

APPENDIX 9

ETHNOGRAPHIC AND ARCHAEOLOGY ASSESSMENTS

9A: ETHNOGRAPHIC ASSESSMENT

9B: ARCHAEOLOGY ASSESSMENT

APPENDIX 9A

ETHNOGRAPHIC ASSESSMENT

Ethnoscience

ABN 47 065 099 228

Ethnography, Heritage & Cultural Interpretation

Report of an Ethnographic Survey of Doral's Yalyalup Project near Busselton, Western Australia

Prepared for Doral Mineral Sands

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January 2020

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Aboriginal Heritage

Disclaimer

The results, conclusions and recommendations contained within this report are based on information available at the time of its preparation. Whilst every effort has been made to ensure that all relevant data has been collated, the author can take no responsibility for omissions and/or inconsistencies that may result from information becoming available subsequent to the report's completion.

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Claimants 2012

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Abbreviations

ACMC:	Aboriginal Cultural Material Committee
AHA:	<i>Aboriginal Heritage Act 1972</i>
AHIS:	Aboriginal Heritage Inquiry System
DPLH:	Department of Planning Lands and Heritage
Doral:	Doral Mineral Sands Pty Ltd
EST:	Ethnographic survey team
NSHA:	Noongar Standard Heritage Agreement
SWALSC:	South West Aboriginal Land and Sea Council
SWB:	South West Boojarah #2 (WC06/4) Native title claim

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Summary & Recommendations

Doral Mineral Sands Pty Ltd (Doral) commissioned Ethnoscience in 2017 to undertake a desktop study of its proposed Yalyalup mineral sands project area. The desktop study was updated in 2019 to include an access corridor across the Abba River to the Ludlow-Hithergreen Road.

The Abba River (DPLH 17354) was the only Aboriginal site identified in the study area, which also did not contain any 'Other Heritage Places'.

Doral entered into a Noongar Standard Heritage Agreement with SWALSC, on behalf of the SWB claimants within whose native title claim (South West Boojarah #2 WC06/4) the survey area is wholly located.

Ethnoscience was then commissioned by Doral to undertake a field heritage investigation. Snappy Gum conducted archaeological survey of the project area, behalf of Ethnoscience. The archaeological survey did not record any archaeological sites with the project area. However, thirty-three (33) isolated artefacts were recorded (Cue & Hovingh, 2019).

SWALSC then provided a list of eight SWB consultants nominated for the ethnographic survey, which Edward McDonald and Tania Phillips of Ethnoscience conducted on November 28, 2019 with seven of those nominated or their proxies. A site identification methodology was used for the survey. Following a short briefing session on Busselton provided by the EST inspected the Yalyalup project area by vehicle, stopping at various vantage points to view the land and discuss the proposed project and the results of the archaeological survey. Particular attention was paid to the location of the proposed crossing of the Abba River (DPLH 17354), which was the only ethnographic site with the project area identified during the field survey.

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The SWB consultants were supportive of and did not raise any objections to Doral's mine development and rehabilitation plans. In particular they expressed their satisfaction with the proposed location for the access corridor crossing of the Abba River.

They noted their satisfaction with the results of the archaeological survey and agreed that archaeological monitoring should be restricted to areas of archaeological potential, especially the location of the proposed Abba River crossing. They requested, however, that any archaeological material that is to be disturbed is salvaged and suitable stored.

A number of SWB consultants raised questions regarding the economic benefits that might flow from the development to the Nyungar community and expressed the hope that the project would provide employment opportunities for local Nyungars.

Recommendations

1. It is recommended that Doral's planned Yalyalup development proceed.
2. It is also recommended that that areas of archaeological potential are monitored during the removal of the topsoil and that any archaeological material discovered is salvaged and suitable stored.
3. It is further recommended that Doral consult SWALSC regarding Nyungar employment opportunities and benefits that might flow to the community from the Yalyalup project.

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Introduction

In June 2017, Ethnoscience was commissioned by Doral Mineral Sands Pty Ltd (Doral) to undertake a desktop Aboriginal heritage survey of the Yalyalup Project Area which is located approximately 8.5km southeast of Busselton (Figure 1) and is located wholly within the South West Boorah #2 (WC06/4) (SWB) native title claim, which is represented by the South West Aboriginal Land and Sea Council (SWALSC). Doral plans to mine the Yalyalup project area for mineral sands (Figure 1).

The objectives of the 2017 desktop survey were (a) identify any known Aboriginal heritage issues that may affect the proposed Yalyalup mine development; and (b) make recommendations for any further research and/or consultation that may be required to meet the requirements of the Aboriginal Heritage Act 1972 (AHA). The desktop found that there are no Registered Aboriginal Sites or 'Other Heritage Places' currently listed within or in close proximity to the proposed Yalyalup Project Area (Figure 1). However, there are a number of ethnographic sites recorded in the surrounding area, including the Sabina River (DPLH 17353) and Abba River (DPLH 17354), as well as a number of archaeological sites (McDonald and Coldrick 2017). The desktop study recommended that ethnographic and archaeological surveys of the project area were undertaken with the participation of the SWB native title claimants.

In August 2019, Doral requested that Ethnoscience examine an additional area not included in the original Development Envelope for which Doral now need to apply for an amendment under the EP Act. This area is for a proposed mine access corridor, which would cross the Abba River (Figure 2). The updated desktop study found that the Abba River (DPLH 17354), a registered Aboriginal site, was intersected by the proposed mine access corridor (McDonald 2019) (Figure 3).

Doral, which had entered into Noongar Standard Heritage Agreement (NSHA) with SWALSC and SWB, commissioned Ethnoscience to undertake ethnographic and archaeological surveys of the Yalyalup project area on November 5, 2019

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Ethnosciences subcontracted Snappy Gum Heritage Services (Snappy Gum) to undertake the archaeological survey, which was conducted November 18 to 21, 2019.

The results of the archaeological survey are presented under a separate cover (Snappy Gum in prep). The ethnographic survey was conducted Edward McDonald and Tania Phillips of Ethnosciences on November 28, 2019.

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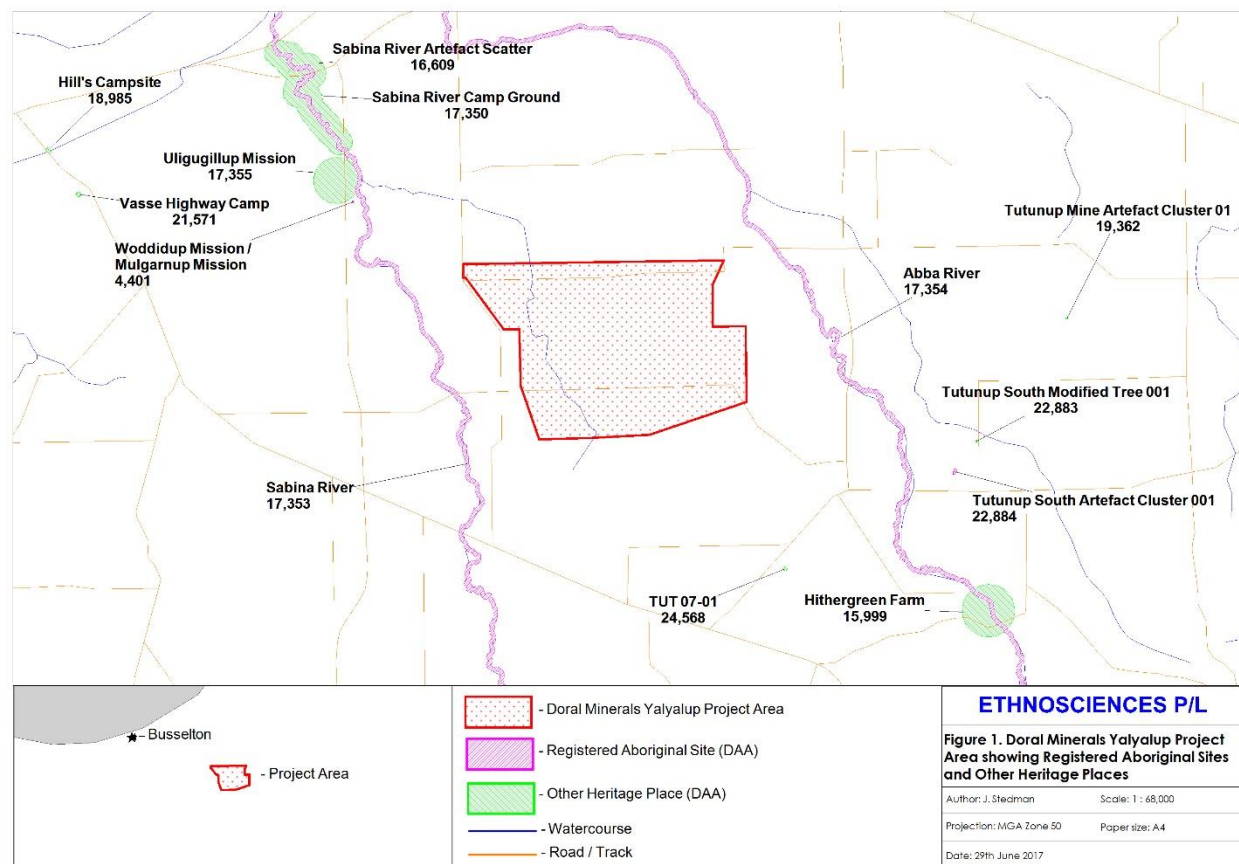


Figure 1: The Yalyalup Project area showing Registered Aboriginal Sites and 'Other Heritage Places' in the vicinity (Source: McDonald & Coldrick 2017)

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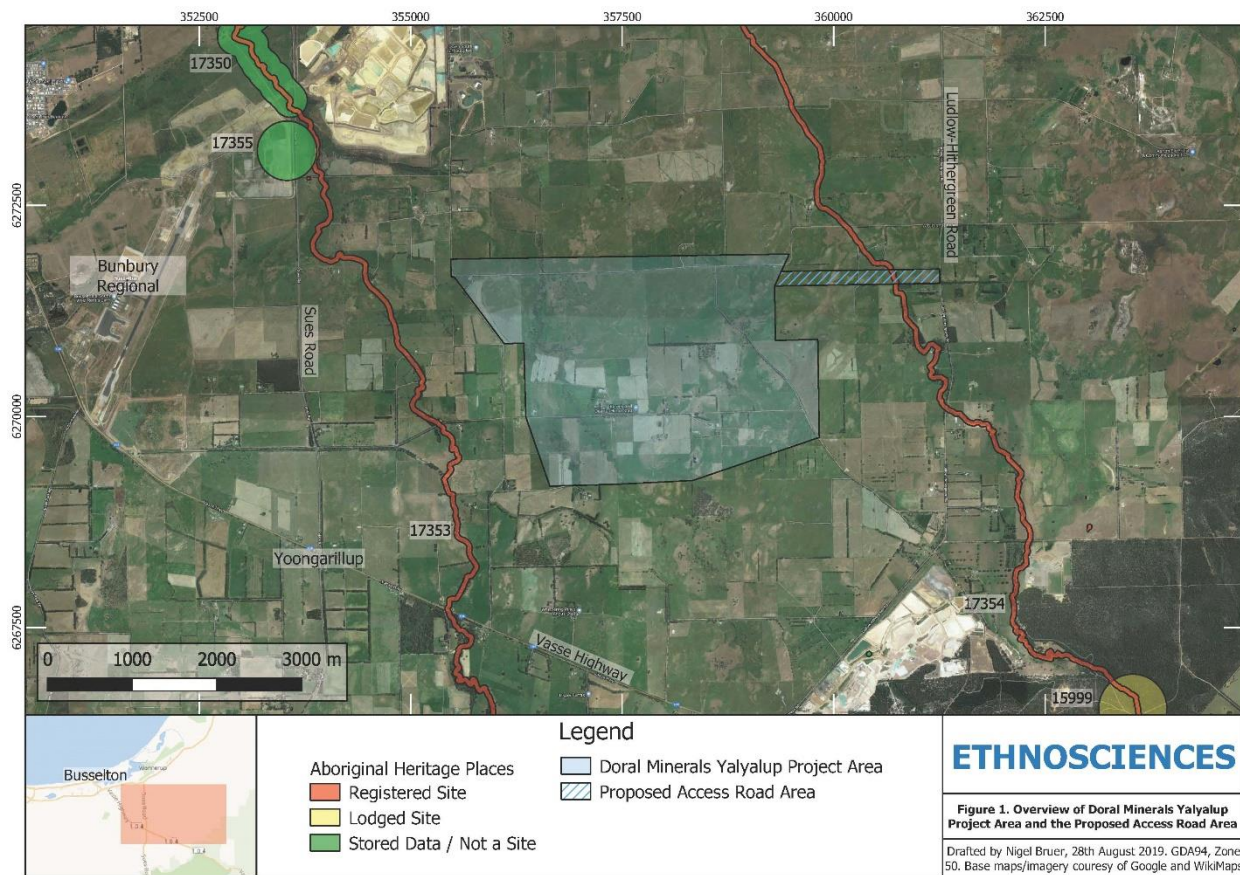


Figure 2: Doral Yalyalup project area including mine access corridor (Source: McDonald 2019)

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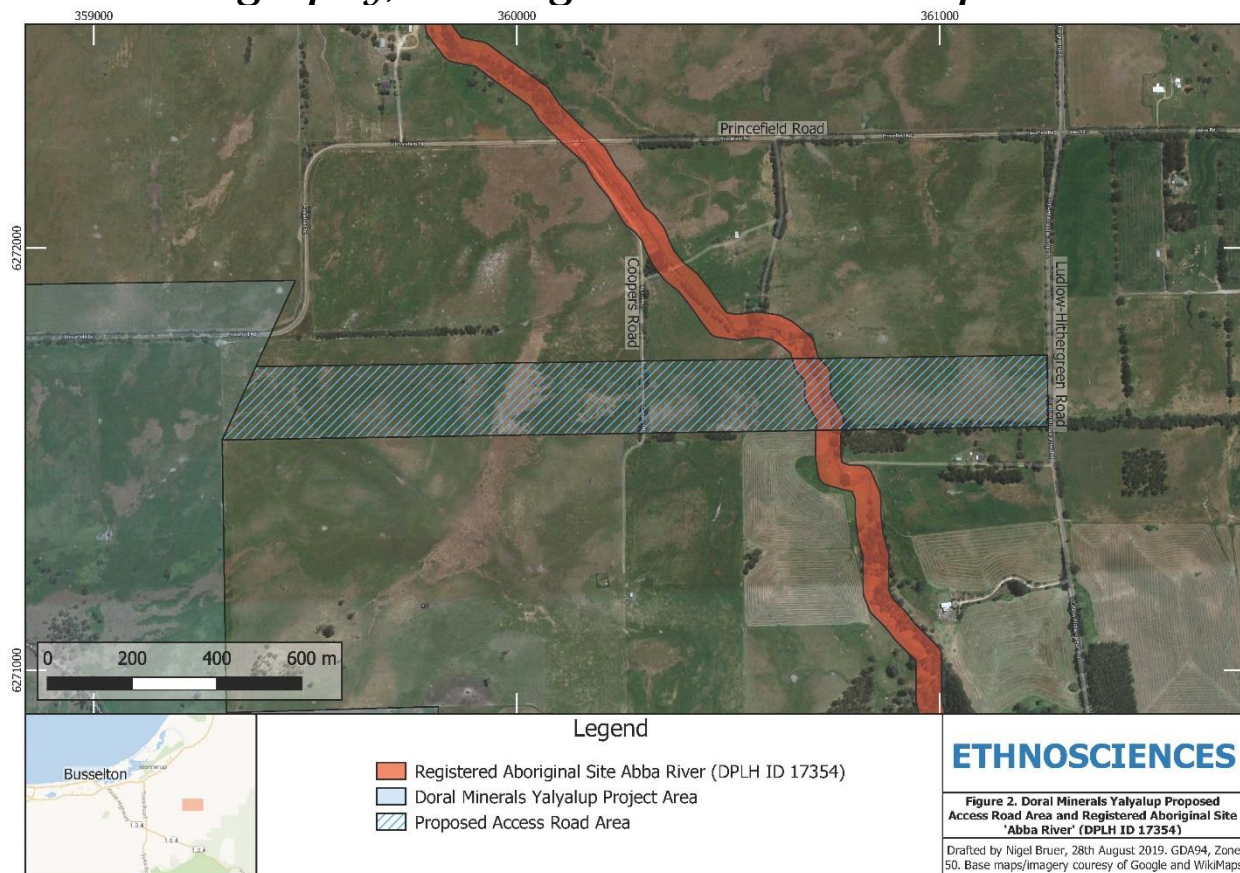


Figure 3: Doral's Yalyalup project area showing the intersection of the mine access corridor with the Abba River (ID 17354)) (Source: McDonald 2019)

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Ethnographic Survey Methods

The ethnographic survey was conducted in the following stages:

- ❖ Desktop research;
- ❖ Preliminary consultation with the SWB Aboriginal consultants nominated by SWALAC & the SWB Working Party;
- ❖ Site inspections with the SWB Aboriginal consultants;
- ❖ Consultation regarding the results of the archaeological survey; and
- ❖ Report preparation.

As noted, McDonald and Coldrick undertook the desktop research in 2017 which McDonald updated in 2019 (McDonald and Coldrick 2017 and McDonald 2019). The desktop studies included an examination of the Register of Aboriginal Sites using the online Aboriginal Heritage Inquiry System (AHIS) operated by the Department of Planning Lands and Heritage (DPLH). A review of previous published and unpublished ethnohistorical and ethnographic material, including previous heritage reports was also undertaken and particularly of survey of other mineral sands (for example, Goode 2003, McDonald, Hales and Associates 2002; McDonald 2007, 2012 & 2018 and McDonald and Coldrick 2010 and 2011). These also include several broadscale ethnographic studies, such as McDonald, Hales & Associates (1994) and CSR, Edith Cowan University and McDonald, Hales & Associates (1997).

The SWB Working Party through SWALAC provided a list of eight (8) Aboriginal consultants to Doral in October 2019. When contacted about the planned ethnographic survey, one was reported that she was not available because of family commitments. Another of those nominated was not available because of work commitments. Another member of the family was nominated to take his place. Mrs Van Leeuwin of the Harris Family native Title claim (WC1996/041). was nominated to participate in the survey. However, members of her family insisted that she not be contacted as she is elderly and has been infirm for some years. Her nephew, Mark Blurton, was nominated by

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senior family members as her proxy. Mr Barry Pell proxied for Kelton Pell who was unable to participate because of work commitments.

The ethnographic field survey was undertaken on November 28, 2019 with seven SWB consultants comprising the ethnographic survey team (EST):

- ❖ Wayne Webb
- ❖ Jack Hill
- ❖ Tim Kumanjii Harris
- ❖ Pearl Councillor
- ❖ Franklyn Nannup
- ❖ Mark Blurton
- ❖ Barry Peel

McDonald conducted the ethnographic field survey with the assistance of Ms Tania Phillips using a site identification methodology. The ethnographic survey team was assisted in the field by Ms Julie Edwards (Environmental Advisor, Doral Mineral Sands) (Plate 1). The survey commenced in Busselton with a quick overview by Ms Edwards of the proposed mine development. The EST then proceeded to the Yalyalup mine development area, stopping at various vantage points to inspect the land, with particular attention been paid to the location of the proposed Abba River crossing (Plate 2). At various stops Ms Edwards discussed various aspects of the mining process and the rehabilitation of the land when mining was complete. She responded to the range of queries raised by the SWB consultants regarding such matters the land to be impacted, the mining and ore treatment processes, the stages of mining and the rehabilitation processes and requirements, as well as the nature of the planned impacts on the Abba River. Ms Edwards explained that it was a continuous process of mining and rehabilitation, as soon as one section was mined rehabilitation commenced and the sands that remained after the processing of the mineral sands were returned to the areas they came from. Mr Wayne Webb, who had assisted Snappy Gum with the archaeological survey, furnished the EST members with a summary of the results of

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the archaeological survey and discussed how the results related to the landform. Mrs Toni Webb who have also participated in the archaeological survey, accompanied her husband Wayne and added information as required (see Plates 3-6).

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Plate 1: The Yalyalup EST & other participants (from left) Jack Hill, Toni Webb, Franklyn Nannup, Wayne Webb, Barry Pell, Julie Edwards, Edward McDonald, Pearl Councillor, Tim Kumanjii Harris & Mark Blurton: note the vegetation free proposed mine access corridor & Abba River crossing alignment behind (Photo: Phillips, November 2019)

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Plate 2: The proposed mine access corridor & Abba River crossing location, looking east towards the Ludlow-Hithergreen Road (Photo: Phillips, November 2019)

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Plate 3: Wayne Webb (pointing) describes the Yalayup Project area landform and the results of the archaeological survey to Mark Blurton, Jack Hill and Barry Peel (Photo: McDonald, November 2019)

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Plate 4: Julie Edwards discusses the environmental & heritage values of the McGibbon Track (in background) and Doral's plans to avoid impacting it with members of the EST (Photo: Phillips, November 2019)

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Plate 5: Julie Edwards responses to queries from the SWB consultants regarding Doral's proposed Yalyalup mining process (Photo: Phillips, November 2019)

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Plate 6: Jack Hill queries Julie Edwards about aspects of Doral's mine development proposals while Franklyn Nannup and Tania Phillips listen on (Photo: McDonald, November 2019)

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Ethnographic Background

Daisy Bates (1985, 1992 and n.d.) was the first researcher to systematically collect information regarding the social organisation, language and customs of the indigenous people of the Southwest region of Western Australia.

Bates (1985:39) referred to the Aboriginal people occupying the Southwest from around Jurien Bay in the north to a point just east of Esperance as the 'Bibbulmun Nation'. She reports that the Bibbulmun were comprised of a number of local groupings with similar customs and beliefs though regional differences, including forms of descent and dialect, were evident (Bates 1985:46–54). According to Bates (1985:54), the Bibbulmun who traditionally occupied the Busselton area were known as the *Dunan Wongi* after the name of their local dialect.

Later researchers, however, provide a different perspective to that of Bates. Berndt (1979), following Tindale (1974), for example, suggested that at the time of British colonisation the Southwest was occupied by thirteen 'tribes' or socio-dialectal groups that formed a discrete socio-cultural bloc similar to what Bates referred to as the 'Bibbulmun Nation'. Tindale (1974) and Berndt (1979) reported that the groups occupying the region in which the study area is located were the *Wardandi* 'tribe' or socio-dialectal group (see Figure 4). Tindale (1974:259) described the *Wardandi* territory as:

From Bunbury to Cape Leeuwin, chiefly along the coast; at Geographe Bay, the vicinity of Nannup and Busselton. According to one informant, the tribal name is linked with the [ˈwardan] or crow, but the name given in vocabularies for crow is [ˈkwa:kum]. They were also called the "seacoast people," and the detailed Nina Layman MS gives "werdandie" also "wartine" as meaning "the sea". In yet another version it is the derivative of the negative term.

Bates (1985:47) also had reported that the Bibbulmun around the Busselton area were called *Waddarn-di*, or sea people; however, she commented that this term referred to

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all coastal people, including the groups stretching from Esperance to Bunbury and beyond.¹

Bates' unpublished notes (for example, n.d. Section II Geographical Distribution) suggest that a number of important camping places associated with an initiates' (*beedawong* or *moolyeet*) trail were located in the Busselton area including in the vicinity of the Abba River (see also Bates 1985). Bates' list begins with the Porongorups and runs west to Augusta, then follows the coast to Perth and finally ends at *Karboordup* near where the Perth Town Hall is located. Hammond (1933:19) also refers to a *bidi* or pathway linking Perth to the Southwest that probably would have encompassed these and other campsites.

Bates (n.d.) lists a cluster of camps in the Busselton area, though the exact location of many of these places is unknown. These camps, in the order listed by Bates (comments in parentheses are Bates' own), include:

- ❖ *Ngamboornup* (Broadwater);
- ❖ *Win'in'up* (winnaitch);²
- ❖ *Yoonderup* (Busselton River);
- ❖ *Kelgalup* or *Kel'al'up* (Butter factory);
- ❖ *Kooneengoonderup* (Estuary);
- ❖ *Beerdalup*;
- ❖ *Kwarreedup*;
- ❖ *Ken'yee'dup*;

¹ The term *Waddarn-di/Wardandi* in this sense is an example of what Sutton (2003:74–75) would refer to as 'environmental identity names' and not a language group name. Bates (1985:47) also reports that people who lived along rivers in the Southwest were referred to as 'Bilgur'; estuary people as 'Darbulung'; and hill people as 'Buyun-gur'. Sutton (2003) discusses how 'tribal' names identified by Tindale (1974) whose provenance might be somewhat doubtful have now been adopted by Aboriginal groups. McDonald and Christensen (n.d.) have questioned the basis of Tindale's, and particularly Berndt's, analyses.

² Bates glosses 'winnaitch' as "avoided" or "sacred". An examination of Bates' unpublished manuscripts indicates that Win'in'up is located between the road and the old railway bridge in Busselton on the Vasse River.

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- ❖ *Woojoolgup*;
- ❖ *Kweejerdup*;
- ❖ *Joorgadup* or *Joorak guttuk* (on the Abba River); and
- ❖ *Wannerdup* or *Menbinup*.³

It has not been possible, to date, to positively identify *Joorgadup/Joorak guttuk* or its location on the Abba River. It needs to be stressed that there are often major difficulties in clearly identifying some of the places listed by Bates (see McDonald, Hales & Associates 1999; McDonald and Venz n.d.). First is the nature of Aboriginal placenames themselves where a number of places may be known by the same or similar names. For example, in the Southwest there were a number of places recorded by Bates called *Walalyup* (place of the Eaglehawk) or other dialectal variants of that name. Second is the use of names and reference points by Bates herself. She is far from consistent in her use of names and dialectal variations of names. She also frequently uses different (English language) reference points to situate an Aboriginal placename. As a consequence of these problems, we must be cautious in applying a placename listed by Bates to a precise location in the context of heritage surveys, particularly in the absence of detailed information. Nevertheless, it appears likely that there were a number of camps located in the vicinity of the study area that were associated with the 'moolyeet trail'.⁴

³ Possibly refers to Wannerup. We are currently unable to identify the location of Joorgadup/Joorak guttuk on the Abba River but likely to be in the vicinity of Wannerup Estuary as it would roughly be in line with the other 'camps'. The suffix '**up**' in Joorgadup refers to 'place of' and '**guttuk**' is to have or possess. Wayne Webb (pers comm. December 2019) is of the view that the stem '**Joorgad/Joorak**' may derive from the word '**jooroot**' meaning track (see also Bindon and Chadwick 1992)

⁴ However, it is not clear that in pre-colonial times the 'moolyeet trail' had the status of a single integrated route as is now is generally attributed to it (e.g. Vinnicombe 1989) as Bates (1985) herself seems to raise doubts about it. She notes (1985:51–52), for example, that one of her informants travelled from Busselton to Albany with initiates after colonisation but notes, "whether this was due to the facilities afforded by white settlement, and the greater ease with which long journeys could be accomplished under white protection cannot be definitely ascertained." McDonald and Venz (n.d.) provide a more detailed discussion of this issue.

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Hallam (1975), Ward (1981:18) and Gibbs (1987) provide detail of various aspects of the traditional economic and social life of Nyungars in the area. Ward (1981:18) has compiled ethnohistorical research which indicates that the Vasse, Wonnerup and Leschenault Inlets, together with the numerous rivers and other waterways in the area, were particularly important places, both economically and socially, prolific in fish, waterfowl and other resources. A number of mungah/mungar (fish traps) were located in various rivers and estuaries throughout the Southwest. At least two were located in the environs of Busselton, one on the Vasse River and another on the Abba River (see Ward 1981; Gibbs 1987; McDonald, Hales & Associates 1995). The former was observed by John Bussell who wrote in 1833 of 'snares for fish' built by Nyungars in the shallows at the mouth of the Vasse River (cited in Ward 1981:30). Groups of more than 200 Nyungars were recorded at the fish trap at Wonnerup on the Abba River (Gibbs 1987). George Layman also noted that during the month of September Nyungars were numerous along the estuary "and have frequently been seen, in numbers of one hundred" (Layman Acc. No. 36, cited in Collard 1994). Thus, the research indicates that the rich habitat of the Busselton region allowed for large gatherings of Aborigines during seasonal availability of certain foods. When food resources became limited at various times of the year, there is some evidence to suggest that Nyungars dispersed in smaller family groups over their range (Hallam 1981; Ward 1981).

According to Landgate,⁵ the name for the Abba River was first recorded by Frederick Ludlow in 1834, '*abba*' an Aboriginal word which is most likely a greeting word used by South-West Aborigines (Bindon and Chadwick 1992: 1, gloss '*abba* as a friendly salutation). Yalyalup according to one of the informants, in the present survey is the name for the eastern end of the Whicher Range, which means 'place of big hill and

⁵ @ <https://www0.landgate.wa.gov.au/maps-and-imagery/wa-geographic-names/name-history/History-of-river-names#alpha>, accessed 051219.

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caves'. According to an entry on Wikipedia, Yalyalup means "place of many holes" with "yal", being the Wardandi word for "large hole". ⁶

Shann (1978) and Jennings (1983; 1999) document various aspects of Nyungar-European relations during the colonial period in the Busselton area. Initially contact between Europeans and the local Nyungar population was relatively peaceful, however, as Nyungars realised they were losing control of their land and resources relations between them and the 'Wadjellas' [white fellas] deteriorated. As Collard (1994:58) points out, there was conflict in the perceptions of property between Aborigines and Europeans:

The Wedjela regarded their sheep, cattle and crops as private property and were incensed when this property was stolen, at the same time, however, they regarded the wild life as public property to be hunted at will. The Nyungar, on the other hand, had areas for hunting and gathering vested in specific families and these families also felt justifiably angry when property and territorial rights were violated.

Conflict between the colonists and the local Aborigines was often intense amounting at times to what Jennings (1983) has described as a state of war or insurrection. The spearing of George Layman and resultant reprisals against the Aborigines, which resulted in the Minninup massacre, highlight these tensions (see Jennings 1983: 181-199; see also Shann 1978 and White 2017).

Following this period of conflict Aboriginal people adapted to colonial conditions and local Nyungars were variously employed in the pastoral, farming and forest industries. Reports from Aboriginal consultants of agricultural employment in and around the Busselton townsite are documented in previous surveys (Hovingh and Jarvis 1996: 24; McDonald, Hales and Associates 1994: 13). The nature of work available was seasonal and those Nyungars employed by farmers were expected to fend for themselves in the off season by accessing traditional sources of food. As such

⁶ @ https://en.wikipedia.org/wiki/Yalyalup,_Western_Australia accessed 051219

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Aboriginal people set up fringe camps on the outskirts of towns and on certain pastoral properties. Research by McDonald, Hales and Associates and other researchers in the Busselton area has shown that a number of fringe camps in and around the Busselton townsite were occupied as late as the 1960s by Nyungars. One such formerly utilised a fringe camp which has been previously recorded (Site ID 15,085) is located a short distance from the Busselton Airport to the west of the present survey area.

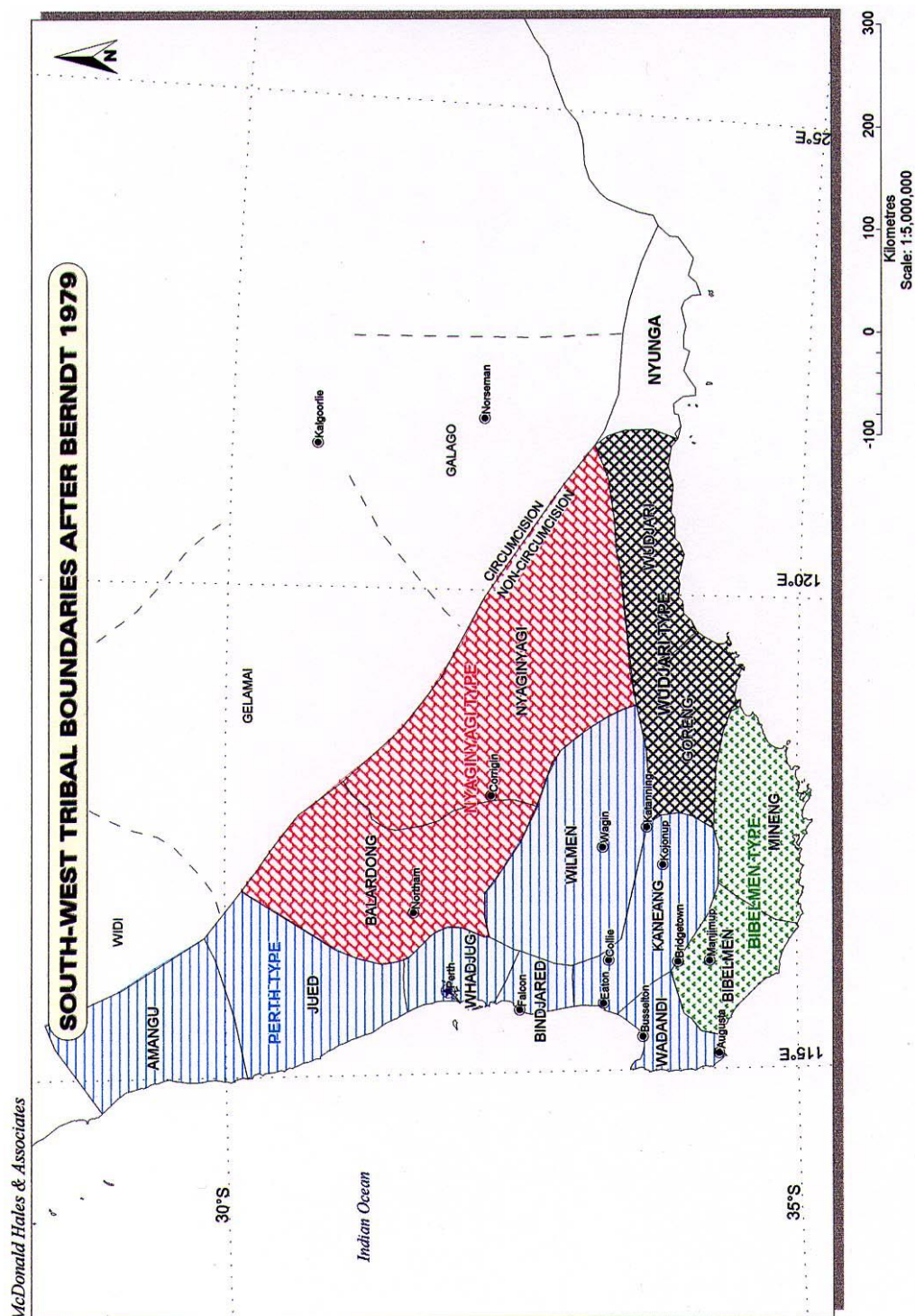


Figure 4: South-West Tribal Boundaries after Berndt 1979

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Ethnographic Survey Results

Desktop Results

The search of the AHIS reveals that the Abba River (DPLH 17354) is the only registered Aboriginal site within the proposed Yalyalup project area, including the mine access corridor. No ethnographic 'Other Heritage Places' (OHPs) were identified within the project area and the desktop review did not identify any other heritage values in the study area (McDonald & Coldrick 2017 and McDonald 2019).

While several broad scale surveys have encompassed the proposed Yalyalup project area, for example, McDonald, Hales & Associates (1994) and CSR, Edith Cowan University and McDonald, Hales & Associates (1997), the AHIS does not reveal any previous targeted surveys of the present study area. No ethnographic sites were reported in the Yalyalup area in either of these earlier broadscale studies.

Results of the Ethnographic Field Survey

With the exception of the Abba River (DPLH 17354) no other ethnographic sites were reported by the EST in Doral's Yalyalup survey area.

The Abba River, as noted, is located in the mine access corridor and a crossing will have to be constructed on the river. Ms Edwards noted that the Ludlow-Hithergreen Road had been selected as the appropriate access to and from the Yalyalup mine, as it was already designed to carry heavy vehicles. She stressed that the area selected for the crossing to provide access from the mine sites to the Ludlow-Hithergreen Road is presently free of riverine vegetation and no clearing would be required (see Plate 2 above; see also Figure 5 below). The SWB consultants agreed that this was the best location for the mine access road. Ms Edwards also reported that Doral hoped to cross the river using culverts in order to minimise impacts on the river but that they would be guided by the environmental conditions that would be established for the project. The SWB Aboriginal consultants raised a number of questions regarding

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environmental impacts which Ms Edwards addressed by outlining the sorts of environmental controls that would be in place and addressed a number of issues including dewatering and run-off and management of topsoil and waste.

A number of the SWB consultants raised a number of strictly non-heritage issues, such as the benefits that might flow to the Nyungar community from the mine development. They also expressed the hope that the project would provide employment opportunities for local Nyungars. It was suggested to them that this was a matter that SWLASC and the SWB Working Party could raise directly with Doral.



Figure 5: Detail of area selected for the Abba River crossing for Doral's proposed Yalyalup Mineral Sands Mine (Source: Doral)

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Consultation Regarding Archaeological Findings

As noted above, the archaeological survey was conducted by Snappy Gum between November 18 to 21, 2019, with a team comprising archaeologists Kellie Cue (Senior Archaeologist) and Tessa Woods and archaeological assistants, Wayne Webb and Toni Webb. Ryan Hovingh, the Managing Director of Snappy Gum also assisted on November 20.

The archaeological survey did not discover any Aboriginal archaeological sites within the survey area. However, thirty-three (33) isolated artefacts were recorded, the vast majority of which were quartz flakes, core fragments or debris, with a few fossiliferous chert flakes also identified. The isolated artefacts were found on top of fine white sands in small areas where vegetation was entirely absent and primarily in pushed-up earth around dams and deflations in the vicinity of the Abba River (Cue & Hovingh, 2019).

Mr Webb described the survey process and outcomes to the other members of the EST, noting that the area had a very low archaeological potential as most of it was extremely low-lying and swampy before being drained by farmers. As a result, it was not suitable for traditional camping and therefore there would be unlikely to be archaeological sites in the area. Members of the EST expressed their satisfaction with the results of the archaeological survey, noting that if Wayne Webb conducted the survey it must be right.

Mr Webb reported that as most of the area had such a low archaeological potential there was little point in monitoring ground disturbance apart from the locations where they had found the isolated artefacts and particularly in the vicinity of the Abba River, where the access corridor would be constructed which would include a river crossing. Other members of the EST concurred with his assessment. They, however, did request that any archaeological material that is to be disturbed is salvaged and suitably stored.

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Conclusions

This report presents the findings of an ethnographic survey undertaken by Ethnoscience for Doral's Yalyalup mineral sands project. A desktop study was initially undertaken in 2017 and updated in 2019 to include an access corridor. Ethnoscience was then commissioned to undertake a field heritage investigation. Snappy Gum conducted archaeological survey of the project area, on behalf of Ethnoscience with the assistance of Wayne and Toni Webb. The results of which are reported under a separate cover (Cue & Hovingh, 2019), suffice it to say, that no archaeological sites were recorded. However, 33 isolated artefacts were identified.

Doral entered into a NSHA with SWALSC, on behalf of the SWB claimants. SWALSC then provided a list of eight SWB consultants nominated for the ethnographic survey, which was conducted on November 28, 2019 with seven of those nominated or their proxies. A site identification methodology was used and following a short briefing session on Busselton the EST inspected the Yalyalup project area by vehicle, stopping at various vantage points to view the land and discuss the proposed project and the results of the archaeological survey. Particular attention was paid to the location of the proposed crossing of the Abba River (DPLH 17354), which was the only ethnographic site identified during the desktop and field survey.

The SWB consultants were supportive of Doral's mine development and rehabilitation plans and particularly of the proposed location for the access corridor crossing of the Abba River. They were satisfied with the results of the archaeological survey and agreed that archaeological monitoring should be restricted to areas of archaeological potential, especially the location of the proposed Abba River crossing. They requested, however, that any archaeological material that is to be disturbed is salvaged and suitably stored.

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A number of SWB consultants raised questions regarding the economic benefits that might flow from the development to the Nyungar community and expressed the hope that the project would provide employment opportunities for local Nyungars.

Recommendations

1. It is recommended that Doral's planned Yalyalup development proceed.
2. It is also recommended that areas of archaeological potential are monitored during the removal of the topsoil and that any archaeological material discovered is salvaged and suitably stored.
3. It is further recommended that Doral consult SWALSC regarding Nyungar employment opportunities and benefits that might flow to the community from the Yalyalup project.

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