

**Aboriginal Archaeological and Ethnographic Survey  
Report, Grange Resources Desalination Pipeline, Cape  
Riche, Great Southern, WA**

**Dr Peter Gifford & Phil Czerwinski**

**February 2010**



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## Spatial Data

Spatial data captured for any Aboriginal sites for this report has been obtained by using a hand held GPS unit (GPS) using the GDA94 coordinate system.

## Abbreviations

ACHM	Australian Cultural Heritage Management
ACMC	Aboriginal Cultural Material Committee
DIA	Department of Indigenous Affairs
NRM	Natural Resources Management Group
SCRIPT	South Coast Regional Initiative Planning Team
SWALSC	South West Aboriginal Land and Sea Council

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- Mr Larry Blight, Indigenous Informant
- Mrs Hazel Brown, Indigenous Informant
- Mr Denis Callaghan, Heritage Section, Department of Indigenous Affairs
- Mr Brendan Corry, Project Manager, Grange Resources Ltd
- Mr Dallas Coyne, Albany Aboriginal Heritage Reference Group
- Mr Harley Coyne, Department of Indigenous Affairs, Albany
- Mr Aden Eades, Indigenous Informant
- Mr Ezzard Flowers, Indigenous Informant
- Mr Anthony Galante, Regional Manager, Department of Indigenous Affairs, Albany
- Mrs Vernice Gillies, Albany Aboriginal Heritage Reference Group
- Mr Stewart Hansen, Indigenous Informant
- Mr Philip Joubert
- Mr William Krakouer, Indigenous Informant
- Mr Rodney McGlade, Indigenous Informant
- Mrs Elaine Minitier, Indigenous Informant
- Mr Doug Moir, Landowner, Cape Riche
- Mr Jerry Narkle, Indigenous Informant
- Mr Sean O'Hara, Future Acts Officer, South West Aboriginal Land and Sea Council
- Ms Carol Pettersen, Indigenous Informant
- Ms Rosalie Quartermaine, Indigenous Informant
- Mr Robert Reynolds, Heritage Officer, Department of Indigenous Affairs, Albany
- Ms Mandy Saunders, Southern Sites Officer, Department of Indigenous Affairs
- Mrs Eliza Woods, Indigenous Informant
- Mr William Woods Senior, Indigenous Informant

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## Executive Summary

This report documents the results of Aboriginal ethnographic and archaeological cultural heritage surveys commissioned by 360 Environmental Pty Ltd, on behalf of Grange Resources Ltd (Grange Resources), of two proposed seawater pipeline routes (Option 1 and Option 2) between the south coast of Western Australia near Cape Riche and the Grange Resources' Southdown mine project area, about 10km south-west of the township of Wellstead and 90 km east northeast of the city of Albany.

A proposed five gigalitre per annum desalination plant to supply water to the mine could be supplied by one of the two pipeline options, with ultra-saline residue liquid to be returned to the sea along the same route.

The report provides details of participants in the ethnographic and archaeological surveys, a description of the proposed alternative pipeline routes, pertinent natural and Aboriginal history information, relevant Aboriginal heritage legislation, the results of a search of the WA Department of Indigenous Affairs (DIA) site register, reviews of previous surveys of the general area, the results of the ethnographic and archaeological surveys and recommendations regarding the proposed pipeline routes.

The ethnographic and archaeological surveys were undertaken on 27, 28, 29 and 30 October 2009, and involved members of Noongar families along with representatives of Australian Cultural Heritage Management (ACHM) and, on 27 October, Grange Resources and the South West Aboriginal Land and Sea Council (SWALSC).

The surveys were intended to determine whether plans by Grange Resources for either of the potential pipeline options would encounter any 'Aboriginal sites' as defined by the *Aboriginal Heritage Act 1972*, or any constraints or restrictions involving issues raised by members of the Aboriginal community who claim association or connection with the Cape Riche area.

No ethnographic sites were encountered during the survey of Options 1 and 2, although several were inspected and recorded nearby. The informants expressed several environmental concerns about each proposed route, and on this basis resolved unanimously that no application by Grange Resources under Section 18 of the *Aboriginal Heritage Act 1972* for permission to construct a pipeline along the Option 1 route would be necessary, provided:

- The proposed desalination plant be built at the Southdown mine site rather than on the coast at or near Cape Riche;
- The seawater intake pipeline route should be the option from the sea along cleared farmland beside Cape Riche Road and Mettler Roads, then through cleared paddocks beside Shearer Road, to the Southdown mine site (Option 1);
- The pipeline containing ultra-saline residue liquid follow the same route back to the sea at Cape Riche;
- The pipeline intake/outlet point be moved further to the south east along the Cape Riche headland, to a point more exposed to the open sea, to minimise marine environmental damage; and
- The pipeline intake/outlet point be located at least 200 metres west north west of a newly-recorded fishing site at Skippy Rock (662073E 6169226N) on the Cape Riche headland.

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No archaeological sites were identified along Option 1. One archaeological site was identified and recorded to a Site Identification level, where the site is recorded to a standard where a high level of archaeological information has been ascertained, on Option 2. This site would require either Section 18 consent under the *Aboriginal Heritage Act 1972* to impact this site, or realignment of the route to avoid this site.

In summary, the informants did not provide support for Option 2 based on the greater environmental impacts and the archaeological site identified along this route. If Grange Resources intend to develop Option 2, an application by Grange Resources under Section 18 of the *Aboriginal Heritage Act 1972* for permission to construct a pipeline along the Option 2 route would be necessary to impact the archaeological site, or the route needs to be realigned to avoid this site. Additional survey work would also be required to finalise an inlet / outlet location along this route given the current location is off a large cliff line.

It is **recommended** therefore that since no ethnographic or archaeological sites as defined by Section 5 of the *Aboriginal Heritage Act 1972* have been identified within the project area along Option 1, the seawater pipeline construction proceed there if resolved upon, subject to and informed by the conditions outlined above by the Noongar informants.

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## 1.0 Introduction

Australian Cultural Heritage Management Pty Ltd (ACHM) was engaged by 360 Environmental Pty Ltd, on behalf of Grange Resources Ltd (Grange Resources), to undertake Aboriginal ethnographic and archaeological cultural heritage surveys of two proposed seawater pipeline routes between the south coast of Western Australia near Cape Riche and Grange Resources' Southdown magnetite mine project area, about 10km south-west of the township of Wellstead and 90 km east northeast of the city of Albany (Figure 1).

Grange Resources is considering plans for a five gigalitre per annum desalination plant to supply water for the mine through one of the two pipeline options, with ultra-saline residue liquid to be returned to the sea along the same route. The first pipeline option (Option 1) is about 35 km from a point on the Cape Riche headland, then along cleared farmland beside Cape Riche, Mettler and Shearers Roads to the minesite, or by diverging from Mettler Road to the minesite across cleared farmland paddocks. The second option (Option 2) involves a route of about 24 km from the sea at Cheyne Bay to the minesite, in the main contained within the Sandalwood Road reserve.

The ethnographic and archaeological surveys were undertaken on 27, 28, 29 and 30 October 2009, and involved 13 members of Noongar families, all native title claimants with links to the Cape Riche area, along with representatives of ACHM and, on 27 October, Grange Resources and the South West Aboriginal Land and Sea Council (SWALSC). Those who took part in the fieldwork for this project were:

- Mr Phil Czerwinski, ACHM, Archaeologist;
- Dr Peter Gifford, ACHM, Ethnographer;
- Mr Larry Blight, Noongar Informant;
- Mrs Hazel Brown, Noongar Informant;
- Mr Aden Eades, Noongar Informant;
- Mr Ezzard Flowers, Noongar Informant;
- Mr Stewart Hansen, Noongar Informant;
- Mr William Krakouer, Noongar Informant;
- Mr Rodney McGlade, Noongar Informant;
- Mrs Elaine Minitier, Noongar Informant;
- Mr Jerry Narkle, Noongar Informant;
- Ms Carol Pettersen, Noongar Informant;
- Ms Rosalie Quartermaine, Noongar Informant;
- Mrs Eliza Woods, Noongar Informant; and
- Mr William Woods senior, Noongar Informant.

The first group of seven informants was addressed on 27 October in Albany by Grange Resources project manager Mr Brendan Corry, who accompanied them during the ethnographic survey that day. They were also accompanied on 27 October by Mr Sean O'Hara, Future Acts Officer with SWALSC.

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The surveys were intended to determine whether plans by Grange Resources for the pipelines would encounter any constraints or restrictions involving members of the Aboriginal community who claim association or connection with the Cape Riche area, and to obtain adequate relevant information on Aboriginal sites so that Section 18 “Consent to Certain Uses” approval under the *Aboriginal Heritage Act 1972* could be obtained in the event an Aboriginal site was identified along the proposed pipeline routes.

While neither proposed route would encounter ethnographic or archaeological sites already listed in the Department of Indigenous Affairs (DIA) Site Register, it was understood nonetheless that the plans might require approval under Section 18 of the *Aboriginal Heritage Act 1972*, if any previously unrecorded ethnographic or archaeological sites were revealed as a result of the surveys along each proposed route.

### **1.1 Noongar Aboriginal Group Participants**

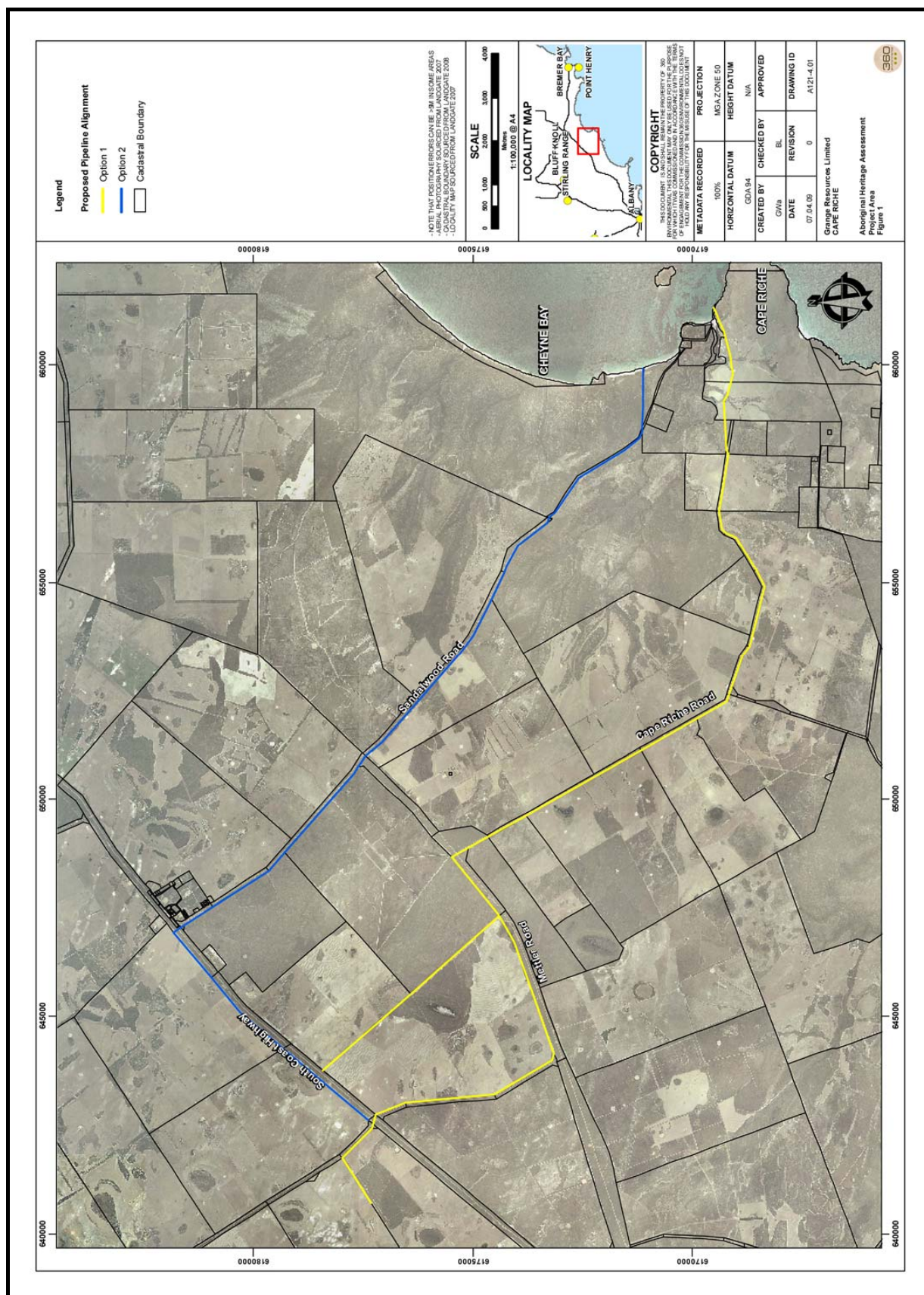
Of the people who took part in the survey:

- Mr Larry Blight is the son of Mrs Vernice Gillies (nee Coyne), and represented the Coyne family.
- Mrs Hazel Brown (nee Roberts) is the matriarch of the Roberts family and has connections to the Williams family.
- Mr Aden Eades is connected to the Penny family.
- Mr Ezzard Flowers represented his own family but is also related to the Woods family.
- Mr Stewart Hansen is connected to the Rodney family.
- Mr William Krakouer represented the Miller family, to which he is related through his mother and uncles (for whom he deputised on this survey).
- Mr Rodney McGlade represented the McGlade family.
- Mrs Elaine Miniter (nee Brown) is Mrs Hazel Brown’s daughter, and represented the Brown and Roberts families.
- Mr Jerry Narkle represented the Mindum and Williams families.
- Ms Carol Pettersen (nee Gray) is a member of the Gray and Knapp families.
- Ms Rosalie Quartermaine is Mr Hansen’s cousin and likewise connected to the Rodney family.
- Mrs Eliza Woods is the sister of Mr Eades and wife of Mr William Woods senior.
- Mr William Woods senior is the head of and represented the Woods family.

All of the families mentioned have historical and genealogical, and in some cases long-standing and continuous work-related and other personal links to the Cape Riche area.

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**Figure 1** Grange Resources Desalination Pipeline Options 1 and 2, Cape Riche, WA

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## 2.0 Project Description

This section of the report details the project proposed by Grange Resources Ltd, and descriptions regarding land-use.

### 2.1 Grange Resources Desalination Pipeline – Route Options

Pipeline installation would involve sinking adjacent twin pipelines beneath the surface of a 10m wide easement in a corridor 25m wide in total, along one of the two route options. In each case this would entail disturbing some remnant bushland in road and bushland reserves.

In both options, the return pipeline to carry concentrated brine for dispersal in the sea would follow the same route in reverse, and both pipelines would be as close as practicable together beneath the ground.

#### 2.1.1 Grange Resources Desalination Pipeline - Route Option 1

The first option route is about 35 km from a point on the Cape Riche headland within private property adjacent to the verge of Cape Riche, Mettler and Shearer Roads to cross the South Coast Highway and then onto the Southdown minesite. This route is mainly within cleared farming paddocks.

#### 2.1.2 Grange Resources Desalination Pipeline – Route Option 2

This option involves a route of about 24 km from the sea at Cheyne Bay along Sandalwood Road and meets up with the South Coast Highway, then travels west of the township of Wellstead onto the Southdown minesite. This route is mainly within the road verge.



### 3.0 Description of Survey Area

This section of the report details relevant natural and Aboriginal history for the project area.

#### 3.1 Topography

The project area, from Cape Riche inland to the South Coast Highway, is part of a region which consists largely of “a plain with little dissected prior to land surface rising gently from sea to a height of 200m, broken by quartzite ranges and granite domes” (Beard 1981). In the project area, the Cape Riche headland is the most prominent granite dome. Further inland, the project area has sandy soils overlaying clay or gravels.

#### 3.2 Vegetation and Fauna

The Cape Riche area inland to the South Coast Highway is part of the Esperance Plains Region of the Eyre Botanical District, one of five comprising the South-Western Botanical Province of Western Australia (Beard 1990: 34).

Botanists and explorers who conducted plant collections in the Cape Riche area in the 19<sup>th</sup> century included Ludwig Preiss (1840), James Drummond (1840, 1846-48), John Septimus Roe (1848) and William Henry Harvey (1854), Ludwig Diels and Ernst Pritzl also collected plant material at Cape Riche in 1901 (Erickson 1966: 325-327; Beard 2001: 143-148).

The plant species formally described as a result of these collections included Moir’s Wattle (*Acacia moirii*), Sheath Cottonhead (*Conostylis vaginata*), tallerack (*Eucalyptus pleurocarpa* and *E. tetragona*), Autumn Featherflower (*Verticordia harveyi*) and *Bossidea preissii*. Cape Riche is also the habitat of rare flora species including Feather-leaved Banksia (*Banksia brownii*), Manypeaks Rush (*Chordifex arbortivus*), Manypeaks Sundew (*Drosera fimbriata*) and Coast Featherflower (*Verticordia helichrysantha*).

Alienation for grazing began with the arrival of European settlers in the 1830s, with widespread clearing in the 1950s and 1960s as trace elements made the inland soil suitable for agriculture, and in the region generally clearing now stands at just over 50 per cent. Clearing for agriculture has rendered some species extinct, while other influences on natural vegetation and fauna include introduced mammals, weeds and diseases – in particular dieback (*Phytophthora cinnamomi*), which threatens species including banksia, dryandra, hakea and grevillea.

The predominant plant formation near the coast was predominantly kwongan and mallee heath with the most common species being tallerack. In patches where the depth of sand in the topsoil is greater, the mallees drop out and are replaced by Proteaceae and scattered Christmas trees (*Nuytsia floribunda*) up to 4.5m. Amid the mallee there may be small patches of yate (*E. occidentalis*) woodland and york gum (*E. loxophleba*), while swampy areas may contain *Melaleuca preissiana*, and in the heathland there are some areas of dwarf peppermint gum (*Agonis flexuosa*) (Beard 1981, 1990: 139-147).

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Cape Arid is one of several areas along the south coast where calving of southern right whales (*Eubalena australis*) takes place, while recovery plans involving the South Coast Regional Initiative Planning Team (SCRIPT) are underway throughout the area inland of the cape to maintain or improve the extent of threatened flora and fauna species. Threatened fauna include the critically endangered western ground parrot (*Pezoporus wallicus flaviventris*) and Gilbert's potoroo (*Potorous gilbertii*), and the endangered noisy scrub bird (*Atrichornis clamosus*) and dibbler (*Parantechinus apicalis*). Surveys have also been undertaken of chuditch (*Dasyurus geoffroi*) and numbat (*Myrmecobius fasciatus*) populations (SCRIPT website).

### 3.3 Geology

The survey area is part of the Esperance Plains Region, which consists mainly of Eocene sediments with granites and quartzites. The coastline shows evidence of uplift during the Tertiary period, as there is a coastal strip along Cheyne Bay and continuing eastwards mantled with Tertiary sediments and other indications.

The modern coastline of the region is controlled from Cape Riche eastwards by a chain of large granite bosses up to 150m above sea level which are responsible for the region's bays including Cheyne Bay and headlands including Cape Riche. Inland is a flat and monotonous coastal plain which rises gently from sea level to about 100m and is formed on the Tertiary sediments of the Plantagenet group, which are sands and siltstones now generally referred to Upper Eocene age. The seaward margin of the plain is much mantled with Quaternary drift sands, some consolidated, some still in movement. The surface of the plain is marked by small depressions, which fill with water and become swamps in winter (Beard 1990: 139).

The chief soils are sandy, neutral and yellow-mottled, and contain variable amounts of ironstone gravel in the surface sand, alternating with leached sands which sometimes contain ironstone gravel, and are underlain by a clay substrate (Beard 1990: 139).

### 3.4 Archaeology

The archaeology of the direct Cape Riche area is largely unexplored. Greenfeld and Harris (2005) have conducted a thorough literature review for the area encompassing the Grange Resources Desalination Pipeline options, and concluded:

The lack of archaeological sites within a 20 kilometre radius around the Southdown mine site is indicative of a paucity of previous surveys that have focused on this area. This survey is one of (if not) the first details surveys undertaken on freehold land in the Wellstead/Cape Riche area. Within the wider South West region surrounding the project area many archaeological sites have been previously recorded. These sites consist mainly of artefact scatters and are mostly located around water sources including swamps, dams, creeks, rivers or revegetated sand dunes. Artefact scatter with small assemblages are typical of the region. A common site may contain from several artefacts up to one hundred pieces of quartz flakes and chips. The presence of a small number of flakes and chips suggests an ephemeral tool maintenance site, a hunting and gathering event or short term campsite where food processing and cooking occurred. A large number of

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artefacts suggest a long term camp or a camp used continually over a long period of time (Greenfeld and Harris 2005: 65).

This summation of the archaeology in the southwest region provides an excellent model for the distribution and intrasite components of archaeological sites in the region, and also provides a context within which to view any archaeological site identified during the current survey.

### 3.5 Ethnography

The generic term Noongar (or Nyungar and Nyoongah) means ‘man’ or ‘person’, and is used by Noongars to distinguish themselves (in linguistic and other terms) from other Indigenous people to the north (Yamatji) and east (Wangkayi, or Wongi) of a line roughly from Jurien Bay to Mullewa to Israelite Bay, and from European ‘strangers’ (Wetjala, or wadjella) (Berndt 1980: 81, Tilbrook 1983). The spelling Noongar is used here on the basis that this is the form currently in use by, for example, the representative body – the South West Aboriginal Land and Sea Council (its website is <http://www.noongar.org.au>).

Thus the south-west of Western Australia is considered to form a distinct cultural bloc defined by the distribution of the Noongar language. Before Noongar was used as a group or linguistic name the pioneer anthropologist Daisy Bates reported that south-west people recognised themselves, their language and culture, as ‘Bibbulmun’ (Bates, 1985). Bates considered that the Bibbulmun were the largest homogenous group in Australia.

The inland tribes were distinguished by the character of the country they occupied. They were either Bilgur (river people, *beel* or *bil*-river), Darbalung (estuary people), or Buyungur (hill people – *buya*-rock, stone, hill), but all were Bibbulmun [Noongar]” (Bates, 1985: 47).

Norman Tindale (1974) identified thirteen ‘tribal groups’ in the south-west based on socio-linguistic boundaries and minor dialect differences. The Noongar or Bibbulmun people of the south-west were a distinct group in that their initiation practices varied markedly from their desert and semi-desert dwelling neighbours. Unlike the desert people, the Noongars did not practise circumcision or sub-incision, following instead a ritual of nasal septum piercing and scarring of the upper body (Bates, 1985). The people who followed these socio-religious practices have been described in Berndt and Berndt (1979) as being of the ‘Old Australian Tradition’.

Bates (1985: 46-51) referred to Noongar speakers as the Bibbulmun nation occupying the coast between Jurien Bay and a point east of Esperance, while Tindale (1974: 142, 246, 248, 255) was more specific in describing the “Pibelman” (alternative name Bibbulmun) as inhabiting the area between the Blackwood and Warren Rivers, east to Gardner River and Broke Inlet, on the Scott River and inland to Manjimup and Bridgetown. The area around Cape Riche and indeed Albany itself, was occupied by the Minang – a word meaning south and by extension southerners. Tindale located them at King George Sound; north to Stirling Range, Tenterden, Lake Muir, Cowerup, and Shannon River. On coast from west Cliff Point to Boat Harbour; at Pallinup (Salt) River; at Mount Barker, Nornalup, Wilson Inlet, and Porongorup Range.

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They were not to be confused with the Mirning of the southern Nullarbor region around Eucla and Eyre's Sandpatch. Their immediate neighbours to the east were the Koreng, from:

Gairdner River to Pallinup (Salt) River; at Bremer Bay, inland to Jeramungup [sic], Pingrup, Nampup (= Nyabing), Badjebup, and Kibbleup near Broome Hill; south to Stirling Range; at Gnowangerup and Ongerup; west to Cranbrook and Tambellup but not originally at Kojonup or Qualeup; they moved west in earliest settlement times under pressure from Wudjari ... The Hassell manuscript summarised by Davidson has much data about this tribe included under the tribal name Wheelman (ie Wiilman of this work). (Tindale 1974: 246, 248).

For the Minang and Koreng as for others, the natural world was a projection of the human world in which ritual affiliations came through an individual's father and such descent groups focused on specific totemic sites in defined country. (Bates 2004: [1938], Tindale 1976). When Europeans arrived, this structure of identity and meaning was seriously damaged but not totally destroyed. In other parts of Aboriginal Australia, according to the Western Australian anthropologist Kevin Shaw:

the answer to the question 'who has the right to discuss Aboriginal sites in this region?' will be framed in terms of the category "traditional owner". The category can be variously defined at the local level, but usually includes membership of a small group based on the family and on:

Place of birth;

Patrilineal influences (matrilineal links may be emphasised in some localities);

Initiation into the region's religious lore (Hard Law)

Nowadays no such category based on these criteria exists at the local level in Perth and surrounding environs. Nevertheless, specific persons in most areas are seen by their fellow Nyungars [sic] as the "right ones to talk about Aboriginal site issues". The question now arises – on what legitimate basis do these people acquire or earn the role of spokespersons? (Shaw: 1990: permission granted to quote private advisory document).

Shaw's comments, it is contended here, hold just as much for the Albany area as for Perth. For Shaw, and for other anthropologists including Dr Barrie Machin with considerable experience working with Noongar people, "the central element is a long association with country, but more than that, the spokesperson must know it intimately and be able to demonstrate this knowledge" (Machin 2001: 49).

The former governor general and Federal minister Sir Paul Hasluck was also a trained historian whose *Black Australians* (1942) was the first serious attempt to analyse the 19<sup>th</sup> century relationship between Noongar (and other WA Aboriginal) people and European settlers (Reece 1984: 133). Hasluck, who grew up among Noongars, commented in 1980 that:

A further outcome of historical events since the first European settlement is that the composition of the Aboriginal population in most places now is very different from what it used to be ... Over the years, partly through voluntary movement and partly as a result of official action in bringing people from various parts of the colony into settlements and institutions, the tribal and cultural backgrounds of the population are also mixed. They are not the 'old' Aborigines but the 'new' Aborigines. Often when one of their spokesmen talks - and talks sincerely and feelingly - of 'the ways of our people', he is not in anthropological fact talking about the society, the traditions, the sites or any practices of the Aborigines who inhabited the South-West before 1829. He is talking of a sense of

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identity, and of the ideas about their own life which have grown up among these 'new' Aborigines in recent years (Hasluck 1980: xxiii).

If Hasluck was correct, then while many heritage reports dealing with Noongar people have usually dwelt at length on anthropological matters such as totemism and moieties based on animal or bird names such as white cockatoo or crow, and with territorial and Dreaming tracks, it seems meaningless to continue to do so except as points of historical curiosity when dealing with Noongar people who by their own admission no longer have other than fragmentary consciousness of such matters.

With one exception, there was consensus in the group that no-one among them could remember or had been told in any detail the Dreaming and other "traditional" stories once associated with the Cape Riche area, although that did not mean total ignorance of Noongar songs and culture associated with, for example, fishing there (Scott & Brown 2005: 29-32).

This cultural situation was however quite a different thing from knowledge of country *per se*, which the survey informants displayed to varying degrees, and which was profound in the cases of the oldest participants, Mrs Hazel Brown and Mr William Woods senior. Both have lifelong associations with the Cape Riche area and their families likewise have been associated with it for several generations of recorded history and probably far longer than that.

Mrs Brown in particular, now aged in her 80s, has memories of relatives who spoke Noongar as their first language, as she did as a child, and who have passed on to her – in classic oral tradition – accounts of events including a 19<sup>th</sup> century massacre at Cocanarup, near Ravensthorpe, in which "white" settlers killed a large number of her family members (pers. comm. 30 October 2009; see also Scott & Brown 2005: 7, 54-59). She has also taken part in "corroborees" involving her own and other Noongar families at a site she identified near Cape Riche during the survey where such ceremonies took place until the 1960s and which remains of great importance to Noongar people.

Sadly, however, while mention is made in this report of certain historical and other records relating to the Albany area since Europeans began visiting there regularly from the late 18<sup>th</sup> century onwards, the situation overall regarding the Cape Riche area is similar to that in the neighbouring Jerramungup district reported by the WA Museum archaeologist Charles Dortch in 1987, that:

... the lack of ethnographic information relating to many key aspects of Aboriginal life in the district inevitably means that a complete reconstruction of traditional or prehistoric life during the past few hundred years is impossible. (Dortch 1987: 7)

Dortch also noted that no mythological sites or sites "of spiritual significance to living Aborigines" had been recorded in the Bremer Bay district, and it was possible therefore that "all knowledge of such sites existing in the district has passed from memory" (Dortch 1987: 16).

These discussions demonstrate nonetheless how Aboriginal people have dealt with changes in social structure since the arrival of Europeans, and the reasoning by Aboriginal groups regarding who can 'speak for country'.

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### 3.6 History

In terms of European contact, the history of the Minang and Koreng Noongar people of the Cape Riche area (Tindale 1974: 142, 246, 248) began in the early 17<sup>th</sup> century, as in other coastal parts of Western Australia, through the agency of the Dutch United East India Company (Vereenigde Oost-Indische Compagnie, V.O.C.), whose ships were involved in the spice trade with the Indonesian archipelago. In most other cases V.O.C. ships ventured too far eastwards while bound from the Cape of Good Hope to ports such as Batavia (now Jakarta) and Surabaya in Java, but the exploration of the southern coast in 1627 from Cape Leeuwin nearly 1500 km to the islands of St Francis and St Peter off Ceduna in South Australia was deliberate.

It was ordered by the governor-general of the East Indies, Jan Pieterszoon Coen, and was carried out by the captain of the *Gulden Seepaert* (Golden Seahorse), Francois Thijssen, although the coastline mapped was subsequently named after the highest ranking V.O.C. official on board, Pieter Nuyts. Coen had ordered a thorough investigation of the land to the south-east of the East Indies, and accordingly Thijssen produced the first definite chart of the southern coast of Western Australia. The accuracy of his work was praised by later British and French explorers, although much of the area surveyed still retains the name of Nuytsland rather than any mention of Thijssen, and the Western Australian Christmas tree was given the botanical name *Nuytsia floribunda*.

A proposed Dutch colony along the south coast in the early 18<sup>th</sup> century never eventuated (Klaassen 2005: 310-311); the first European settlers a century later were British, although Cape Riche was named after a Frenchman, Claude-Antoine-Gaspard Riche, who was official naturalist in an expedition led by Bruny D'Entrecasteaux in 1791 in search of the lost exploration ships of the Comte de La Perouse. Riche had almost been given up for dead by his colleagues when he was separated from them for two days in the Esperance area (Duyker 1999: 1709-10). D'Entrecasteaux's was one of a number of military and scientific expeditions to south-western and other parts of Australia as a result of British and French colonial rivalry in the 18<sup>th</sup> and 19<sup>th</sup> centuries. It was as a result of this rivalry that the British military and convict outpost at King George the Third's Sound (hereafter King George Sound) was established in 1826, followed by systematic colonisation involving grazing and agriculture which had spread to the Cape Riche area by mid-century.

Among the first explorers to make contact with the Minang and, possibly, the Koreng people was the naval officer George Vancouver, who named Albany's harbour and other geographical features after members of the British royal family in 1791. Another British naval explorer, Matthew Flinders, and Louis de Freycinet, a Frenchman who accompanied Nicolas Baudin's French expedition, visited King George Sound and the adjoining coastline between 1802 and 1803, and Phillip Parker King of the Royal Navy called there twice, in 1818 and 1823 (Battye 1985 Vol. 1: 78-83). Their ships were often anchored for lengthy periods as they careened their hulls and took on water and other supplies including wood for cooking.

Other Europeans including whalers and sealers arrived as the explorers' news spread, and some of these visitors behaved callously toward Aboriginal women in particular. Major Edmund Lockyer, the first commandant of the Albany garrison, reported incidents of Aboriginal women found on Michaelmas Island, having been kidnapped and then abandoned by sealers. Other visitors, however, sought the assistance of Aboriginal people as guides and

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labourers, and from them the Indigenous people learned some English language and British concepts of trade involving artefacts for ship's food and other stores (Mulvaney and Green 1992: 241).

The Minang and Koreng thus had experienced more than 30 years of European cultural contact before colonisation began. Early European observers noted that the Minang in particular would assemble on the coast in large numbers between about November and April, then move inland up to 100 kilometres in separate bands during the winter, but never totally abandoning the coast (Mulvaney and Green 1992: 241). Despite the immense impact of European colonisation on the Minang and Koreng, as with all other Noongar people of the south-west, this practice has continued into modern times as Aboriginal people with links to the Cape Riche area gathered there at Christmas and at Easter to fish and eat other traditional foods such as kangaroo before returning inland in many cases to wherever labouring and other rural work was available (Hazel Brown, pers. comm. November 2009; Hodson 1993: 78 - 79).

The pre-colonial cultural contact between Aboriginal people along the south coast of Western Australia and European visitors helped bring about a fairly cordial relationship between the British party, including convicts, and the Minang and Koreng people when the British government finally acted to keep out the French by establishing a military post at King George Sound in December 1826. This cordial relationship was maintained in part by the relatively enlightened attitudes of some British officers, in particular those of the 39<sup>th</sup> Regiment including Captain Collet Barker, and his successor, the first Government Resident, Dr Alexander Collie (Battye Vol. 2 1985: 827) Like Barker before him, Dr Collie became friendly with a young Minang man named Mokare, so much so that when Dr Collie became fatally sick in 1835 his last request was that he be buried alongside Mokare, who had pre-deceased him (Green 2005: 285-6; also Host and Owen 2009: 62).

A surgeon named Isaac Scott Nind was likewise attached to the garrison and it is largely through his, Barker's and Dr Collie's accounts of life in and around the outpost that some written record regarding the traditional life of the Albany Noongars has been preserved (see, for example, Host and Owen 2009: 62, 64, 67, 72, 122-5, 128-9, 197; Mulvaney and Green 1992; Collie 1834). Albany was originally known as Frederickstown, but was re-named in 1831 when the administration of the settlement was transferred to the Swan River colony founded two years earlier (Battye Vol. 1 1985: 100-101, 104, vol. 2 1985: 827; Host and Owen 2009: 76).

As with the military, initial relations between the Aboriginal people and the settlers were friendly; the Noongar people directed the settlers to water sources and the Europeans shared game taken while being guided by Noongar men. A historian for the South West Aboriginal Land and Sea Council, Dr John Host, is almost certainly correct in his assessment, however, that changes amounting to "a seismic shift in legal and political terms" were about to confront the Minang and Koreng people of the Albany and Cape Riche areas. In short, the garrison – which did not require much land on which to operate – was about to expand into a colony, which did (Host and Owen 2009: 76).

The initial friendliness may have been in part because the Aboriginal people believed that the first European settlers, because of their light skin colour, were souls of the dead (djanga)

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returned from Kurannup, the home of the Bibbulmun dead beyond the western sea. According to Bates and Professor Ronald Berndt, the process involved

the kanya (soul of the newly dead) going first to the tabu-ed moojarr or moodurt tree (Nuytsia floribunda or Christmas tree), where it rested on its way to Kurannup. Here, their old skins were discarded and they appeared 'white' (Berndt 1979: 86).

The early settler practice of paying Aboriginal people with food, tea and tobacco was, however, a major disruption to traditional life. Small amounts of flour or sugar would frequently be exchanged for services such as firewood collecting or fetching water. This source of ready food attracted the Aboriginal people into fringe dwelling camps; while they maintained their diet with bush foods and hunting they became increasingly dependent on European foods. This dependency increased as the settlers cleared more land and further encroached on the Aboriginal means of survival, and ultimately put an end to their traditional economies. As the settler demand for labour increased, Aboriginal people were employed as farm and domestic workers in exchange for goods such as flour, sugar and tobacco. While still practicing some aspects of their economies and culture, the fully traditional life of the Noongar people had ended as early as the 1860s in some places (Berndt 1979: 87).

In the Cape Riche area, European settlement began in 1836 with the arrival of a Scot, George Cheyne, who had already set up as a merchant in Albany and had accompanied the Western Australian surveyor-general, John Septimus Roe, on two exploring trips around the south coast in 1835. Cheyne was involved in whaling and sealing, and he organised the cutting of sandalwood for sale in Ceylon (now Sri Lanka) and China; it was these operations which ultimately resulted in the naming of the road from Wellstead to Cape Riche which is also the route for Grange Resources' seawater pipeline Option 2.

Cheyne's port at Cape Riche was effectively duty free and thus well patronised by American whalers in particular, who objected to what they considered excessive government port charges at Albany. Cheyne provided water, fuel, vegetables and meat to the whalers; some of the work involved in producing these items would have been carried out by Noongar people, who also probably helped build the Cape Riche farmhouse, outbuildings and wool shed between 1850 and 1860 although convict artisans were responsible for the cutting and working of local spongelite stone used in the construction.

The Noongar writer Kim Scott, in his 2005 collaboration with Noongar informant Mrs Hazel Brown, *Kayang & Me*, maintains that Noongars also helped make up the whaling crews. Cheyne is quoted by Scott as saying that he – Cheyne – “had frequently to use coercive methods” with “natives” who considered the land was still theirs and became over familiar as a result; the nature of these coercive methods is unknown although Cheyne's problems with officialdom in Albany had more to do with the running of his port than any alleged mistreatment of Aboriginal people (Scott and Brown 2005: 36-37; Cheyne 2009: family website). While a massacre of Noongar people is said to have taken place at Cocanarup, near Ravensthorpe, in 1880, Aboriginal “offences” against European property – sheep spearings, theft and revenge – in the Albany “frontier” hinterland during Cheyne's time at Cape Riche seem mostly to have been dealt with according to the rule of law, in the Albany courts (Scott and Brown 2005: 7, 54-63; McDonald et al 1994: 32). Aboriginal deaths at any rate, as in most of Australia, were far more likely to occur from European-introduced diseases than from

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European firearms (McDonald et al 1994: 32), a situation in terms of disease at least which has persisted into modern times.

It was also during Cheyne's early years at Cape Riche that the explorer Edward John Eyre, accompanied by the Albany Noongar Wylie, passed through the area on the way from Fowler's Bay in South Australia to Albany; they had been rescued from death by privation when they encountered a whaler near modern day Esperance (Dutton 1966: 363-364; Birman 1967: 629-630). This whaler, the Mississippi, may well have been carrying supplies obtained from Cape Riche. Again, Host is probably correct in stating that Wylie was the most famous of the King George Sound Noongars who:

... were never taken on expeditions for their company. They were taken for the services they could provide, not only as guides, servants and trackers, but also as advisers who had expert knowledge of the land (Host and Owen 2009: 133).

A memorial to Eyre and Wylie has been erected in the Grange Resources seawater pipeline Option 2 project area, at the junction of Sandalwood and Mettler Roads. Wylie was rewarded with a weekly ration of meat and flour, and later served as a police constable until dismissed because of problems caused through tribal connections and alcoholism (Birman 1967: 629-630). Mrs Brown's apical ancestor, a Noongar man from Cape Riche known as Bob Roberts, also served in the police force and had experience as a guide on exploring expeditions with J.S. Roe before Wylie was recruited by Eyre; it is possible therefore as Mrs Brown claims that Bob Roberts and Wylie were one and the same (pers comm. October 2009; Scott and Brown 2005: 38-48).

Cheyne's nephew by marriage, Andrew Moir, arrived in Western Australia from Scotland in 1842 and served five years indentured to the bachelor Cheyne before the Moir family took over Cheyne's Cape Riche property, Bonnington Braes, which their descendants still own and operate. The Cheynes Beach whaling operation which Cheyne founded and which later functioned from King George Sound, was Australia's last, being closed down by the Federal Government in 1978. Cheyne himself retired to Scotland in 1860, having served as a justice of the peace and foundation trustee of St John's Anglican church in Albany, where he also built the south coast's first wind-powered flour mill in 1858. He died in 1869 (Cheyne family website 2009; Battye 1985 Vol 2: 785, 796-7, 837).

A principal form of labour for Noongar people at Cape Riche and elsewhere as European settlement advanced was as shepherds and, in season, sheep shearers – which in the latter case continues today. Most of those male informants involved in the Cape Riche district seawater pipeline surveys for Grange Resources had worked or still were, in the case of the youngest, working as shearers. This practice seems to have evolved virtually from the time sheep were first introduced into Western Australia, with the development of "runs" – an expression which refers both to land occupied by pastoralists and to the seasonal migratory pattern of casual workers (Hodson 1993: 78; Haebich 1988: 36). A Noongar man interviewed by the anthropologist Sally Hodson explained how typical runs to the north of Cape Riche, and involving people with links to that area, actually worked:

See, it was in Ongerup where the Woods, they had that area around Ongerup, they'd do all the shearing and the [mallee root and poison weed] picking and the haycarting, and then Borden, there was Harry Brown and the Roberts and then in Gnowangerup there was

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the Williams and there was some Woods too and Picketts. Some of the names I've missed out ... the Pennys, there was a lot of Pennys in Borden (Hodson 1993: 78-9).

Hodson then noted:

Within each run there were particular places where people met up between jobs and those often had traditional or historical associations. One such place was Cape Riche ... which had once been a camp site used by Nyungars [sic] employed by pastoralists as shepherds along this stretch of coast (Hodson 1993: 79).

While the Noongar men became more and more involved in the European economy as wage labourers, Noongar women typically performed unpaid domestic tasks within the household or camp, and often poorly paid domestic work for the "white" farmers and their families, doing "all the work the white women didn't want to do" (Hodson 1993: 77). Some, such as Hazel Brown, also went to the shearing sheds, doing much of the work normally carried out by men including pressing and woolclassing and frequently out-performing them; such women, however, were in the minority (P. Joubert, ex farmer, Borden, pers. comm. 2009).

In effect, the later 19th and early 20th centuries were a period in which Noongar people, in the Cape Riche area as elsewhere, were

... constantly acquiring new skills, and exploiting them to remain on their lands and maintain their lifeways ... they cleared land, built fences, cared for livestock, sheared sheep and did all of the other labouring work required of them. As properties became established and full-time workers were no longer required, there evolved a contract system that was agreeable to Aboriginal people for several reasons. The work paid better and it generated a cycle of jobs on family 'runs' that coincided more or less with traditional territories. It also allowed time for hunting, camping and other aspects of traditional life, notably seasonal gatherings ... (Host and Owen 2009: 32).

During the Great Depression of the 1930s, however, the Aboriginal unemployed received a lower sustenance rate than their "white" counterparts, and the years 1936-1948 were a particularly oppressive period for Noongar people as legislation aimed at assimilating those of the part-descent into the "white" community split up families and caused children to be taken to designated reserves at places such as Carrolup and Moore River. That Noongar people were often employed to clear the land on which they had lived, for the benefit of the European farmers, was an irony not lost on many of those who were more or less forced to take this sort of employment. Living more or less permanently in fringe camps, seeking out seasonal employment and supplementing their diet with game, fish and some "bush tucker" was a way of life which continued for many Aboriginal people, including some with links to Cape Riche, until late into the 1960s (McDonald et al., 1994; Hazel Brown, pers. comm. October 2009; D. Moir, Cape Riche, pers. comm. November 2009).

The passing of the *Native Title Act 1994* and subsequent amendments have since presented a legal need to define boundaries that conform to native title claimant criteria, meaning there is now a continuous and dynamic re-drawing of the boundaries of the 'country' with which Noongar families associate themselves. While extant boundaries reflect perceived traditional boundaries to some extent, they may also reflect the history of disruption that has prevailed for most Noongar families since European settlement began. Within the Aboriginal community there is a lack of consensus about the exact boundaries of each family's and larger

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tribal group's 'country', and there are often disagreements over areas of overlapping interests (Goode 2005 [Grange]: 14).

### **3.7 Summary**

This section provides an extensive overview of the Cape Riche and Great Southern region and Aboriginal attachment to country. It is shown that, historically, the Noongar Aboriginal group have occupied the area prior to and since European arrival, and that occurrences such as tribal movements and the establishment of Albany have influenced the lifeways of Noongar people, who have adapted to these changing times.

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## 4.0 Aboriginal Heritage Protection Legislation

This section outlines information on relevant Western Australian Aboriginal heritage protection legislation.

### 4.1 Aboriginal Heritage Act 1972

The Minister for Aboriginal Affairs is responsible for the administration of the *Aboriginal Heritage Act 1972*. The Minister's responsibility is to ensure that all places in Western Australia which are of archaeological, traditional or current sacred, ritual or ceremonial significance to Aboriginal people should be recorded and their importance evaluated on behalf of the community. Under Section 17, it is an offence to disturb any Aboriginal site. If a development is likely to impact a site, the consent of the Minister is required under Section 18. The Minister receives a recommendation from the Aboriginal Cultural Material Committee (ACMC) before giving his consent. He considers its recommendations and the general interests of the community when making a decision. The Minister may also impose conditions on his approval.

The *Aboriginal Heritage Act 1972* was enacted to protect and preserve Aboriginal heritage and protects all sites or objects. This includes any places or objects of past or present significance to Aboriginal people. It also provides for fines and jail sentences for breaches. In relation to Aboriginal heritage surveys Section 5 of the *Aboriginal Heritage Act 1972* provides the following definitions of Aboriginal sites:

- a) Any place of importance or significance where people of Aboriginal descent have, or appear to have, left any object, natural or artificial, used for, or made or adapted for use for, any purpose connected with the traditional cultural life of Aboriginal people, past or present;
- b) Any sacred, ritual or ceremonial site, which is of importance and special significance to people of Aboriginal descent;
- c) Any place which, in the opinion of the committee, is or was associated with Aboriginal people and which is of historical, anthropological, archaeological or ethnographical interest and should be preserved because of its importance and significance to the cultural heritage of the State; and
- d) Any place where objects to which this Act applies are traditionally stored, or to which, under the provisions of the Act, such objects have been taken or removed.

Any place determined to be as site under Section 5, is then evaluated under Section 39 of the *Aboriginal Heritage Act 1972*. Section 39 (2) & (3) states:

(2) In evaluating the importance of places and objects the committee shall have regard to

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- (a) Any existing use or significance attributed under relevant Aboriginal custom;
  - (b) Any former or reputed use or significance which may be attributed on the basis of tradition, historical association, or Aboriginal sentiment;
  - (c) Any potential anthropological, archaeological or ethnographical interest; and
  - (d) Aesthetic values.
- (3) Associated sacred beliefs, and ritual or ceremonial usage, in so far as such matters can be ascertained, shall be regarded as the primary considerations to be taken into account in the evaluation of any place or object for the purposes of this Act.

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## 4.2 DIA Heritage Survey Report Guidelines

The Department of Indigenous Affairs (DIA), which administers the *Aboriginal Heritage Act 1972* and the Register of Aboriginal Sites, has published Heritage Survey Reporting Guidelines (2005) which refer to Sections 4 and 5 of the *Aboriginal Heritage Act 1972*, but do not provide any additional guidance regarding the definition of what physically and geographically constitutes an Aboriginal site.

DIA has developed an additional, draft set of guidelines concerning the categories and thresholds of information that should be recorded by anthropologists for the registration of significant ethnographic sites, but these are still under development and have not been released for general use. The guidelines relate to the information content of site records with regard to establishing the nature and significance of ethnographic sites – they do not deal with issues relating to the physical definition of the extent or boundaries of a recorded site.

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## 5.0 DIA Register Search and Previous Surveys

This section of the report provides background information regarding Aboriginal sites on the DIA Site Register, and also summarises previous archaeological and ethnographic research relevant to the current survey area.

### 5.1 DIA Site Register

The DIA Site Register is a record of all previously recorded Aboriginal sites within Western Australia, and is a means whereby a proponent can identify Aboriginal sites before conducting ground disturbing activities where such sites are located.

The DIA Site Register was searched for information on previous Aboriginal cultural heritage surveys and records of Aboriginal sites within and adjacent to the survey area (Table 1).

SITE ID	NAME	REGISTER STATUS	SITE TYPE
4935	CHEYNE BAY	OPEN	ARTEFACT SCATTER
20214	CAPE RICHE OCHRE	OPEN	QUARRY / ARTEFACT SCATTER

**Table 1** Aboriginal sites on the DIA Site Register within 2km of the Grange Resources Desalination pipeline route options

Neither of these two Aboriginal sites is located in immediate proximity of the pipeline routes.

#### 5.1.1 Relevant DIA Site Register Information

As a result of an online search of the DIA Sites Register in Perth on 18 October 2009, the presence was noted of two registered sites within 2 km of the Grange Resources Option 2 seawater pipeline route, and none in the immediate vicinity of the Option 1 route.

Both registered sites – Cheyne Bay (no. 4935) and Cape Riche Ochre (20214 – formerly known as Aaron’s Ochre Site) – are adjacent to each other near the Cheyne Bay shoreline to the north of the Option 2 survey area. Each involves scatters of artefacts including quartz, shell and chert fragments, and a small ochre source in the case of the Cheyne Bay site. This site was recorded in 1982 by Kate Morse and the second in 2003 by Rebecca Khan and Robert Reynolds of DIA, with assistance from Carol Pettersen, a member of the Gray family.

The second site includes a quarry containing white, yellow, pink, red to dark purple ochre and a small rock shelter which may have been used by traditional Aboriginal visitors to the area, and has natural water supplies nearby. Harris (in Goode 2005: 27) describes it as the only ochre quarry recorded within the Albany municipal boundaries.

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### 5.1.2 Relevant DIA Reports Information

Reports consulted at DIA as mentioned in the relevant site files were:

- Dortch, C.E. 1987, *Assessment of the effects of proposed development on Aboriginal Sites in the Jerramungup Coastal District*. Report Prepared for Department of Aboriginal Sites, Western Australian Museum, Perth.

This report, by a WA Museum archaeologist, is concerned with an area extending about 50 km west from Doubtful Bay to Beaufort Inlet, at the mouth of the Pallinup River and all within the shire of Jerramungup. At its closest point this area is about 20 km in a direct line from the seawater pipeline Option 2 route along Sandalwood Road from near Wellstead to the sea, and the author's comments therefore have some application to the archaeology and ethnography of the Cape Riche area. Thus, as at Cape Riche, the "small number" of "known archaeological remains consist mostly of stone artefact scatters exposed in eroding sandy soils or on bare rock surfaces".

The focus of Aboriginal prehistoric activity and its accompanying archaeological evidence would be concentrated around freshwater lakes, river channels and estuarine environments. The ethnographic component, he says, is "limited"; although the writings of Ethel Hassell (1936, 1975) provide a "fascinating picture" of the traditional life of the "Wheelman" people in the region now centred on Jerramungup. These people, according to Tindale (1974), were the Wiilman or Koreng, whereas those of the Cape Riche area were the Mineng. Dortch concluded however by stating that lack of ethnographic information meant that "a complete reconstruction of traditional or prehistoric life during the past few hundred years is impossible."

- Hook, F. & Veitch, B. 2001, *The Report of an Aboriginal Archaeological Assessment of the Proposed Pinjar to Cataby Transmission Line, Western Australia*. Report Prepared report for Western Power Corporation, Perth.

This report is mentioned in the Cape Riche (no. 4935) site file and details an archaeological assessment of a proposed electricity transmission line more than 600km north-west of Cape Riche in which no Aboriginal archaeological sites and one isolated artefact were found. While there are some linguistic and cultural affinities between traditional Noongar people of this area and those of Cape Riche, this report's relevance is nonetheless extremely limited.

- Smith, M.V. 1993, 'Recherche A L'Esperance: A Prehistory Of The Esperance Region Of South-Western Australia'. PhD thesis, Department of Anthropology, University of Western Australia.

Dr Smith's thesis, as the title suggests, deals with the coastal and inland regions between Esperance and Israelite Bay on the western edge of the Nullarbor and thus has little relevance to the Cape Riche area in either archaeological or ethnographic terms. Much of the fieldwork was carried out in the Cape Arid area, near "the boundary between observed nineteenth century Aboriginal socio-cultural blocs of the South-west and the Desert", and traditional Esperance people therefore had a "socially marginal position in relationship with both cultural divisions."

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- Goode, B. et al 2005, *'Kinjarling': The Place Of Rain: The City Of Albany & Department Of Indigenous Affairs Aboriginal Heritage Survey*. Report Prepared for the City of Albany and the Department of Indigenous Affairs.

This comprehensive and detailed report was compiled by an anthropologist, a historian, an archaeologist and a GIS consultant in an attempt to identify sites of cultural significance within the Albany area likely to be registered under the *Aboriginal Heritage Act 1972* and which might be affected by future development planning within the region. As such its scope is largely within the immediate Albany area and while it does mention the two registered sites (nos. 4935 and 20214) in the Cape Riche area, neither of these sites nor the area in general is discussed in any detail. In respect of no. 20214, the Cape Riche ochre site, however, the report comments that this is the only ochre site within the Albany municipal boundaries and should be fully recorded "as its integrity is vulnerable to the elements due to its [coastal] position". The study otherwise draws extensively on a wide range of archival and published sources to assemble an overview of prehistoric and historical Aboriginal land use patterns for the Albany region, to assist the City of Albany in addressing Aboriginal heritage issues within its regional strategic land use plans.

Other heritage reports consulted regarding the Albany area include:

- Goode, B. & Irvine, C. 2005, *An Ethnographic Survey For Grange Resources Limited, & Albany Port Authority, Southdown Magnetite Project, Great Southern Region, Western Australia*. Report Prepared for Grange Resources Ltd.
- Greenfeld, P. & J. Harris 2005 Report on an *Archaeological Survey for Grange Resources Limited, & Albany Port Authority, Southdown Magnetite Project, Great Southern Region, Western Australia*. Report prepared for Grange Resources Ltd.

These extensive reports by an anthropologist and a historian, with a separate archaeological section by Paul Greenfeld and Jacqueline Harris, deal with Grange Resources' plans for an open cut magnetite mine and ore concentrating facility at Southdown, near Wellstead, and for a pipeline to transport ore slurry to Albany for shipment through a new loading facility within the port area. The report noted five previously identified and DIA-listed ethnographic sites within a 200 metre exclusion zone along the 90 km pipeline route between the minesite and Albany, and one previously unrecorded site in the exclusion zone within urban Albany. Of these sites, it was recommended that three – including the one within urban Albany – would require consideration under Section 18 of the *Aboriginal Heritage Act 1972* before the project could proceed. After subsequent consultation with Aboriginal informants, it was agreed that disruption of the three sites could proceed with ministerial approval.

At the Southdown minesite, a total of seven archaeological sites were recorded. Following discussions with Grange Resources regarding land use requirements, the Aboriginal community representatives accepted that it would be difficult to avoid disturbance to Southdown Sites 1, 2, 3 & 4. The Aboriginal representatives accordingly recommended that if clearance under Section 18 of the *Aboriginal Heritage Act 1972* was granted, then the four sites should be excavated and dated, fully recorded, salvaged and relocated to an area near Southdown Sites 5, 6 and 7. This should only occur with full consensus from the Albany Heritage Reference Committee. The Aboriginal community representatives consulted did not support Grange Resources' wish to apply under Section 18 of the *Aboriginal Heritage Act 1972* to disturb Southdown Sites 5, 5a, 6 and 7. The Aboriginal representatives saw this area as of

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high significance and advised Grange Resources to reconsider plans to use it as a waste dump.

After further consultation, the Aboriginal community recommended that if ministerial approval were granted, then extensive archaeological salvage operations would be required involving strategies such as test excavations and dating of materials. It was also suggested that salvage and preservation of significant archaeological materials at a place such as the Albany museum could be an option, although this would require unanimous support from the Albany Heritage Reference Committee, which might have other ideas. As with Goode's earlier 'Kinjarling' study, this report otherwise refers to a comprehensive range of archival and published sources to assemble an overview of prehistoric and historical Aboriginal land use patterns for the Albany and Wellstead regions.

- Machin, B. 1997, *Aboriginal Heritage Survey: Albany Lake Grace Road Amelup Section, SLK 83.5 to SLK 87.0*. Report Prepared for Main Roads Western Australia.

This report was requested by Main Roads after a number of artefact scatters said to be of "particular significance" to Aboriginal people were reported in an area under consideration for road realignment in the shire of Gnowangerup, near its borders with the shires of Plantagenet and Albany. Dr Machin concluded however that the archaeological scatters were of no particular ethnographic significance; they were found in a major flood plain and could have originated hundreds of kilometres away. Dr Machin's report typically included considerable ethnographic and historical background on the Noongar people of the area.

- Bradshaw, E. 1989, *Report On The Monitoring Of Construction Work At Site S0616, Kalgan*. Report Prepared for the Department of Aboriginal Sites, WA Museum.

This report followed a request by the Kalgan Settlers Association under section 18 of the *Aboriginal Heritage Act 1972* to disturb an artefact scatter site on an already extensively disturbed alluvium deposit on the northern bank of the Kalgan River. The report was considered by the Aboriginal Cultural Material Committee (ACMC) and the association was subsequently given ministerial permission to erect a toilet block, lay septic tank pipes and build a tank stand on the site. The report's author monitored the digging of a 1 metre deep trench and drain during construction; no artefacts were revealed during this work.

- McDonald, Hales & Associates 1994, *Aboriginal Heritage in the Southern Forest Region, S.W. Western Australia*. Report Prepared for the Australian Heritage Commission.

This survey was undertaken by six ethnographic and archaeological consultants as one of a national series commissioned by the Australian Heritage Commission on native forests, for its register of the National Estate. It was intended to collect historic and contemporary information about Aboriginal sites in the southern forest (jarrah and karri) region of Western Australia, to develop and test a model of Aboriginal site location in those areas of the region administered by the then Department of Conservation and Land Management, and to liaise with relevant Aboriginal communities about matters including custodianship and control of information about Aboriginal sites. This included consultation with individual Noongar people and Aboriginal organisations in Albany and Mount Barker. The report contains considerable historical and ethnographic background information about Noongar people in general.

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- McGann, S. 2000, *Report on An Archaeological Monitoring Programme At The Manypeaks Road Realignment, Western Australia*. Report Prepared for Halpern Glick Maunsell Pty Ltd on behalf of Main Roads Western Australia.

Monitoring of the South Coast Highway/Manypeaks Road realignment, south-west of the Cape Riche area, was commissioned by Main Roads on the basis that the work flanked two registered archaeological sites, S1507 and S2792. The monitoring involved an archaeologist and members of the relevant claimant groups over four days. No archaeological material was discovered but it was established that a temporary access route might affect the southern margin of S2792.

- Martinick, W.G. & Associates Pty Ltd 1992, *Aboriginal Site Survey Report: SLK 33.58 to SLK 46.30 South Coast Highway, Manypeaks, Albany*. Report Prepared for Main Roads Western Australia.

Main Roads commissioned this Aboriginal site survey of the South Coast Highway, roughly midway between Albany and the proposed Cape Riche seawater pipelines area, as part of an environmental assessment management plan study. The planned roadworks were considered unlikely to impact on any known Aboriginal sites, although two small artefact scatters were found nearby on a road cutting and in a cleared paddock. No ethnographic sites of significance were identified.

## 5.2 Summary

Neither of the sites mentioned by the DIA Site Register in the Cape Riche area will be impacted upon by the proposed pipeline construction work, regardless of which option may be chosen. The four heritage reports listed in the DIA site files for these two sites (4935 and 20214) contain little archaeological information relevant to the Cape Riche area and the same is true for the most part in ethnographic terms with the exception of Goode's detailed 2005 report, *Kinjarling*, which while dealing largely with the immediate Albany area, contains useful background information about his informants, including some Noongar people with connections to Cape Riche.

Of the other ethnographic heritage reports, those by Goode and Drs McDonald and Machin are typically well backgrounded and researched, and contain some material pertinent to the Cape Riche area. With the exception of the section of Goode's report written by Greenfeld and Harris, the archaeological reports contain little of relevance to Cape Riche or either proposed pipeline route.

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## Aboriginal Site Fieldwork Methods

This section details the methodology used during the Aboriginal survey.

### 5.3 Aboriginal Heritage Survey – Desktop Methodology

The background research for this project consisted of numerous online searches under various headings, and included an online inspection of the DIA Site Register. Two subsequent visits to DIA in Perth involved copying of site file and heritage survey report information, and discussions with senior DIA staff. Other such discussions took place with former residents – “white” and Noongar – of areas close to the Cape Riche district. Primary (archival) and secondary research was also conducted in the Battye Library and State Records Office in Perth on two occasions.

### 5.4 Aboriginal Heritage Survey - Ethnographic Field Methodology

ACHM successfully tendered in July 2009 to conduct ethnographic and archaeological surveys on Grange Resources’ behalf, of two proposed seawater pipeline routes (Option 1 and Option 2) between the south coast of Western Australia near Cape Riche and the company’s Southdown mine project area.

A meeting of the relevant SWALSC working party subsequently compiled a list of 15 Southern Noongar (WC96/109) and Wagyl Kaip (WC98/70) applicants whom it considered appropriate to take part in the pipeline heritage surveys. This list was then emailed by SWALSC’s future acts officer, Mr Sean O’Hara, to Mr Phil Czerwinski, archaeologist and WA representative of ACHM, and hence to Dr Peter Gifford, an ethnographer/ethnohistorian contracted to conduct the ethnographic survey.

Of the 15 names on the list, two – Mr Gerald Williams junior and Mr Dino Dempster - could not be contacted and the names of two Noongar elders with known long-standing attachments to the Cape Riche area, Mr Bill Woods senior and Mrs Hazel Brown, were added in their place. Mrs Brown’s daughter, Mrs Elaine Minitier, also took part in place of her son, Mr Graeme Minitier, who could not attend because of work commitments. Another SWALSC nominee, Mrs Janice Krakouer, was unable to take part for the same reason, and because of a family bereavement, while Mr Dallas Coyne – a police officer unable to change his roster - was replaced by his nephew, Mr Larry Blight. Serious illness prevented yet another SWALSC nominee, Ms Lynette Knapp, from participating.

Mr Woods’s name was formally added to the list after a meeting in Albany on 26 October with the DIA regional manager, Mr Anthony Galante, DIA heritage officer Mr Robert Reynolds and staff member Mr Harley Coyne. Mrs Vernice Gillies, who attended the meeting as representative of the Albany Aboriginal Heritage Reference group, maintained that it was imperative for Mr Woods to be part of the survey because he knew the Cape Riche country “better than anyone on the SWALSC list”, which at that time did not include Mrs Hazel Brown. The DIA representatives were officially non-committal about the SWALSC list, but all three

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supported the idea of adding Mr Woods's name to it on the basis of knowledge and elder status.

During the meeting, Mr Coyne made several comments which he stressed were not in his capacity as a DIA official but as a private citizen and member of the Albany Aboriginal Heritage Reference group. The SWALSC list, he said, was setting an unfortunate precedent in terms of heritage surveys in the Albany area because it contained the names of several people whose links with Cape Riche were possibly historical and genealogical but not based on heritage in the sense of knowledge gained at first-hand through long-standing personal or even immediate family contact with the area. The ACHM representatives' response was that the company was bound at least to consider advice from SWALSC, but that ACHM was also trying to make the list more representative in terms of people knowing country at first hand by adding Mr Woods's name to the list, on the basis of other advice from both Indigenous and non-Indigenous people with knowledge of the Cape Riche area.

At all events, Mrs Gillies's claim about Mr Woods proved accurate. Mr Woods did demonstrate considerable knowledge of the country gained both through family and personal contact, and other group members deferred to him on that basis during the survey, while Mr Woods himself went out of his way to impart some of his knowledge to younger members of the group, notably Mr Billy Krakouer and Mr Rodney McGlade.

Because of the numbers of informants and distance involved in travelling to and from Albany, it had been decided before arrival in Albany that the survey should take place over four days, effectively with two groups taking part for two days each. Those who took part on day one were Messrs Krakouer, Aden Eades, Stuart Hansen, Blight, McGlade and Woods, and Ms Rosalie Quartermaine and Ms Carol Pettersen. The same people took part on day two, with the exception of Mr Eades, who was available for only one day, and Mr Blight, who had a work commitment on day two but was available for day three. On the third day, those besides Mr Blight who took part were Mrs Elaine Miniter, Mr Ezzard Flowers, Mr Jerry Narkle, Ms Quartermaine and Mr Hansen; with the exception of Mr Blight, they were joined on the fourth day by Mrs Brown and Mrs Eliza Woods, who is Mr Bill Woods's wife and Mr Eades's sister.

Before leaving Albany, the informants were addressed by Grange Resources project manager Mr Brendan Corry, who later answered questions including several about the dimensions and nature of the pipeline plans. In particular, Mr Corry stressed that the company's intention was to reduce environmental damage as far as possible by working close to existing roads so that plant would not impact on remnant bushland. Mr Corry made maps and diagrams available, and indicated through documents that all relevant landholders had been informed of the survey plans and were aware that it might be necessary on occasion to enter private land.

During the survey, however, contact was made with only two landholders – Mr Doug Moir and his son Mr John Moir, on whose Cape Riche property the Option 1 seawater intake and outlet point is located. Neither had any objection to the informants inspecting their property, and Mr Doug Moir expressed pleasure on day four when he was greeted by Mrs Brown, who said she and Mr Moir had known one another virtually all their lives and he was her "*wadjella* [European] brother". Both Mr Moir and Mrs Brown are aged in their 80s.

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Again before departure, Mr Czerwinski spoke about safety issues – each vehicle contained a well-equipped first aid kit – and in particular the possibility that poisonous snakes might be encountered, as in fact happened but without injury to anyone involved.

On reaching the survey area on day one, the vehicles proceeded slowly along the route of Option 1, south south west along Shearer Road to Mettler Road, then east north east to Cape Riche Road and south south west and west to Cape Riche and the Option 1 intake/outlet point. The two survey vehicles and another containing Ms Quartermaine and Mr Hansen were accompanied for part of day one by a third driven by Mr Corry and a fourth by Mr O'Hara, of SWALSC. As on each occasion when the informants were driven along Shearer Road, none expressed any knowledge of anything amounting to ethnographic sites or points of ethnographic interest in the immediate survey area.

Mrs Brown, who has been by her own account visiting the area since 1929, said on day four that this was probably because the immediate area had no water sources and was regarded by the “old” Noongar people as undesirable in camping terms because it was much hotter in summer than places closer to the coast. People had only camped there in emergencies, she said.

On this occasion and in fact again each time when the informants passed the point on Mettler Road where an alternative route for the pipeline might pass from the road to the north-west through cleared paddocks, the informants said this would be better than running the pipeline along Shearer Road.

The informants took turns at accompanying the ethnographer along each of the pipeline route options; at other times the survey members assisted the archaeologist in walking the ground along each route and searching for artefacts and other indications of previous Aboriginal occupation.

In Albany, Mr Harley Coyne had spoken of a “death site” in the general survey area, that of one of his uncles, Jack Coyne, which should be acknowledged and protected. This place is actually on the northern side of the Cape Riche road, at 657900E 6169209N, adjoining a “no thru road” sign leading in to the Moir property. By Mr Woods’s account, Mr Jack Coyne – Mr Blight’s great uncle – a World War Two veteran who served along the Kokoda Trail, died by the roadside of a heart attack in the 1960s while waiting for transport into Wellstead. He had just received news of the death of a close friend in Albany. Mr Coyne had been employed in the area for many years at carting, pulling poison weed and other farm work, and was well respected.

Mr Woods, Mr Eades and Mr Blight requested that while the place was not a site as defined in the *Aboriginal Heritage Act 1972*, Grange Resources employees should still be asked to treat the area with respect. It was also suggested that another informant, Mr Jerry Narkle, be asked to gain approval for erecting an appropriate monument through his other capacity as a member of the South Coast Natural Resource Management (NRM) group specialising in “restoring connections”. Mr Narkle, who viewed the place while taking part in the ethnographic survey on days three and four, agreed to raise the matter with the NRM.

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Both the ethnographic group and those informants accompanying the archaeologist to assist him, visited the Option 1 pipeline intake/outlet point on the Cape Riche headland simultaneously on day one. Ms Pettersen found what she said to be stones comprising a lizard trap in the area; the senior men, Messrs Woods and Eades, said however that this was most unlikely since Aboriginal people had come to the area seeking fish; one so-called lizard trap on its own did not mean anything without other evidence and the lizards there were unpalatable anyway. Mrs Brown agreed with this assessment independently on day four. Mr Eades and Mr Woods said they had both heard of lizard traps and snake traps in early settler reports in the Albany region (cf for example McDonald 1994: 41-2), but neither had ever used them or seen them used.

After inspecting the area, Mr Woods and Mr Eades agreed (as did all other informants subsequently) that while there was no ethnographic reason for the intake/outlet pipes not to be located there, the pipes would be better situated further around the headland where the open sea would clear away the ultra-briny liquid residue from the desalination process with less threat to the fish and other marine creatures there. Mr Woods and Mr Eades agreed however that the new intake/outlet point should not intrude on a then unrecorded but nonetheless important Noongar fishing site known as Skippy Rock, several hundred metres to the south-east along the headland.

Mr Blight, who took part in this conversation, accompanied the ethnographer and Mr Ezzard Flowers on foot to Skippy Rock from the proposed intake/outlet point on day three. The site, at 662073E 6169226N, consists of sheltered rocks protruding into the sea, from where Noongar men (and occasionally women, by Mrs Brown's account) used stones and small holes in the rocks to grind crabs and shellfish into berley, or bait, to attract fish which they caught using handlines and, later, fishing rods (Figure 2). Generations of use have left round grinding holes in some cases 8cm wide by 5cm deep. The fish caught included groper, skippy (trevally), sweep, snapper, sea bream and herring which were sometimes cooked on fires and eaten nearby, or carried out on foot to nearby campsites to be shared with women and children. Mr Blight and Mr Flowers requested, with the subsequent agreement of all other informants, that the new location for the Option 1 intake/outlet pipes be at least 200 metres from the Skippy Rock site.

One Indigenous campsite mentioned by the informants is located on the north-eastern edge of the Moir's property near the banks of the Eyre Creek (called Cape Riche Creek by the informants), which empties into the sea immediately to the north of the Cape Riche headland (Figure 3). This campsite is on the opposite side of the Cape Riche road from the proposed Option 1 route, about 180 metres from the nearest point at which the pipelines would pass. Mr Eades, Mr Woods and Mr Blight say the un-named campsite has "always been there", a claim given further substance by a show of quartz and chert flakes encountered nearby by Mr Blight which has apparently been uncovered by recent heavy rain, at 658634E 6169450N.

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**Figure 2** Skippy Rock grinding hole, for grinding berley to catch groper



**Figure 3** Cape Riche Road campground artefact scatter (left – right: Billy Krakouer, Larry Blight, Aden Eades)

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The informants requested that this site be registered as both ethnographic and archaeological, and Mr Narkle was also asked subsequently for the assistance again of the NRM in providing a team to clean up rubbish including broken glass there. While the site is not directly in the path of the proposed Option 1 pipelines, it is nonetheless close enough for the informants to request that the area be treated with respect and that no equipment or heavy vehicles be taken in there from the road during pipeline construction.

After lunch at this campsite on day one, the ethnographic and archaeological groups separated, with Mr Eades, Mr Woods, Mr Blight and Ms Pettersen accompanying the ethnographer back along the Option 1 route to the main South Coast Highway, where Mr Blight and Ms Pettersen decided to assist the archaeologist, as did Ms Quartermaine and Mr Hansen, travelling in their own vehicle. Mr O'Hara departed at this point, Mr Corry having left immediately after lunch. The ethnographer then drove Mr Eades and Mr Woods down Sandalwood Road, the route of pipeline Option 2, for a brief reconnaissance in preparation for a more detailed survey on the second day, when Mr Eades would not be present.

Neither Mr Eades nor Mr Woods had any comment in ethnographic terms about the Option 2 route from Wellstead to the car park off Sandalwood Road which is the site of the seawater pipeline intake/outlet proposed in Option 2. Mr Woods did, however, point out a track, now nearly overgrown, which he said led from Sandalwood Road to a fishing ground on the creek where he and others had caught mullet and bream as young men.

Both Mr Woods and Mr Eades agreed that the Option 1 intake/outlet site on the Cape Riche headland was preferable, for both marine and land environmental reasons; in the second case because of potential damage to coastal scrubland near the car park, both from the work itself and from subsequent unavoidable erosion. Mr Eades and Mr Woods also agreed subsequently with the informant consensus that Option 1 was preferable in general environmental terms because it ran predominantly through areas where uncleared bushland was less scarce than along Option 2 - Sandalwood Road. In the case of Option 2, there were several points at which the narrow bush verge along the road adjoined cleared land on either side and was thus the only corridor available for natural flora and fauna, which might be endangered if that corridor was damaged as a result of pipeline construction.

Mr Woods and Mr Eades then asked to see the privately-run Cape Riche caravan park and camping area at the end of Sandalwood Road near the river mouth. Both expressed indignation at a "no camping" sign outside the caravan park, which they said had "always" been a Noongar camping ground. Noongars, they said, had cleared out the paperbark trees within the camping area which was now utilised by "white" people paying for the privilege (Figure 4). The camping area includes a woolshed built during the mid 19<sup>th</sup> century by the Moir family, using convict and possibly Noongar labour – a plaque on the woolshed dated 1992 marks 150 years since the arrival of Andrew Moir at Cape Riche.

Mr Eades managed to locate nearby – at 660619E 6169750N – an overgrown well, stone-lined by men with knowledge of masonry probably at the same time the woolshed was built, since the workmanship is similar (Figure 5). Mr Eades and Mr Woods stated at any rate that the well had been lined for as long as they could remember, but that Noongar people always used it when camping there. It was their task there as children to fetch water for their elders.

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**Figure 4** Elaine Minitier, Jerry Narkle, Hazel Brown and Eliza Woods at corroboree ground / camping area, Cape Riche



**Figure 5** Noongar campground well, lined and deepened by early European settlers

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The likelihood is therefore that convict artisans deepened and lined what had been a “native” well, in use for many generations by Noongar people before the arrival of European settlers in the first half of the 19<sup>th</sup> century. It thus has significance for both Noongars and Europeans, although apparently forgotten by the latter since it is now dry and almost totally overgrown by brush scrub.

Once again Mr Narkle was asked subsequently after inspecting the well, whether his NRM group could do anything to rehabilitate it; his response was that it should not be hard to get a group together to clean up the site and possibly erect a fence around it, if the caravan park owners (the Albany council) agreed. Mrs Brown was able to locate the well without assistance on day four of the survey; she also announced that the camping ground nearby had included a corroboree area which she located at 660666E 6169844N. Corrobores at which Noongar people had sung, tapped sticks and danced, she said, had taken place there until the 1960s and had ceased after the death of her brother. They were usually organised in her childhood by her uncle, Len Roberts, who was also known as “Sharkey” after he once swam over to Cheyne Island, about a kilometre off the Cape Riche coast, and managed to return without falling victim to a shark which followed him. For the corroborees, he would bring in a 44 gallon drum of water and another of fuel. Those families which took part included her own – Roberts – along with the Pennys, Browns, Dongups, Williams, Coynes, Eades and Woods. The Knapps were not regular visitors, although Freddy Knapp had been once and Alfie Knapp likewise once, at shearing time.

On the morning of day two of the survey, the ethnographer was accompanied from Albany and along Sandalwood Road (Option 2) by Ms Pettersen, Mr Woods and Mr McGlade, with Mr Krakouer, Ms Quartermaine and Mr Hansen assisting the archaeologist. Mr Krakouer joined the ethnographer’s group in the afternoon. The ethnographic group’s first stop along Sandalwood Road at the intersection with Mettler Road was at a memorial to the explorer Edward John Eyre and his Noongar companion Wylie, who passed through the area in July 1841 on their way overland from Fowlers Bay in South Australia to Albany. Also at this point is a cast iron pole of the type which replaced the original wooden poles used during the construction in the 1870s of the Overland Telegraph line across the Nullarbor to Albany and Perth, roughly following Eyre’s route.

Mr Woods said most Albany Noongars know something about Wylie, whom Eyre took with him by ship from King George Sound before setting off on his overland journey in South Australia. The two were thought to have followed the creek now named after Eyre to its source before returning to the coast and continuing to Albany. At the Eyre/Wylie memorial on the fourth day, Mrs Brown stated that Wylie was indeed from Albany, that he had worked as a police tracker and again as an explorer’s guide in later life, and that he took or was given a European name, Bobby Roberts – her own maiden name was Roberts. Whether they are in fact related is unclear, however (see Scott & Brown 2005: 46-47).

On day two, Ms Pettersen stated that the Eyre/Wylie memorial was a point on what she called the Ngadju Trail – this was, she said, a track followed by Ngadju women from the Balladonia, Fraser Range and Norseman areas whose husbands were arrested by police for various offences and taken to Esperance, then overland to Albany and finally to the Aboriginal prison on Rottnest Island. The women had walked more than 500 kilometres from Esperance to Albany to be with their husbands. Ms Pettersen said some of her forebears were Ngadju people from Balladonia and this was where the story had originated.

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Mr Woods knew nothing of it, however, nor did any of the other informants. Mrs Brown had nothing to say about it although she did relate certain genealogical and other information relating to Ngadju people and their neighbours among Noongars from the Esperance region which the ethnographer understands, from archival and oral research conducted over nearly a decade, to be correct.

The ethnographer incidentally has consulted records including 19<sup>th</sup> century police and court books from Esperance and Albany which indicate that Ngadju men charged with offences such as sheep stealing were sometimes taken in custody from Esperance to Albany on foot, attached to the stirrups of police horses, if no sea transport was available, and from there to Rottnest by sea. But these and other records contain no references to such men being accompanied or followed by their women; nor was there any oral tradition among senior Ngadju people including Mr Arthur Dimer and Mrs Mabel Wilson (both now deceased) of such things having happened.

In relation to the Overland Telegraph pole, Mrs Brown said her father, Freddy Roberts, had helped dismantle the telegraph line during the late 1920s when she was a little girl, unravelling more than 60 miles [96 km] of copper wire along the main road in the Wellstead area and later burying it in a campsite where it still remained, as far as she knew.

After an inspection of the Option 2 intake/outlet site off Sandalwood Road, Ms Pettersen related what she maintained was a Noongar dreaming story involving two snakes, cousins, which fell out over a female and are now replicated as fighting in the sea off the coast to the north of Cape Riche, at a place where breaking waves meet the returning shore break. The story by Ms Pettersen's account is located from the Pallinup River around to the base of the Stirling Range by various geographical features.

None of the other informants and in particular neither Mr Woods nor later Mrs Brown had heard of this story and in fact each was somewhat dismissive of it. What Mrs Brown's daughter, Mrs Elaine Minter, said of it on day three is that while dreaming stories – and in particular some related to serpent deity figures – undoubtedly were told by previous generations of Noongars in Albany and along the south coast, and recorded in some cases by the same generations of “white” people interested in these matters, such stories have now been almost certainly forgotten. If her mother Mrs Brown, now in her 80s but still possessed of all her faculties and in particular with a fine memory, did not know of such a story then indeed it was “lost” to current generations of Noongars with genuine ties to the Cape Riche area. Mrs Minter by her mother's account has been visiting Cape Riche since she was ten weeks old.

At the Cape Riche caravan park/camping ground, Ms Pettersen was out by several hundred metres in her estimate of the location of the well recorded by Mr Eades and the ethnographer the previous day. While the ground is grown over, Ms Pettersen's description of it as a natural spring – a fissure or crack in the ground – was incorrect, since the well found by Mr Eades was almost certainly lined by Europeans at the same time as the nearby woolshed was built in the 19<sup>th</sup> century, and neither Mr Eades nor Mr Woods can remember it as anything but stone-lined.

Ms Pettersen was further mistaken in stating that the woolshed was built by Noongar rather than convict labour because “there were no convicts in the area”. Convicts in fact were

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transported to Western Australia from the British Isles between 1850 and 1868, and while not employed in the north were widely used throughout the south west of the colony including the Albany district on road building and other projects as required by both the public and private sectors. Noongar labour was quite possibly conscripted to help with the heavy work of lifting and manhandling dressed stone blocks into position, but few if any Noongars in the Cape Riche area would have had the opportunity in the mid 19<sup>th</sup> century to learn the technical skills associated with stonemasonry.

The ethnographic survey was completed on the afternoon of the fourth day, with a final traverse along Sandalwood Road, Option 2. In terms of the four days of actual surveying of the options being considered for the seawater pipelines to and from the minesite, each of the 13 informants travelled at least once along the entire length of both routes in company with the ethnographer, with the exception of Ms Quartermaine and Mr Hansen, whose preference was to learn about the country by walking it with the archaeologist. Ms Quartermaine and Mr Hansen both, however, spoke to the ethnographer at some length on several occasions.

In the case of all the other informants, stops were made whenever requested (see Figure 6), both at points directly concerned with each route and at other nearby places of importance such as the camping grounds on either side of the Eyre River and the old well area near the council caravan park. Each informant was given ample opportunity to comment on ethnographic matters as he or she saw fit.



**Figure 6** Noongar informants at Sandalwood Road car park, intake/outlet point, facing Cape Riche

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## 5.5 Aboriginal Heritage Survey - Archaeological Field Methodology

Prior to the survey, the spatial data for Options 1 and 2 were uploaded into a handheld Garmin GPSmap 60CSx Global Positioning System (GPS) unit for orientation in the field. Field maps were printed to brief all survey participants. A pedestrian archaeological site survey was then undertaken by the ACHM archaeologist and Noongar representatives over the survey area. This involved walking straight transects to cover the survey area. Transects were 20 metres wide and covered a wide variety of land surfaces. Photographs of ground surface visibility were taken to thoroughly document the conditions of the survey. Ground surface visibility at the time of survey was between 0% and 100%. Due to the poor ground surface visibility of a large section of the two routes (due to uncleared vegetation and agricultural crops), and areas of greater visibility (i.e. cleared access tracks, burnt out vegetation, fire breaks and uncropped areas) and/or landscape features with a known higher association with Aboriginal sites (i.e. swamps, sand dunes and creek crossings) were targeted for inspection. Through this sampling strategy, it is estimated that approximately 60% of Option 1, and approximately 40% of Option 2, were physically walked and inspected for archaeological sites. This is an adequate measure to understanding the archaeological values component of the survey.

Any archaeological material identified in the project area during the survey was spatially recorded using a Garmin Map60 60CSx GPS, and photographs and information about the intra-site components of the site collected. This information is as follows.

- Site ID
- Site Type
- Easting (GDA94 – Zone 50)
- Northing (GDA94 – Zone 50)
- Site Significance

For artefact scatters, the site boundary was verified through identifying the spatial extent of the artefact scatter. The site boundary was defined when an area of land no longer contained stone artefacts. This involved a pedestrian survey around the land encompassing the site area, and identifying whether stone artefacts were either present or absent. For stone artefacts identified within sample squares the following artefact attributes were recorded.

- Artefact Type
- Artefact Lithology (Rock Type)
- Artefact Length (mm)
- Artefact Width (mm)
- Artefact Thickness (mm)
- Number of Dorsal Flake Scars
- Platform Type
- Percentage of Cortex
- Cortex Type
- Location and Length of Edge Retouch (if appropriate)

By recording these site attributes, any artefact scatter is recorded to a site identification level prior to any submission of a Section 18 notice under the *Aboriginal Heritage Act 1972*.

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## 6.0 Aboriginal Heritage Survey Results - Route Option 1

This section documents the results of the Aboriginal heritage survey along the Grange Resources desalination pipeline Option 1.

### 6.1 Ethnography – Route Option 1

No ethnographic sites were encountered during the survey of Option 1, although several were located and recorded nearby. On this basis the informants resolved unanimously that as far as they were concerned no application by Grange Resources under Section 18 of the *Aboriginal Heritage Act 1972* for permission to construct a pipeline along the Option 1 route would be necessary, provided:

- The proposed desalination plant be built at the Southdown mine site rather than on the coast at or near Cape Riche;
- The seawater intake pipeline route should be the option from the sea along cleared farmland beside Cape Riche Road and Mettler Roads, then through cleared paddocks beside Shearer Road, to the Southdown mine site (Option 1);
- The pipeline containing ultra-saline residue liquid follow the same route back to the sea at Cape Riche;
- that the pipeline intake/outlet point be moved further to the south east along the Cape Riche headland, to a point more exposed to the open sea, to minimise marine environmental damage; and
- The pipeline intake/outlet point be located at least 200 metres west north west of a newly-recorded fishing site at Skippy Rock (662073E 6169226N) on the Cape Riche headland.

It is **recommended** therefore that since no ethnographic or archaeological sites as defined by Section 5 of the *Aboriginal Heritage Act 1972* have been identified within the project area along Option 1, the seawater pipeline construction proceed there if resolved upon, subject to and informed by the conditions outlined above by the Noongar informants.

The informants also requested that in the event of Option 1 being chosen as the preferred pipeline route, Grange Resources instruct its staff to treat with respect the death site of Mr Jack Coyne on the northern side of the Cape Riche road, at 657900E 6169209N, adjoining a “no thru road” sign leading in to the Moir property.

Likewise if Option 1 were chosen, the informants requested that company staff treat with respect a campsite on the north-eastern edge of the Moir property, on the opposite side of the Cape Riche road from the proposed Option 1 route and about 180 metres from the nearest point at which the pipelines would pass, and that no equipment or heavy vehicles be taken in there from the road during pipeline construction.

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## 6.2 Archaeology – Route Option 1

No archaeological sites were identified along Option 1. The ‘lizard trap’ as discussed in Section 5.2 was investigated but could not conclusively be determined to be an ‘Aboriginal site’ as defined by the *Aboriginal Heritage Act 1972* as there was no archaeologically visible evidence of this being a man-made structure.

One isolated artefact was identified outside of the proposed route option. This is located in a sand dune blowout adjacent to a small swamp, which is a typical environmental association with Aboriginal sites (i.e. sand dune for camping, swamp for resource use). This location is about 40 metres south of the Option 1 route alignment.

## 6.3 Summary – Route Option 1

Option 1 is the most preferred option based on informant discussions and the archaeological record. All Noongar informants stated this route would have significantly less impact than Option 2 to the Aboriginal ethnographic heritage values of the region, and because no archaeological sites were identified there are no constraints as far as archaeology is concerned.

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## 7.0 Aboriginal Heritage Survey Results - Route Option 2

This section documents the results of the Aboriginal heritage survey along the Grange Resources desalination pipeline Option 2.

### 7.1 Ethnography – Route Option 2

No ethnographic sites were encountered during the survey of Option 2, although as with Option 1 several were located and recorded nearby. The informants expressed several environmental concerns about Option 2: largely on the basis that, in general environmental terms, Option 2 contained more uncleared bushland than along Option 1. In the case of Option 2, there were several points at which the narrow bush verge along the road adjoined cleared land on either side and was thus the only corridor available for natural flora and fauna, which might be endangered if that corridor was damaged as a result of pipeline construction.

The Option 1 intake/outlet site on the Cape Riche headland was likewise preferable, for both marine and land environmental reasons; in the second case because of potential damage to coastal scrubland near the car park adjoining Sandalwood Road, and also the potential for impacts to the marine environment and sandy beach.

### 7.2 Archaeology – Route Option 2

One archaeological site was identified and recorded along Option 2. Three isolated artefacts were identified within the proposed route option.

#### 7.2.1 ACHM-GR-01

ACHM-GR-01 is a small, low density artefact scatter located on a deflated sand dune amongst heavy scrub (Figures 7-11). This site is only archaeologically visible within a cleared firebreak, and it is likely that it continues east into the scrub. Grading of soil within a tree farm plantation to the west has more than likely removed the western section of this site. Site characteristics for ACHM-GR-01 are provided in Table 2.

SITE ID	ACHM-GR-01
SITE TYPE	ARTEFACT SCATTER
EASTING (GDA94 – ZONE 50)	410684
NORTHING (GDA94 – ZONE 50)	7669808
SITE MEASUREMENTS	40m x 10m
MAXIMUM ARTEFACT DENSITY	3/M <sup>2</sup>
MINIMUM ARTEFACT DENSITY	1/M <sup>2</sup>
SITE SIGNIFICANCE	LOW

**Table 2** ACHM- GR-01- site characteristics

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Figure 7 ACHM-GR-01 – Location along Option 2

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**Figure 8** ACHM-GR-01 – View south across site



**Figure 9** ACHM-GR-01 – Quartz bipolar core

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**Figure 10** ACHM-GR-01 – Chert backed artefact



**Figure 11** ACHM-GR-01 – Chert flake

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A total of seven stone artefacts were identified and measured in detail from across this site (Table 3). This consists of approximately 70% of all artefacts visible on the ground.

ARTEFACT TYPE	ROCK TYPE	LENGTH (MM)	WIDTH (MM)	THICKNESS (MM)	NO. DORSAL FLAKE SCARS	PLATFORM TYPE	% CORTEX	CORTEX TYPE	LOCATION OF RETOUCH	LENGTH OF RETOUCH (MM)
FLAKE	QUARTZ	38	15	10	2	CORTICAL	0	TERRESTRIAL	N/A	N/A
FLAKE	QUARTZ	30	12	5	1	BIPOLAR	0	N/A	N/A	N/A
CORE	QUARTZ	50	54	49	10	BIPOLAR	0	N/A	N/A	N/A
FLAKE	QUARTZ	40	28	10	2	BIPOLAR	0	N/A	N/A	N/A
BACKED ARTEFACT	CHERT	25	11	8	2	CORTICAL	10	TERRESTRIAL	RIGHT DORSAL	15
CORE	CHERT	20	36	32	3	CORTICAL	30	TERRESTRIAL	N/A	N/A
FLAKED PIECE	CHERT	21	17	12	2	CORTICAL	60	TERRESTRIAL	N/A	N/A

**Table 3** ACHM- GR-01- artefact measurements and characteristics

From the artefact analysis, it is identified that the most common artefact type found on this site are complete flakes (Table 4). These account for 42% of the assemblage. Cores (29%) are represented in higher proportion than retouched flakes (backed blade = 14.5%), while the debitage from flaking cores is also present (flaked piece = 14.5%).

ARTEFACT TYPE	COUNT	% OF ASSEMBLAGE
FLAKE	3	42
CORE	1	14.5
BIPOLAR CORE	1	14.5
BACKED ARTEFACT	1	14.5
FLAKED PIECE	1	14.5
TOTAL	7	100

**Table 4** ACHM- GR-01 – artefact types

Table 5 shows the raw material counts and percentages for all artefacts recorded at ACHM-GR-01.

RAW MATERIAL TYPE	COUNT	% OF ASSEMBLAGE
QUARTZ	4	57
CHERT	3	43
TOTAL	7	100

**Table 5** ACHM-GR-01 – raw material types

All the artefacts were manufactured from either quartz (57%) or chert (43%). Quartz artefacts were produced using the bipolar flaking method (placing the core on an anvil and applying downward force to produce flakes).

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Although the presence of chert at this site, may indicate this site was utilised prior to Holocene sea level rises, it is also possible that the chert artefacts were manufactured from an opportunistic find of a chert nodule washed ashore on the sandy beaches along the coast.

From the available archaeological information, it is inferred that Aboriginal hunter-gatherer activities at this site consisted of a small temporary campsite representing a transitional camp, with people moving from campsites or resource rich areas along the coast, camping at this and other inland locations, and moving further inland to the large archaeological sites. Such a model of transient mobility to and from base camps fits with established archaeological theory (i.e. Binford & Binford 1969), and provides support for the regional model proposed by Greenfeld and Harris (2005: 65).

The site is considered of low archaeological significance because of the low artefact density and the limited technological variation in artefact production. There is little additional scientific information (e.g. rare or unusual archaeological features or technology) that this site may contribute to the archaeological understanding of Aboriginal land use in the area and this site type (artefact scatter) is represented at other sites (such as those at the Southdown mine site) with greater research potential within this area.

### **7.3 Summary – Route Option 2**

Option 2 is the least favoured route based on informant discussions and the archaeological record. All Noongar informants stated this route would have significantly greater impact than Option 1 to the Aboriginal ethnographic heritage values of the region, and because archaeological sites were identified there are constraints as far as archaeology is concerned. These constraints would involve both applying for and gaining Section 18 consent under the *Aboriginal Heritage Act 1972* to impact this archaeological site, or the re-routing of the pipeline around this site. Additional survey work would also be required to finalise the outlet/inlet along the coast, since the current option drops off a large cliff.

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## 8.0 Aboriginal Heritage Survey Results - Isolated Artefacts

Additional to the archaeological site recorded along Option 2, four locations containing isolated artefacts were identified along or near Options 1 and 2 (Table 6 – see also Figures 12 and 13).

ISOLATED ARTEFACT ID	EASTING (GDA94 – ZONE 50)	NORTHING (GDA94 – ZONE 50)	ARTEFACT TYPE	ENVIRONMENT	ROUTE OPTION	INSIDE PIPELINE ROUTE?
ACHM-GR-02	647700	6174632	CHERT MULTI-PLATFORM CORE	SAND DUNE	1	NO
ACHM-GR-03	650277	6177978	CHERT FLAKED PIECE	SCRUB	2	YES
ACHM-GR-04	651342	6177057	CHERT FLAKE & QUARTZ CORE	SAND DUNE	2	YES
ACHM-GR-05	643826	6178796	CHERT FLAKE	SAND DUNE	2	YES

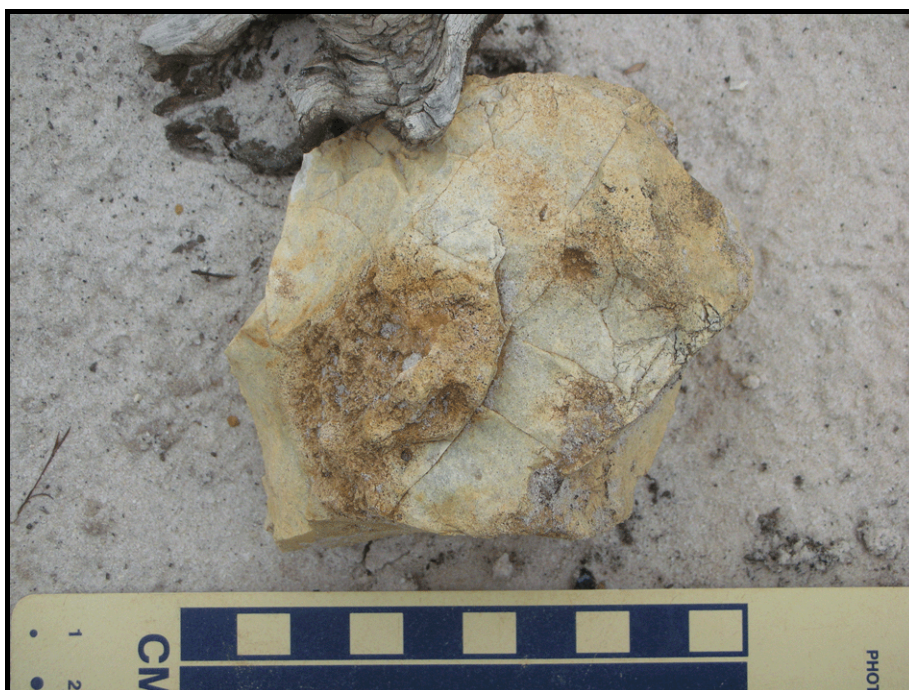
**Table 6** Isolated artefacts identified along Options 1 and 2

These locations do not constitute an archaeological site under the *Aboriginal Heritage Act 1972* as they do not exhibit an archaeologically visible and significant focus of Aboriginal hunter-gatherer activity.

These isolated artefacts are mentioned in this report in the event that, should these locations be impacted by the construction of the desalination pipeline, these artefacts should be relocated outside of the pipeline construction area by Noongar representatives.



**Figure 12** ACHM-GR-02 - View of sand dune containing chert core



**Figure 13** ACHM-GR-02 - Chert multi-platform core

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## 9.0 Summary & Recommendations

This section provides a summary of the results of the Aboriginal survey, and recommendations in relation to any Aboriginal sites recorded during the fieldwork for this survey.

### 9.1 Summary

Ethnographic and archaeological surveys of the two pipeline route options under consideration by Grange Resources for its proposed desalination plant to service its Southdown mine project area were undertaken on 27, 28, 29 and 30 October 2009, and involved members of Noongar families along with representatives of ACHM and, on 27 October, representatives from Grange Resources and SWALSC.

The surveys were intended to determine whether either or both of the proposed pipeline route options would encounter any 'Aboriginal sites' as defined by the *Aboriginal Heritage Act 1972*, or any constraints or restrictions involving issues raised by members of the Aboriginal community who claim association or connection with the Cape Riche area.

No archaeological sites were identified along Option 1. One archaeological site was identified and recorded to a Site Identification level on Option 2. This site would require either Section 18 consent under the *Aboriginal Heritage Act 1972*, or realignment of the route to avoid this site.

No ethnographic sites were encountered during the survey of Options 1 and 2, although several were inspected and recorded nearby.

### 9.2 Recommendations

The Noongar informants who took part in the ethnographic and archaeological surveys expressed several environmental concerns about each proposed seawater pipeline route, and on this basis resolved unanimously that as far as they were concerned no application by Grange Resources under Section 18 of the *Aboriginal Heritage Act 1972* for permission to construct a pipeline along the Option 1 route would be necessary, provided:

- The proposed desalination plant be built at the Southdown mine site rather than on the coast at or near Cape Riche;
- The seawater intake pipeline route should be the option from the sea along cleared farmland beside Cape Riche Road and Mettler Roads, then through cleared paddocks beside Shearer Road, to the Southdown mine site (Option 1);
- The pipeline containing ultra-saline residue liquid follow the same route back to the sea at Cape Riche;
- that the pipeline intake/outlet point be moved further to the south east along the Cape Riche headland, to a point more exposed to the open sea, to minimise marine environmental damage; and

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- The pipeline intake/outlet point be located at least 200 metres west north west of a newly-recorded fishing site at Skippy Rock (662073E 6169226N) on the Cape Riche headland.

In summary, the informants did not provide support for Option 2 based on the greater environmental impacts and the archaeological site identified along this route.

If Grange Resources intend to develop Option 2, an application by Grange Resources under Section 18 of the *Aboriginal Heritage Act 1972* for permission to construct a pipeline along the Option 2 route would be necessary to impact the archaeological site, or the route needs to be realigned to avoid this site. Additional survey work would also be required to finalise an inlet / outlet location along this route given the current location is off a large cliff line.

It is **recommended** therefore that since no ethnographic or archaeological sites as defined by Section 5 of the *Aboriginal Heritage Act 1972* have been identified within the project area along Option 1, the seawater pipeline construction proceed there if resolved upon, subject to and informed by the conditions outlined above by the Noongar informants.

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