised

This Permit does not authorise the Permit Holder to clear native vegetation between 31 October and 1 April.

PART II – MANAGEMENT CONDITIONS

7. 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.

PART III – RECORD KEEPING AND REPORTING

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 7 of this Permit.

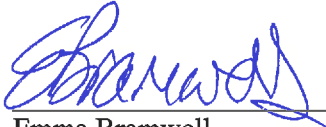
9. Records must be kept

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 the administration of the clearing provisions under the *Environmental Protection Act 1986*;

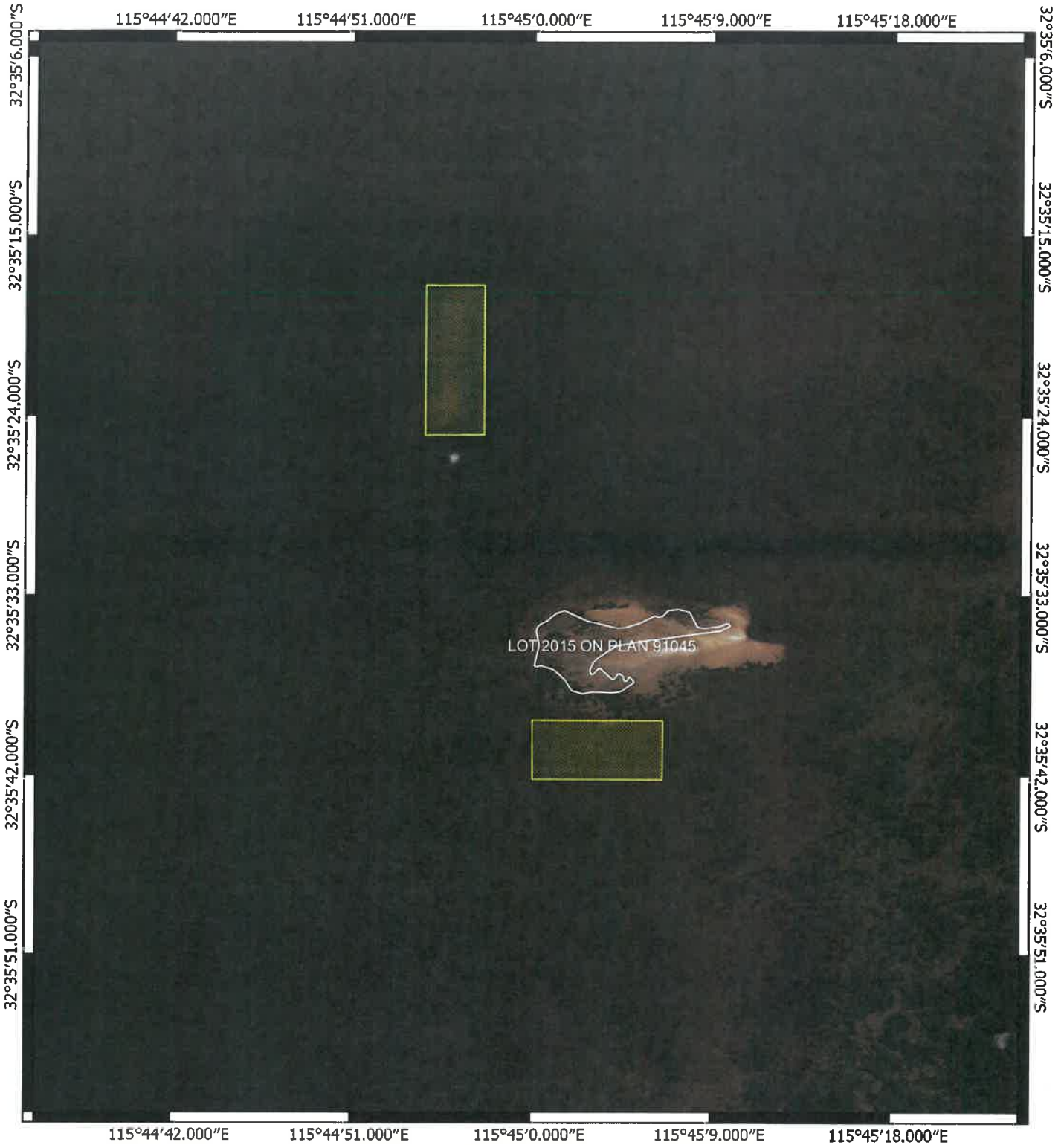


Emma Bramwell
A/MANAGER
CLEARING REGULATION


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

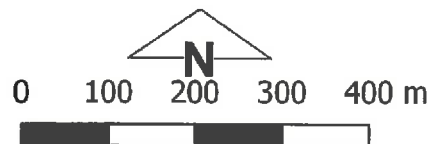
16 March 2018

Plan 7844/1



Legend

-  Areas approved to clear
- Cadastre
- WANow_Imagery



MGA 94
Geocentric Datum of Australia 1994
E. Skamwaga Date: 16/03/18
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.: 7844/1
Permit type: Purpose Permit

1.2. Applicant details

Applicant's name: Shire of Murray

1.3. Property details

Property: Harvey Estuary water feature (PIN 11834258)
Local Government Authority: Shire of Murray
DWER Region: Greater Swan
DBCA District: Swan Coastal
Localities: South Yunderup

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
3.322 (as revised)		Smothering of seagrasses	Disposal of dredging spoil

1.5. Decision on application

Decision on Permit Application: Granted
Decision Date: 16 March 2018

Reasons for Decision: The clearing permit application was received on 31 October 2017 and has been assessed against the clearing principles, planning instruments and other matters in accordance with section 51O of the *Environmental Protection Act 1986*. It has been concluded that the proposed clearing is at variance to clearing principles (f) and (h), may be at variance to clearing principle (b), and is not likely to be at variance to the remaining clearing principles.

The Delegated Officer noted that the application area is located within a conservation category and Ramsar wetland. The Delegated Officer determined that the proposed clearing (being the disposal of dredging spoil) will directly impact on seagrasses growing in association with this wetland, will impact on the quality of surrounding waters through a resulting sediment plume and turbidity, and may impact on the environmental values of adjacent Boodalan Island. The Delegated Officer noted the extent of the proposed clearing and the tidal nature of the estuary, and determined that these impacts are likely to be short term and that the proposed clearing is otherwise unlikely to have any unacceptable environmental impacts.

To address these impacts, the clearing permit contains conditions requiring the applicant to avoid and minimise impacts, and to restrict clearing to the period April to October.

2. Site Information

Clearing Description	<p>The application is for the clearing of 3.322 hectares of native vegetation within two locations in the Harvey Estuary water feature (PIN 11834258), for the purpose of disposing of dredging spoil.</p> <p>Specifically, the application relates to the proposed smothering of seagrasses with approximately 35,000 cubic metres of dredging spoil resulting from maintenance of the Yunderup Entrance Channel.</p> <p>The location of the application area is indicated in Figure 1 (areas cross-hatched blue).</p>
Vegetation Description	<p>The application area is located within an estuary and below the water line. Vegetation description, vegetation condition and soil/landform datasets are not available for this location.</p>
Vegetation Condition	<p>As above.</p>
Soil/Landform Type	<p>As above.</p>
Comment	<p>The local area considered in the assessment of this application is defined as a 10 kilometre radius measured from the perimeter of the application area.</p>

Figure 1: Application area (areas cross-hatched blue)



3. Assessment of application against clearing principles

The application area is located within the 'Peel-Harvey Estuary' consanguineous wetland suite, the 'Peel Inlet Waterbody' conservation category wetland and the 'Peel-Yalgorup System' Ramsar wetland, and is adjacent to Lot 2015 on Deposited Plan 91045 / Crown Reserve 33749 'Boodalan Island' vested for the purpose of recreation and conservation of fauna and listed on the Register of the National Estate.

The proposed clearing (being the disposal of dredging spoil) will directly impact on seagrasses growing in association with the Peel Inlet Waterbody and Peel-Yalgorup System wetland and the adjacent Boodalan Island, and will impact on the quality of surrounding waters through a resulting sediment plume and turbidity. Noting the tidal nature of the estuary in which the application area is located, it is considered that the sediment plume and turbidity is likely to be short-term.

According to available databases, a number of records of threatened and priority fauna occur within the local area. The majority of these records are terrestrial or marine species and are unlikely to occur within the application area. However a number of these records are for migratory waterbirds, which utilise the Peel-Harvey Estuary, Peel Inlet Waterbody and Peel-Yalgorup System wetland and are likely to utilise the adjacent Boodalan Island.

Avoiding the disposal of dredging spoil during the growth period of benthic flora and the peak visitation and breeding times of migratory waterbirds will minimise impacts to these species, and to the environmental values of the Peel-Harvey Estuary, Peel Inlet Waterbody and Peel-Yalgorup System wetland and the adjacent Boodalan Island.

According to available databases, a number of records of rare and priority flora occur within the local area. These records are primarily terrestrial species and a few aquatic species (Western Australian Herbarium, 1998-). On this basis, rare and priority flora are not likely to occur within the application area. The application area is not likely to include, or be necessary for the continued existence of, rare flora.

According to available databases, a number of records of threatened and priority ecological communities occur within the local area. The nearest occurrence is the State-listed Priority 3 ecological community 'Subtropical and Temperate Coastal Saltmarsh' located approximately 1.4 kilometres east of the application area, which is also listed as 'vulnerable' under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The approved Conservation Advice for this community states "The physical environment for the ecological community is coastal areas under regular or intermittent tidal influence", and "It is typically restricted to the upper intertidal environment, occurring in areas within the astronomical tidal limit, often between the elevation of the mean high tide and the mean spring tide" (Threatened Species Scientific Committee, 2013). Other records of threatened and priority ecological communities within the local area are terrestrial communities. On this basis, threatened and priority ecological communities are not likely to occur within the application area. The application area is not likely to comprise the whole or a part of, or be necessary for the maintenance of, a threatened ecological community.

Noting that the application area is located within an estuary and below the water line, the proposed clearing is not likely to cause appreciable land degradation, is not likely to cause deterioration in the quality of surface or underground water (noting the impacts to surrounding waters outlined above), and is not likely to cause, or exacerbate, the incidence or intensity of flooding. Noting the extent of the proposed clearing, the application area is also unlikely to comprise a high level of biological diversity in the context of the broader estuarine system.

The proposed clearing is at variance to clearing principles (f) and (h), may be at variance to clearing principle (b), and is not likely to be at variance to the remaining clearing principles.

Planning instruments and other relevant matters.

The application was originally to clear 3.5 hectares of native vegetation and included Lot 2015 on Deposited Plan 91045. Lot 2015 is Crown Reserve 33749 'Boodalan Island', dually vested by Management Order with the Shire and the WA Wildlife Authority (now the Conservation and Parks Commission) for the purpose of recreation and conservation of fauna. Boodalan Island was registered on the Register of the National Estate on 21 March 1978 as 'Natural' (Place ID 10776). To avoid direct impacts to Boodalan Island, the applicant revised the application to exclude Lot 2015.

The application was advertised on the Department of Water and Environmental Regulation (DWER) website on 8 February 2018 with a 21 day submission period. The revised application was advertised on the DWER website on 9 March 2018 with a seven day submission period. No public submissions have been received in relation to this application.

The Department of Biodiversity, Conservation and Attractions (DBCA) advised that as the proposed clearing (being the disposal of dredging spoil) has previously been considered by the Environmental Protection Authority (EPA) and the former Commonwealth Department of the Environment and Water Resources (DEWR) (as outlined below), it has no comments on the application (DBCA, 2018). DBCA also advised that as the in-water spoil disposal area and footprint of the application does not involve the Boodalan Island reserve, the consent of the Conservation and Parks Commission is not required (DBCA, 2018).

There are no Aboriginal Sites of Significance mapped within the application area.

The applicant provided copies of a Dredging and Spoil Management Plan, Dredge Strategy Report and Dredging Licence DR3/18 with the application, which were approved by the former Department of Water under the *Waterways Conservation Act 1976*. The Dredging Licence contains a condition requiring that the dredging shall be in full accordance with the approved Dredging and Spoil Management Plan, which specifies (among other things) that "The timing of works is identified as being most likely over the period April to October, which minimises disturbance impacts to birds, seagrass and recreational users of the estuary".

Related proposals

In February 1987, the Chairman of the EPA determined to assess the proposal 'Extension to Yunderup Canals Estate' by Peel Waterways Pty Ltd at the level 'Public Environmental Review' under the *Environmental Protection Act 1986*. The proposal refers to the area in the immediate vicinity of the Yunderup Canals Estate, but not to the entrance channel.

In June 1991, the EPA published its assessment report and recommendations for a proposal for the extension of the Yunderup Canals Estate (Bulletin 541). The EPA's assessment considered the disposal of dredging spoil, and Bulletin 541 states "In recognition of the need to maintain the Yunderup Canals water exchange mechanism, it is anticipated that the entrance channel will require further dredging at some stage in the future. ... The Authority is of the view that dredge spoil should not be pumped into Wellya Lagoon nor into the Peel Inlet, and that other options should be considered at the appropriate time. This should be recognised in any agreement reached in accordance with Recommendation 3". The EPA's Recommendation 3 relates to an agreement being entered into between the proponent, the Shire of Murray, the Peel Inlet Management Authority, and the Department of Marine and Harbours (now Department of Transport), which clearly delineates responsibility for the physical maintenance and water quality monitoring and management of the canal system, both new and existing, and of its entrance channel.

On 17 January 1992, the then Minister for the Environment published Ministerial Statement 209, approving implementation of the proposal subject to conditions.

In April 2007, the applicant referred the proposal 'Yunderup Approach Channel Maintenance Dredging' to DEWR for consideration under the EPBC Act. The referral document refers to the disposal of dredging spoil associated with maintenance of the Murray and Serpentine River mouths (creating Brindley Shoal) and from capital dredging of the Yunderup Approach Canal (creating Boodalan Island). The referral document states that Boodalan Island was artificially created. In relation to environmental impacts, the referral document states:

- "The dredge operation will be carefully timed so as to avoid disturbance of migratory birds. Migratory species are known to be present in the region during late-spring through summer ... and the dredge operation is due to commence during winter 2007. This will also avoid periods of nesting for resident waterbird species".
- "Turbidity of the surrounding waters will be a temporary side-effect to the dredge operation, largely as a result of dredge material disposal. Due to the rapid intake velocity of the cutter suction head, the turbidity at the dredging site is expected to be minimal. However, a sediment plume is likely to be evident at the dredge material disposal sites. The timing of the operation, during winter, will reduce the environmental impacts of elevated turbidity, as winter suspended sediment loads tend to be naturally high, as well as being a period of low growth rates for benthic flora. The dredge material disposal sites will be designed and managed so as to minimise impacts of elevated turbidity. The marine dredge disposal option will be located such that impacts on benthic habitat will be minimal. The discharge point will be located towards the seabed to encourage rapid settling of the suspended sediments".
- "The Monosulphidic Black Ooze (MBO) material found at the bottom of the Yunderup Approach Channel poses a risk of forming AASS if not properly managed once disturbed. This risk will be taken into account when considering options for dredge material disposal sites. The marine disposal dredge disposal option presents advantages with respect to dealing with ASS due to the buffering effects of seawater along with limited contact with the air preventing oxidation of the sediments. Sediment samples from the previous marine disposal sites (Boodalan Island and Brindley Shoal) indicate that AASS have not formed".

On 22 June 2007, DEWR determined that "The proposed action is not a controlled action provided it is undertaken in the manner set out in this decision", being "The following measures must be taken to avoid significant impacts on wetlands of international importance (sections 16 & 17B) and listed migratory species (sections 20 & 20A): 1. Dredging will not occur during the period 15 December to 31 March to avoid peak migratory waterbird periods. 2. Dredged material will be placed at Boodalan Island and the 'Marine Disposal Area', as illustrated in Figure 1 attached to the referral".

4. References

- Department of Biodiversity, Conservation and Attractions (DBCA) (2007-) NatureMap: Mapping Western Australia's Biodiversity. Department of Environment and Conservation. URL: <http://naturemap.dec.wa.gov.au/> (accessed February 2018).
- Department of Biodiversity, Conservation and Attractions (DBCA) (2018) Advice provided in relation to clearing permit application CPS 7844/1, received 13 March 2018 (DWER ref. A1633604).
- Threatened Species Scientific Committee (2013) Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) (s266B) Conservation Advice for Subtropical and Temperate Coastal Saltmarsh. Department of the Environment, Canberra. Available from: <http://www.environment.gov.au/biodiversity/threatened/communities/pubs/118-conservation-advice.pdf>.
- Western Australian Herbarium (1998-) FloraBase - The Western Australian Flora. Department of Parks and Wildlife. <http://florabase.dpaw.wa.gov.au/> (accessed February 2018).

GIS Databases:

- Aboriginal Sites of Significance
- Department of Biodiversity Conservation and Attractions, Tenure
- Hydrography, linear
- Hydrography, hierarchy
- SAC Bio Datasets (Accessed February 2018)